The Loon

SPRING 2005
VOLUME 77 — NUMBER 1

Journal of the Minnesota Ornithologists' Union

THE MINNESOTA ORNITHOLOGISTS' UNION
J.F. Bell Museum of Natural History
University of Minnesota
10 Church Street Southeast
Minneapolis, Minnesota 55455–0104

The Loon, Minnesota's journal of birds, is published four times each year by the MOU, the statewide bird organization. All members receive this publication and also our newsletter, *Minnesota Birding.*

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ISSN 0024–645X

First Record of the Green Violet-ear for Minnesota

James P. Mattsson

On 12 June 2004, Carol Reed photographed what she believed was a Magnificent Hummingbird (*Eugenes fulgens*) at her feeder in Linwood Township, Anoka County. The bird was present only for one day and did not return. Three digital photographs and a brief description of the bird were sent to Anthony Hertzel 13 June 2004 (Figures 1, 2, and 3). The accompanying description was as follows: "Description: 3–3 3/4 inches, black bill, slender and long, mostly dark body, royal blue throat going to teal/blue-green towards bill, lighter gray/white towards base of tail, tail dark gray." Three additional photos were received by Hertzel on 24 June 2004, plus one more on 26 June 2004. The seven color photos were generally of poor quality, i.e., blurry, back lit, and strongly affected by shadow.

The record (#2004-054, Magnificent Hummingbird) was soon forwarded to the Minnesota Ornithologists' Union Records Committee (MOURC). In spite of the poor quality of the photos, several MOURC members noted that the bird appeared to be a Green Violet-ear (*Colibri thalassinus*), a rare Neotropical vagrant to the U.S. Following notification that the bird was a possible Green Violet-ear, Carol Reed researched the species and agreed that this was a much more likely prospect. Nevertheless, in keeping with established protocol, a vote was called for and the Committee voted not to accept the record as originally submitted, i.e., as a Magnificent Hummingbird. Subsequently, a new record, #2004-077, Green Violet-ear, was established and reevaluated by MOURC.

Review of the Minnesota Record

As MOURC has often done in the past, it was decided to seek outside review and opinion of the record. Three well-known hummingbird authorities were contacted and germane portions of their responses follow:

"Although the images are poor and the description virtually useless, I am confident that the bird is a Green Violet-ear (*Colibri thalassinus*) of the Mexican subspecies. Over all, the photos show a relatively large (by North American standards), mostly greenish hummingbird with an average length, all dark bill and broad, mostly dark tail. The bottom image [Figure 2] shows a dark area in the face that contrasts with the green sides of throat; assuming this is a correct interpretation, this pattern dramatically restricts the possibilities among the hordes of green hummingbird species to the violet-ears (*Colibri*). This dark area also seems to extend below the eye and into the upper throat. This would eliminate South and Central American subspecies of *C. thalassinus* and *C. serrirostris*, which have more restricted face patches. The belly and undertail coverts appear to be mostly buffy grayish with (after zoom-in) irregular dull greenish markings; this pattern is consistent with Green Violet-ear, but would eliminate Sparkling Violet-ear of the Andes, which shows much more bright green and blue-green in this area. The tail pattern is very difficult to ascertain but appears at least consistent with Green Violet-ear, namely bluish-green with darker bluish central area (upper image). At first I thought that I could see whitish tail tips (which would eliminate *Colibri*) but I suspect this is just a little back-lighting at the tips of the rectrices. I cannot clearly make out the bluish spot that marks the center of the breast of a Green Violet-ear, but none of the images is really suitable for showing it. The top image [Figure 1] appears to show exten-

Figure 1. Green Violet-ear, 12 June 2004, Linwood Township, Anoka County. Photo by Carol Reed.

Figure 2. Green Violet-ear, 12 June 2004, Linwood Township, Anoka County. Photo by Carol Reed.

sive dark underparts, but I assume this is just shadow effect. The absence of broad pale tips of rectrices, lack of bright base to lower mandible, and lack of either dark or whitish undertail coverts eliminate almost any of the other greenish Neotropical hummingbirds, any of which I suppose could potentially occur as escaped cage-birds. Each of the points above in favor of Green Violet-ear could be disputed because they rest largely in interpretation of poor-quality digital images. However, in concert I think one can be fairly certain, especially in absence of viable alternatives. I am undoubtedly biased by considerations of likelihood, namely that a Green Violet-ear in Minnesota in June fits fairly nicely their general pattern of appearance in eastern USA (although July would be better)." *—E-mail, J. V. Remsen, Curator of Birds, Louisiana State University, Baton Rouge, LA, 12 August 2004.*

"While I don't have much first-person experience with Green Violet-ear, the overall jizz of this bird and the description are a good fit for what I know about the species from reviewing museum specimens for the field guide and hours of video for a more recent project (see below). In particular, the proportionally small, rounded head, "flat-chested" look, tail shape, pale terminal band across the rectrices, lack of a prominent white postocular triangle, and description of the underparts as blending from royal blue on the throat to blue-green on the belly fit Green Violet-ear...The undertail coverts do seem unusually pale for Green Violet-ear, but it's quite individually variable. Of course, I don't expect the committee to accept this record on my input alone, but I would definitely support acceptance of this bird as Minnesota's first (known) Green Violet-ear". *—E-mail, Sheri L. Williamson, Bisbee, Arizona, 12 August 2004.*

"I have not banded any Green Violet-ears, but handled dozens of museum skins in preparation of my April 2001 *Birding* article. I've seen dozens of both species in the wild in their native haunts, but I don't consider myself an expert on either. In evaluating these images, I considered several other tropical species, but I think Green Violet-ear is the best fit." *—E-mail, Nancy Newfield, Casa Colibri, Metairie, LA, 24 June 2004.*

After reviewing the original documentation and the supporting opinions from authorities, MOURC members voted unanimously to accept record #2004-077, thus establishing the first Minnesota record for Green Violet-ear.

Figure 3. Green Violet-ear, 12 June 2004, Linwood Township, Anoka County. Photo by Carol Reed.

The recent pattern of extralimital records in North America was noted during discussion of this record at the Committee's 8 August 2004 meeting (Svingen 2004), and in particular, it was noted that of the accepted records of Green Violet-ear north of Mexico, more than 70% occurred during the months of May, June, and July.

Natural History

There are three species of green-bodied violet-ears, and only the Green Violet-ear has occurred north of Panama (AOU 1998, Clements 2000, Stiles and Skutch 1989, Wetmore 1968). White-vented Violet-ear (*C. serrirostris*), a monotypic species, is restricted to the drier chaco and savanna of eastern Bolivia, Paraguay, southern Brazil to northwestern Argentina (Clements 2000). Sparkling Violet-ear (*C. coruscans*) has as many as three races that range across South America from Columbia to eastern Guyana and northern Brazil, south to Bolivia and northwestern Argentina (Meyer de Schauensee and Phelps 1978, Clements 2000, Ridgely and Greenfield 2001, Rodner *et al.* 2000). Green Violet-ear is a common resident of montane forests from central Mexico south to northern Bolivia and has as many as six races described, only two of which occur from Panama northward. No breeding records exist north of Mexico (AOU 1998, Fjeldså and Krabbe 1990, Howell 1995, Ridgely and Gwynne 1989, Ridgely and Greenfield 2001, Wetmore 1968). To date, all records of the Green Violet-ear north of Mexico that can be identified to race have been of the nominate form *C. t. thalassinus*.

The Green Violet-ear is a large hummingbird, about 30% larger than Ruby-throated Hummingbird (*Archilochus colubris*). It is a deep green overall, slightly more bluish green on the under parts with sharply contrasting glittering violet on the lores and auriculars, and usually a bluish-violet area on the center of the breast. The tail is the same green coloration as the upperparts and is broad and square-shaped with a prominent blackish-blue subterminal band. The bill is black, of medium length, and rather straight, at times appearing only slightly decurved (AOU 1998, Howell 1995, Stiles and Skutch 1989). In comparison, Magnificent Hummingbird is even larger (4 ¾ – 5 ¼ inches) with a prominent, triangular-shaped white postocular spot. Magnificent Hummingbird is also darker overall with most of the upperparts dark green, a black chest and upper belly with dull mottled green flanks. Male Magnificents have a glittering purple forehead and crown and bright blue-green gorget. Females are dull green above, grayish below with a pale line behind the eye. Unlike Green Violet-ear, the tail of a male Magnificent is a uniform dark green with females showing white-tipped outer rectrices. The black bill of Magnificent Hummingbird also differs from that of Green Violet-ear in that it is much longer, thick at the base and very straight. (AOU 1998, Howell 1995, Stiles and Skutch 1989).

Accepted records for Green Violet-ear now exist for 15 U.S. states and 2 Canadian provinces (Figure 4). An additional well-documented report is still under review for New Mexico. Four previous records of Green Violet-ear have been accepted for the Western Great Lakes re-

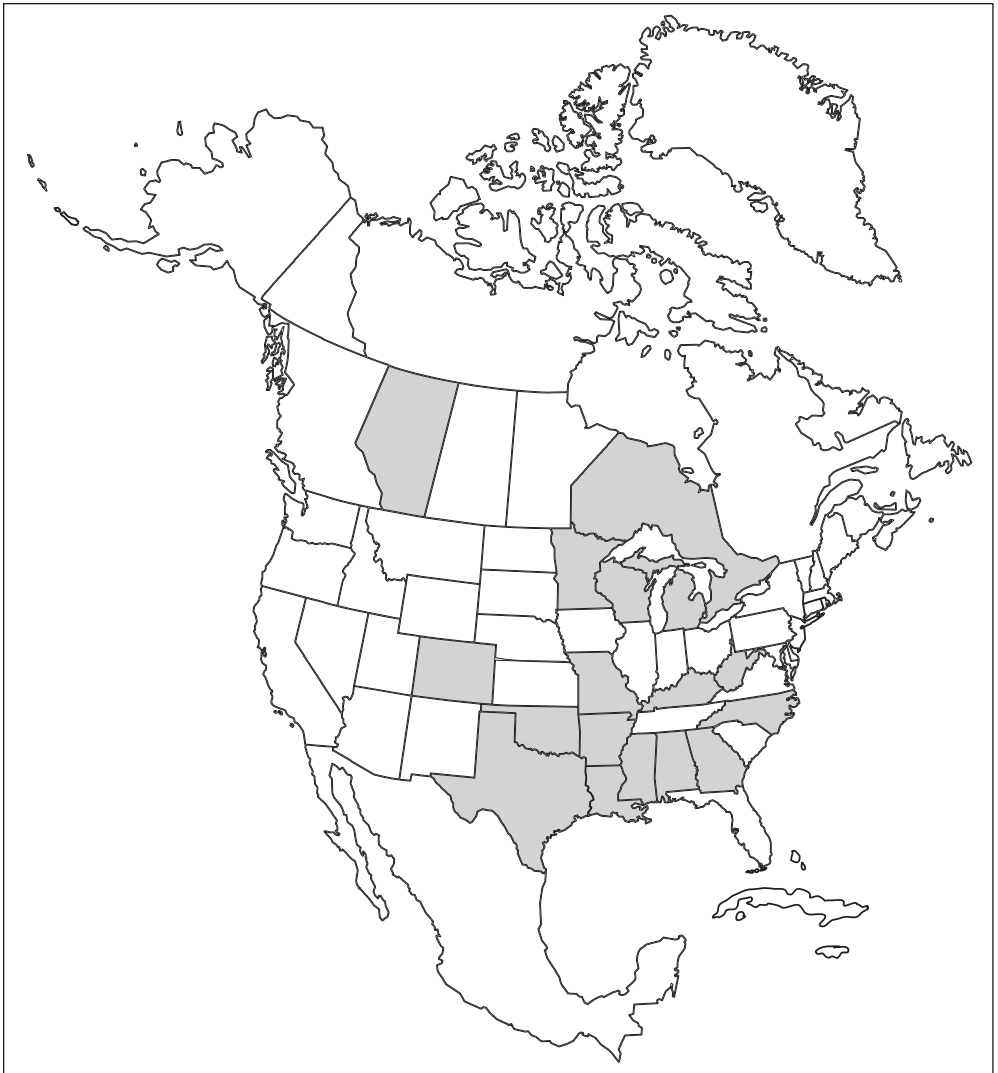

Figure 4. U.S. states and Canadian provinces with records of Green Violet-ear.

gion. The first was present from 30 June – 3 July 1991 at Kakebeka Falls, Ontario, Canada (Escott 1991). Next was an observation from Edwardsburg, Michigan, which was present 15 July – 18 August, 1996 (Miller 1997, Chartier and Powell 1997). The third was in LaCrosse, Wisconsin from 27 October – 1 November 1998 (Zink and Klicka 1999). The most recent record was also Michigan's second, was 11–14 August 2002 in Bergland, Michigan (Chartier 2003).

For an excellent overview on Green Violet-ear, the reader is urged to review Nancy Newfield's article in the April 2001 issue of *Birding* (Newfield 2001). The article discusses identification, subspecies, habitat, and distribution, including extralimital records in the U.S. and Canada. Photographs nicely illustrate plumage differences of some of the subspecies, including the northernmost *C. t. thalassinus*,

of which the Minnesota bird is believed to represent.

Acknowledgments

I wish to thank J. V. Remsen, Nancy Newfield, and Sheri Williamson for their thoughtful comments on the identification of this hummingbird. Anthony Hertzel provided data and the map used in Figure 4. Anthony Hertzel and Kim Risen also contributed to this article.

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Editor's Note: On 13 June 2004, Cathy Zimmerman of East Bethel, Anoka County (about five miles southwest of Linwood Township), reported a "very different hummingbird" at her feeder. As with the record above, this bird initially was identified as a Magnificent, but after a short exchange of communications, Ms. Zimmerman wrote that she had found a picture of a Green Violet-ear and "that's definitely the one we saw." This observation was not submitted to the Records Committee, and though interesting in light of the above record, it remains, technically, an undocumented report of a large hummingbird from a different location and date. — AXH

Minnesota's First Wood Stork

Boyd A. Blomberg, III

At 6:00 P.M. on 17 June 2004, I was making dinner when my 3½ year old son, Lynden said, "Papa, there's a really big bird out there." I went to look and immediately grabbed an HI-8 camcorder and started filming. I obtained approximately 6 minutes and 15 seconds of videotape. The bird sat and preened for about an hour, and also was seen by my wife, Kristin, and sister-in-law, Kathleen Oberholtzer.

An account of Lynden's discovery was published in the 2 July 2004 issue (Volume 114, Number 12) of the Cook County News-Herald. In that account, Lynden is quoted as saying, "He's in trouble, papa. He's in danger."

Field guides used included the Stokes guide, the Peterson guide, and the Sibley guide. Ken and Molly Hoffman came over to view the videotape and confirmed the identification.

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Wood Stork: Documentation and Research

Peder H. Svingen

At its 8 August meeting, the Minnesota Ornithologists' Union Records Committee (MOURC) reviewed the Blombergs' 17 June 2004 videotape and, by a vote of 10–0, unanimously accepted the bird's identification as a Wood Stork (*Mycteria americana*) (***The Loon*** 76:153). Afterward, MOURC member Philip Chu wrote, "an unambiguous Wood Stork, as indicated by (1) its very long, heavy-based, droop-tipped bill; (2) its bare blackish crown, face, chin, and throat; (3) its white neck, body, and folded upperwings (except for the visible portions of the upper primary-coverts and primaries, which were black); and (4) its long, blackish legs and pale toes." The Committee then conducted research on issues of origin and arrival, and voted 10–0 to accept the record as representing natural occurrence.

This species has occurred in almost all nearby states and provinces, including North Dakota (specimen from Pembina County, Spring 1900, *Wilson Bulletin* 38:17–33), South Dakota (Hanson County, mid-August 1964, *South Dakota Bird Notes* 16:91), Ontario (occasional, rare straggler in the south, primarily late summer and autumn, *Annotated Checklist of the Birds of Ontario*, R. D. James, 1991), Wisconsin (five records listed in *Wisconsin Birdlife*, S. D. Robbins, 1991), and Michigan (one bird in Ingham County, 31 May – 10 August 1963, and two in Leelanau County, 29 May 1975, P. Chu, pers. com.).

Kim Smith, Curator of Birds at the Milwaukee County Zoo, reported that the only known Wood Storks in captivity in the region are at the Brookfield Zoo in Chicago. That zoo was contacted and the curator confirmed that all three of its Wood Storks were accounted for. The International Species Information System database was queried and no other holdings were listed for zoos in the Great Lakes region. Phil King, Zoo Foreman at the Assiniboine Park Zoo in Winnipeg, reported that no zoo in Canada held this species as did the curator at the zoo in Thunder Bay, Ontario. The Lake Superior Zoo in Duluth also has never kept this species.

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Proceedings of the Minnesota Ornithologists' Union Records Committee

Peder H. Svingen, Chairman

The most recent meeting of the Minnesota Ornithologists' Union Records Committee (MOURC) was conducted at the James Ford Bell Museum of Natural History in Minneapolis on 5 December 2004. In attendance and voting at this meeting were MOURC members Renner Anderson (alternate), Paul Budde, Philip Chu, Anthony Hertzel, Ann Kessen (alternate), Jim Mattsson, Drew Smith, Steve Stucker (alternate), Peder Svingen (Chairman), and Tom Tustison.

In accordance with its policy on term limits, the Committee reviewed nominations for membership and elected Ann Kessen as a Regular member, replacing Anthony Hertzel. Renner Anderson also rotated off the Commitee at the end of 2004, leaving two alternate positions unfilled. Jim Lind and Bill Marengo were elected to fill these positions.

Among the items on the agenda was additional discussion on the status of the Cackling Goose (*Branta hutchinsii*) in Minnesota (45th Supplement to the American Ornithologists' Union Check-list of North American Birds, *Auk* 121:985–995). Prior to the meeting, members received a compact disk containing photographs, written documentation, and a spreadsheet showing reports of this "new" species in Minnesota compiled by Peder Svingen.

At the meeting, Steve Stucker reviewed North American distribution of the Cackling Goose and Canada Goose complex (***The Loon*** 76:225–228) and summarized band recovery data in Minnesota, and Ann Kessen discussed three specimens. The Committee thanks Dr. Scott Lanyon and Dr. Robert Zink for permission to view specimens and to include these data in its deliberations.

Records of *Branta hutchinsii* were not voted upon individually. Instead, a vote was taken on the addition of the Cackling Goose to the Minnesota list, and by a 9–1 margin, it was added as a Regular (R) species. The Committee requests further information on the status and occurrence of Cackling Goose and identifiable forms of the Canada Goose in Minnesota. Please send dates, specific locations, number of birds and how identified, along with photographs, sound recordings, written details, and any additional information, to Peder Svingen (address below).

Also discussed were three recirculated records, i.e., those with inconclusive first-round votes; a potential first state record of the Cave Swallow; and a record of the Dovekie documented primarily by video recording. A photograph of a Mississippi Kite from Duluth was discussed and a vote on the identifiability of this physical evidence was taken. The results of these discussions and votes on these records are included below. All of the other records were reviewed and voted on by mail.

The following records were voted on August – December 2004 and were Accepted (also see Not Accepted records #2004-084 and #2004-110, which involved qualified Accepted votes).

• Black-bellied Whistling-Duck, 1 August 2004, Otrey Township, Big Stone County (record #2004-108, vote 5–2).

This juvenile was well-described at rest and in flight. Members not accepting this record were concerned about the early date, i.e., the probability that a bird hatched in 2004 within this species' current breeding range could reach western Minnesota by 1 August, and that similar-looking species including exotic waterfowl or hybrids thereof were not considered.

• Cinnamon Teal, 1 June 2004, Hantho Township, Lac Qui Parle County (record

Record #2004-111, Mississippi Kite, 8 September 2004, Duluth, St. Louis County. Digital photo by Frank Nicoletti.

Record #2004-094, Red Phalarope, 13 September 2004, Salt Lake, Lac Qui Parle County. Digital photo by Dave Cahlander.

#2004-082, vote 7–0).

• Barrow's Goldeneye, 21 November 2004, Upper Mississippi River National Wildlife and Fish Refuge, Houston County (record #2004-119, vote 7–0).

Single adult males were documented at this same location 17 November 2001 and 11–15 November 2003, suggesting the possibility of a returning individual.

• Neotropic Cormorant, 15 August 2004, Otrey Township, Big Stone County (record #2004-088, vote 7–0).

Third state record. This adult in alternate plumage was photographed almost exactly one year after a pair was found at Big Stone National Wildlife Refuge (***The Loon*** 76:46).

• *Plegadis* ibis, sp. (13 individuals), 2 July 2004, Borchardt Rosin W.M.A., Lac Qui Parle County (recirculated record #2004-084, vote 6–1 for all 13 individuals, please see comments under Not Accepted record).

• *Plegadis* ibis, sp. (2 individuals), 18 September 2004, West Toqua Lake, Graceville Township, Big Stone County (record #2004-118, vote 7–0).

• *Plegadis* ibis, sp. (3 individuals), 3 October 2004, seven miles east of Ortonville, Odessa Township, Big Stone County (record #2004-098, vote 7–0).

• *Plegadis* ibis, sp., 13 October 2004, Black Rush Lake, Lyon County (record #2004-117, vote 7–0).

• *Plegadis* ibis, sp., 7 November 2004, Prairie View Township, Wilkin County (record #2004-114, vote 7–0).

• Mississippi Kite, 30 August 2004, Hawk Ridge Nature Reserve in Duluth, St. Louis County (record #2004-112, vote 7–0).

• Mississippi Kite, 7 September 2004, Hawk Ridge Nature Reserve in Duluth, St. Louis County (record #2004-113, vote 7–0).

• Mississippi Kite, 8 September 2004, Hawk Ridge Nature Reserve in Duluth, St. Louis County (record #2004-111, vote 7–0; vote on physical evidence 8–2).

All three kites were aged as juveniles and were considered to be different individuals on the basis of plumage details. All ten MOURC members vote on whether or not the identification can be made based on physical evidence alone (in this case, an in-flight photograph taken by Frank Nicoletti). Dissenting opinion held that at least one similar species could not conclusively be eliminated — the remote possibility of Plumbeous Kite (*Ictinea plumbea*), which has never been documented north of Mexico.

• Buff-breasted Sandpiper, 26 June 2004, near Ortonville, Big Stone County (record #2004-089, vote 6–1).

This injured bird established only the second late June record for the state, following one at Agassiz N.W.R., 25 June 1980 (***The Loon*** 53:137).

• Red Phalarope, 11–13 September

Record #2004-106, Common Ground-Dove, 18 October 2004, near Beaver Bay, Lake County. Digital photo by Earl Orf.

2004, Salt Lake, Lac Qui Parle County (record #2004-094, vote 7–0).

Written documentation and images of this juvenile were submitted by multiple observers.

• Pomarine Jaeger, 7 September 2004, Duluth, St. Louis County (record #2004-090, vote 7–0).

Sight record of one juvenile. Its size was compared to all nearby Ring-billed Gulls. Its bicolored bill, dark brown head and neck, "chesty" profile, wing width at the base compared to the distance from the trailing edge of the wing to the tail tip, contrastingly pale rump and upper-tail coverts, and heavily barred belly and under-tail coverts, were all noted. Also see Not Accepted record #2004-097.

• Black-headed Gull, 27 September – 17 October 2004, Spirit Lake, Jackson County (record #2004-103, vote 7–0).

One adult, discovered on the Iowa side of the border 26 September 2004, was documented on the Minnesota side the following day and also was photographed 11 October.

• California Gull, 31 October – 15 November 2004, Lake Calhoun, Minneapolis, Hennepin County (record #2004-109, vote 7–0).

This juvenile was carefully documented by several experienced observers. Distant photographs supported the identification.

• Sabine's Gull, 15 September 2004, Park Point, Duluth, St. Louis County (record #2004-095, vote 7–0).

• Sabine's Gull, 16–21 September 2004, Ironton wastewater treatment ponds, Crow Wing County (record #2004-096, vote 7–0).

• Sabine's Gull, 22 September 2004, Park Point, Duluth, St. Louis County (record #2004-099a, vote 7–0).

• Sabine's Gull, 24–26 September 2004, Superior Entry, St. Louis County (record #2004-099b, vote 7–0).

Though possibly involving the same individual, several members considered

Record #2004-102, Scissor-tailed Flycatcher, 9 October 2004, Duluth, St. Louis County. Digital photo by Tom Auer.

Record #2004-105. Clark's Nutcracker, 14 October 2004, Silver Bay, Lake County. Digital photo by Anthony X. Hertzel.

the 22 September and 24–26 September descriptions separately, since the dates and locations were different. Additional reports of this species at Wisconsin Point 21, 23, 24, and 26 September referred to birds seen only on the Wisconsin side of the Superior Entry.

• Arctic Tern, 25–27 September 2004, Superior Entry, St. Louis County (record #2004-101, vote 7–0).

Third fall record in five years at this location.

• Common Ground-Dove, 17–19 October 2004, near Beaver Bay, Lake County (record #2004-106, vote 7–0).

Second state record, well-documented and photographed by many observers.

• *Selasphorus* hummingbird, sp., 16 November — 3 December 2004, Duluth, St. Louis County (record #2004-110, vote 7–0, please see comments under Not Accepted record).

• Scissor-tailed Flycatcher, 6 September 2004, Anna Gronseth Prairie, Wilkin County (record #2004-092, vote 7–0).

• Scissor-tailed Flycatcher, 7–9 October 2004, 40th Avenue West, Duluth, St. Louis County (record #2004-102, vote 7–0).

• Clark's Nutcracker, 14–24 October 2004, Silver Bay, Lake County (record #2004-105, vote 7–0).

Continuing the recent trend of discoveries by "young birders" in Minnesota, 4½ year-old Al Robertsen spotted this bird at a feeder in his family's yard. First Minnesota record since 1986.

• Cliff Swallow, 7 November 2004, Good Harbor Bay, Cook County (record #2004-121, vote 7–0).

The recent trend in late fall vagrancy of the Cave Swallow to the Great Lakes and northeastern North America was understood by the observer, who carefully documented this record late Cliff Swallow.

• Sprague's Pipit, 10–11 October 2004, Red Rock Prairie, Cottonwood County (record #2004-104, vote 7–0).

One of the very few migrant Sprague's Pipits ever photographed in the state.

• Townsend's Warbler, 9–11 September 2004, Linwood Lake, Anoka County (record #2004-093, vote 7–0).

Fifth state record, seen by dozens of observers and photographed.

• Lark Bunting, 6 September 2004, 40th Avenue West, Duluth, St. Louis County (record #2004-091, vote 7–0).

Refound and photographed following its initial discovery.

• Lark Bunting, 4 October 2004, Gooseberry Falls State Park, Lake County (record #2004-120, vote 6–1).

Field notes and sketches submitted by an experienced observer convinced all but one Committee member.

• Lazuli Bunting, 27 May 2004, Moulton Township, Murray County (record #2004-043, vote 5–2).

Record #2004-091, Lark Bunting, 6 September 2004, Duluth, St. Louis County. Digital photo by Mike Hendrickson.

This adult male in alternate plumage was observed at close range. Members not accepting the record were concerned that the written description did not fully address the possibility of hybridization with Indigo Bunting. Indices for evaluating hybrid characteristics were presented in *Auk* 76:443–463, 92:66–80, and *Wilson Bulletin* 87:145–179.

The following records were voted on August – December 2004 and were Not Accepted.

(Please note that a record which is Not Accepted only means that the documentation was not complete or convincing enough to include the sighting in ***The Loon***, the journal of the MOU, or in the MOU's archives of confirmed bird records. Such a vote does not necessarily mean the observer misidentified the bird or did not see it. Summaries of the reasons why a record was Not Accepted are included here. These are in no way intended to be critical of the observer. The only purpose is to highlight the difficulties an observer may encounter while identifying or documenting these and similar species.)

• White-faced Ibis (ten individuals) and *Plegadis* ibis, sp. (three individuals, designated birds #8, #11, #12), 2 July 2004, Borchardt Rosin W.M.A., Perry Township, Lac Qui Parle County (recirculated record #2004-084, first vote 4–3, second vote 3–4 for birds #1, #4, #13; vote 0–7 for bird #6; vote 1–6 for bird #10; vote 2–5 for birds #2, #5, #7, #9; vote 3–4 for bird #3); all 13 Accepted as *Plegadis*, sp., vote 6–1.

Though ultimately accepted as *Plegadis* ibises, these 13 birds were observed from a distance that most Committee members considered too far away for critical evaluation of potential hybrid characteristics. Field notes and sketches were submitted for each bird, but for none of them were both the facial skin and iris color described (see *North American Birds* 57:136–139).

• Golden Eagle, 30 June 2003, Murray County (Record #2004-073, vote 2–5).

Documentation for this unseasonal report of a subadult eagle was reviewed more than a year after the sighting. The description was not entirely consistent with Golden Eagle and the majority felt that an immature Bald Eagle could not be eliminated.

• Pomarine Jaeger, 18 September 2004, Superior Entry, St. Louis County (record #2004-097, vote 1–6).

This juvenile jaeger was seen at close range by three experienced observers, two of whom submitted documentation. Unfortunately, the two descriptions were inconsistent regarding critical facets of the identification. One observer stated "belly lighter than flanks yet heavily barred with dark and light pattern" while the other observer's drawing showed clean white undersides labeled "white breast/belly." Other discrepancies concerned color of under-tail coverts and whether or not the bill was seen. The identification relied in part on the presence of a "strong double underwing flash." This is not an infallible criterion for Pomarine Jaeger according to Olsen and Larsson (Skuas and Jaegers, 1997). Identification also relied upon size — the jaeger was said to be either "not larger than a Ring-billed Gull" or "as big or slightly bigger than Ring-billed Gull." Depending on the sex and age of the species in question, both Parasitic and Pomarine jaegers may appear similar in size to a Ring-billed, so size comparison with more than one or two gulls is needed;

reverse sexual size dimorphism in jaegers makes big female Parasitics overlap in size with small female Ring-billed Gulls.

• California Gull, 15 July 2004, Breckenridge wastewater treatment ponds, Wilkin County (record #2004-085, vote 0–7).

This juvenile was compared to Herring Gull, but it was unclear whether Herring Gulls were present for size comparisons. The bird had a bicolored bill, but juvenile California Gull has a blackish bill at fledging which gradually becomes pale; by October it is sharply two-toned in most individuals (*Birding* 34:540–544).

• Arctic Tern, 9 October 2004, South Kawishiwi River, Lake County (record #2004-107, vote 0–7).

This black-billed tern with an entirely white underbody and partial black cap must have been in juvenal or basic plumage, or a combination of the two, yet its upperwing was described as uniform gray and its underwing showed only a hint of gray on the trailing edge; an Arctic Tern in this plumage would show a black trailing edge on the underside of the outer wing, a carpal bar on the upperwing, and (if a juvenile) whitish secondaries. Three Accepted fall records of this species in Minnesota have involved adults in alternate plumage at the Superior Entry in mid- to late September.

• Dovekie (unknown number of individuals), late October – early November 2003, Lake Minnetonka, Hennepin County (record #2004-116, vote 0–7).

The identification rested primarily on a poor-quality videotape, which did not rule out Bufflehead among other species.

• White-winged Dove, 31 July 2004, Otrey Township, Big Stone County (record #2004-081, vote 2–5).

This bird was seen only briefly, and binoculars were not used. The description omitted color of bare parts, body color, and tail markings.

• White-throated Swift, 28 September 2004, St. Paul, Ramsey County (record #2004-100, vote 3–4).

This bird was not seen with binoculars, but was serendipitously photographed in flight using a digital camera. While acknowledging the possibility that it was correctly identified, the majority considered the blurred image insufficient for a potential second state record.

• Calliope Hummingbird, 18 September 2004, Springfield, Brown County (record #2004-122, vote 0–7).

This silent female or immature short-tailed hummingbird may have been correctly identified, but the description was incomplete and the observer reported no experience with this species. The upper surface of the tail was green and apparently lacked rufous in the proximal portions of R1–R4, while R3–R5 lacked white tips; these details do not match any age or sex class of the Calliope Hummingbird.

• Rufous Hummingbird, 16 November – 3 December 2004, Duluth, St. Louis County (record #2004-110, Not Accepted as Rufous Hummingbird, vote 1–6; but Accepted as *Selasphorus*, sp., vote 7–0).

This adult female hummingbird was carefully studied and hundreds of images were obtained by many observers over a period of 2½ weeks. Most observers and expert opinion leaned towards its identification as Rufous Hummingbird (*Selasphorus rufus*), but in-hand examination could not be arranged and even the best photographs of the spread tail were insufficient to conclusively eliminate the very similar Allen's Hummingbird (*S. sasin*).

• Say's Phoebe, 4 August 2004, Florida Township, Yellow Medicine County (recirculated record #2004-086, first vote 4–3, second vote 3–4).

This bird was described as showing a "rosy" or "rosy-peach" belly and undertail coverts, and "pale gray" wing linings, which are not typical for this species and suggest the possibility of Vermilion Flycatcher. The observer's experience with this species and the light conditions were not mentioned — the latter an important consideration, since identification relied largely on coloration of the underparts.

• Cave Swallow, 15 July 2004, Breckenridge wastewater treatment ponds, Wilkin County (record #2004-087, vote 0–10).

All ten MOURC members vote on potential first state records. This bird was seen only in flight and was initially identified by voice, but the observer did not mention previous experience with this species, including its calls. The description of its back indicated that it was an adult bird, but the forehead was "tan, with a rusty tinge" (suggesting an immature bird — the forehead should be reddish in adult Cave Swallow). The documentation also lacked basic information about the circumstances of this sighting, including light conditions, observer orientation with respect to the sun, and whether the sketch was prepared before or after consulting field guides or other references. Though recently increasing as a vagrant to northeastern North America and predicted to occur in Minnesota, almost all extralimital records of the Cave Swallow have been in late October or early November.

• Sprague's Pipit, 27 July 2004, Keene Township, Clay County (record #2004-080, vote 3–4).

Call notes supported the identification, but this species' distinctive white outer tail feathers and whitish wing bars were not noted. Field notes were not submitted.

• Worm-eating Warbler, 18 May 2004, Big Stone N.W.R., Lac Qui Parle County (recirculated record #2004-063, first vote 4–3, second vote 4–3).

The observer reported recognizing its call note in flight, but the documentation lacked information about the observer's experience with this species (including its call notes), whether or not a field guide was used, and how other species were eliminated. Observers are encouraged to either use the "Request for Documentation" form or follow its format exactly; the form can be mailed upon request or downloaded (please note new URL) under "Documents for Downloading" at <http://moumn.org/>.

• Lark Bunting, 29 June – 18 July 2004, Springfield, Brown County (record #2004-083, vote 2–5).

The observer reported no experience with this species. The description was incomplete, and the bird's behavior and habitat were atypical for Lark Bunting. Other observers were unable to confirm the identification.

The efforts of all those observers who document reports of unusual species are appreciated, whether or not the records are Accepted. An increasing number of submissions have included digital documentation (audio, video, or photographic) in recent years — a most welcome trend — but observers are encouraged to also take field notes and sketches and submit a written description for unusual species, even if documented by digital media.

The Committee acknowledges with thanks those who provided written documentation for the records listed in this article: Tom Auer, Jo & Steve Blanich, Jerry Bonkoski, Conny Brunell, Paul Budde, Doug Chapman, Philip Chu, Nelvina De Kam, Bob Dunlap, Kim Eckert, Eddy Edwards, Laura Erickson, Ron Erpelding, Bruce Fall, Cole Foster, Mike Hendrickson, Anthony Hertzel, Paul Jantscher, Jeanie Joppru, Doug Kieser, Jim Lind, Jim Mattsson, David Neitzel, Frank Nicoletti, Bob O'Connor, Ryan Perala, Jackie Potts, Bob Russell, Roger Schroeder, Drew Smith, Peder Svingen, Bill Unzen, Josh Watson, and Nathan Wersal.

There were also many observers who documented records of Regular species which were not voted on by the Committee; although these records are not cited here, the efforts of these individuals are greatly appreciated. The Committee wishes to especially thank Tom Auer, Conny Brunell, Steve Falkowski, Ben Fritchman, Mike Hendrickson, and Josh Watson for documenting many such records during the second half of 2004.

The Committee welcomes questions or comments from MOU members regarding any record in particular or our procedures in general. Please contact Peder Svingen by e-mail at <psvingen@d.umn.edu> or at the address below. Summary: 45 records voted on / 30 Accepted, 15 Not Accepted.

2602 East 4th Street, Duluth, MN 55812.

The Summer Season
1 June through 31 July 2004

Ann E. Kessen[1] and Peder H. Svingen[2]

The wet, cold May of 2004 was followed by a drier, but still cool, summer season. Many observers remarked that there seemed to be fewer birds, or at least fewer birds singing, than in past summers, and the numbers appeared to support that observation. A total of 249 species was reported, well below the ten-year average of 269, and several species were reported in record low numbers. Nonetheless, the season had many highlights, including a first state record **Wood Stork**, found by a 3½-year-old boy who immediately reported the bird to his parents, and a first nesting record for the **Rock Wren**, a species whose status in Minnesota is Casual.

For the second year in a row, there was an unusually high number of **Snow Goose** reports. Also unusual for midsummer was a **Greater White-fronted Goose** at Salt Lake, and up to three **Ross's Geese** at Black Rush Lake W.M.A. A single **Tundra Swan** was observed in mid-June at Agassiz N.W.R. Though reports of several duck species were down, **Gadwall** and **Blue-winged Teal** reports exceeded the most recent ten-year averages. An adult male **Cinnamon Teal** in Lac Qui Parle County continued the recent pattern of early summer records.

Drumming counts by the Minnesota D.N.R. found **Ruffed Grouse** numbers lower than expected in northeastern (down 17%) and northwestern (down 8%) Minnesota, but stable or increasing in other regions of the state. In contrast, D.N.R. surveys of **Sharp-tailed Grouse** indicated numbers were up 15% in north-central Minnesota and up 31% in the Northwest.

Interesting was a report of two **Horned Grebes** on Lake Superior in mid-June. **Snowy Egrets** were found in record high numbers, with all sightings from the western part of the state. An adult **Little Blue Heron** was observed in Big Stone County in early June. **Cattle Egrets** were also present in record numbers, and breeding took place in Grant County. An adult **Yellow-crowned Night-Heron** was reported, after an absence of reports for two consecutive summers. In July, a flock of 13 **Plegadis ibis** was spotted in Lac Qui Parle County.

Northern Harrier reports were up slightly from the ten-year average. Once again, **Peregrine Falcons** had a good summer, with 38 territorial pairs fledging 84 young. **Common Moorhens** bred in Brown County, and there were several new county nesting records for **Sandhill Cranes**. The eighth state record **Snowy Plover** was documented by many observers in Stearns County. **Upland Sandpiper** reports were up significantly over the mean for the past ten years. A cooperative **Ruff** was seen by many observers in late July. A pair of **Caspian Terns** was found nesting on Hennepin Island, in Mille Lacs N.W.R., only the second known Minnesota nesting record.

The **Eurasian Collared-Dove** continued to expand its range in the state, and the sixth state record **White-winged Dove** was found in mid-June. Reports of **Black-billed** and **Yellow-billed cuckoos** were both down significantly compared to the last ten years. A pair of **Burrowing Owls** first found in May disappeared in early June. Interestingly, **Great Gray Owl** reports were much higher than usual. **Common Nighthawk** and **Whip-poor-will** reports were both down significantly from the ten-year average. The first state record **Green Violet-ear** was photographed in Anoka County in June.

For the second year in a row, **Western Kingbird** numbers were up, primarily in the western part of the state. Also in the west, a **White-Eyed Vireo** was banded in Buffalo River S.P. in June. Two **Carolina Wren** reports fit the pattern of one or two reports each summer. **Winter Wren** numbers were down significantly, but **Sedge Wrens** were exceptionally abundant. Mimids were well-represented with no fewer than five **Northern Mockingbirds**, and the eleventh state record **Sage Thrasher** adroitly photographed in flight at Dodge Nature Center in Ramsey County.

Golden-winged, **Tennessee**, **Chestnut-sided**, and **Magnolia Warbler** numbers were all up as compared to the past ten years. **Yellow-rumped Warbler** numbers were down, however. Five **Yellow-breasted Chats** put in an appearance during the summer. Two male **Summer Tanagers** occupied territories that were also occupied by this species in 2003 — one in Lebanon Hills Regional Park and one in Murphy-Hanrehan Park Reserve. Though both sang persistently, there was no evidence that either acquired a mate. **Clay-colored**, **Vesper**, and **Le Conte's Sparrow** reports were all up significantly compared to the ten-year average, but **White-throated Sparrow** reports were down. **Henslow's Sparrow** was found at a new location near Tympanuchus W.M.A. in Polk County. Two **Painted Buntings** were present in June, an adult male near Marshall and an immature in Rochester.

Weather Summary: June temperatures were near normal during the early part of the month, but very cool during the last two weeks. In fact, for the last week of June the mean temperature statewide was nine degrees below normal. Rainfall amounts varied in different regions of the state. In general, southern regions experienced heavy rainfall during the month, with southeastern Minnesota averaging six inches above normal. Precipitation levels were also up in northwestern Minnesota. Conversely, north-central and central Minnesota were comparatively dry.

July temperatures were erratic, with much of the month being near normal. However, the second week of July was five degrees below the average and the last week was four degrees below normal. The pattern of heavy rainfall in southern regions and the northwest continued. There was increased precipitation in the central region of the state, which ended the month nearly three inches above normal. The northeast experienced dry conditions during July.

Escapes and exotics: **Northern Bobwhite** 6/29 St. Louis (Britt) KRS, **European Goldfinch** 6/19 Hennepin GB, NB.

Undocumented reports: **Red-throated Loon** 7/3 St. Louis (Duluth), **Arctic Tern** 7/2 Crow Wing (Garrison), **Sage Thrasher** 6/16 Aitkin (Pietz's Road).

Acknowledgments: We thank all of the observers who provided summer season reports and breeding records. Without their efforts, our understanding of the occurrence and breeding range of Minnesota birds would be much reduced. Dave Benson, Anthony Hertzel, and Jeanie Joppru provided transcripts of weekly birding reports. Thanks also to Paul Budde for compiling early and late dates, to Anthony Hertzel for preparing the breeding maps, and to Terry Wiens for his records of previous summer season reports.

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Greater White-fronted Goose — A single individual reported **6/26–7/17** Lac Qui Parle (Salt Lake) BJU, †JMJ, PHS, PCC (***The Loon*** 77:51–52).

Snow Goose — Seen 6/1 Big Stone (2, near Clinton) PHS, 6/5 Lincoln (2 adults, 1 first summer, all white morph, Lake Benton) †PHS, 6/6, 6/30, 7/4 Lac Qui Parle (6 white morph at Pegg Lake, 1 white morph in Walter Twp., 1 white morph at Perry W.M.A., respectively) †BJU, 6/10 Rock (2, Luverne W.T.P.) BWF, 6/18 Marshall (1 white morph at Warren W.T.P.) †SLF, 6/20

Clearwater (2, Clearbrook W.T.P.) DPJ.

Ross's Goose — Reported **6/10, 6/11** Lyon (2 and 3 individuals, Black Rush Lake W.M.A.) †RJS, ph. JGW.

Canada Goose — Reported from 56 counties statewide; new nesting records from *Swift* BJU and *Traverse* PHS.

Mute Swan — Observed 6/1, 6/9, 6/22 Mower RCK, RDK.

Trumpeter Swan — Reported from 15 counties in all regions except Northeast, West-central, South-central. New nesting records from *Jackson fide* BRB, *Marshall* PHS, *Sherburne* REH, PLJ.

Tundra Swan — Observed 6/13 Marshall (Agassiz N.W.R.) JMJ.

Wood Duck — Record low number of reports: seen in 40 counties throughout the state.

Gadwall — Reported from 18 counties as far east as Wadena, Kandiyohi, Brown. New nesting records in *Polk* EEF and *Wadena* BJU.

American Wigeon — Fewest reports ever: observed in Roseau, plus 6/6 Marshall JMJ, 6/6, 6/13 Brown BTS, 6/7 Lac Qui Parle (Perry Twp.) BJU, 6/20 St. Louis SLF, 7/17 Anoka (Carlos Avery W.M.A.) KJB.

American Black Duck — Reported from St. Louis, as well as 6/18 Cook JEB, 6/19 Lake NRRI, 6/20 Roseau PHS, 7/16 Beltrami BJU.

Mallard — Fewer reports than usual: observed in 55 counties statewide.

Blue-winged Teal — Observed in 48 counties throughout the state.

CINNAMON TEAL — Adult male 6/1 Lac Qui Parle (section 35, Hantho Twp.) †BJU. Fourth summer record in five years.

Northern Shoveler — Reported from 22 counties throughout state.

Northern Pintail — Seen in Jackson, Lac Qui Parle, Swift, plus 6/5 Big Stone (3 locations) PHS, 6/6 Clay PHS, 6/6 St. Louis SLF, 6/20 Roseau (4 birds) SLF.

Green-winged Teal — Reported from 13 counties in all regions of the state except East-central, Southeast, Southwest.

Canvasback — Reported from six western counties, plus Brown, Stearns, Isanti.

Redhead — Observed in 17 counties in western, Central, South-central regions.

Ring-necked Duck — Lowest number of reports since 1993: reported from 18 counties in northern and central regions of state.

Lesser Scaup — Lowest number of reports since 1989; seen in St. Louis, Roseau, Marshall, Sherburne, Brown, Big Stone, Lac Qui Parle.

Bufflehead — Seen 6/1 Stearns (Albany) KJB, 6/6 Marshall JMJ, 6/20 Marshall (3 males, 2 females) PHS, 6/20 Roseau SLF, 7/4 Hennepin (French Lake) KJB and Stearns (Albany) JPE.

Common Goldeneye — Reported from eight northern counties.

Hooded Merganser — Seen in 26 counties in all regions except Southeast. New nesting records in *Big Stone* BJU and *Otter Tail* DTT, SMT.

Common Merganser — Observed in Cook, Lake, St. Louis, Hubbard, Beltrami, Lake of the Woods, Mille Lacs. New nesting record in *Hubbard* RCS.

Red-breasted Merganser — Reported 6/6 Yellow Medicine (Spellman Lake) BJU, 6/18 Cook JEB, 7/23 Lake (Castle Danger) JWL.

Ruddy Duck — Reported in 23 counties in all regions except Northcentral, Northeast, Southeast.

Gray Partridge — Reported from six counties in western regions of the state, plus Todd, Stearns, Brown, Faribault, Freeborn.

Ring-necked Pheasant — Seen in 42 counties statewide, except Northeast. New nesting record in *Pine* JMP.

Ruffed Grouse — Reported from 22 counties as far west and south as a line through Polk, Todd, Fillmore. New nesting record in *Kittson* KLP, SSP.

Spruce Grouse — Reported from the counties of Lake, St. Louis, and Lake of the Woods.

Sharp-tailed Grouse — Reported from Beltrami, Marshall, Polk, and Kanabec; also 6/26 **Lac Qui Parle** (one hen and three chicks, Walter Twp.) BJU. New nesting record in *Kanabec* JMP.

Greater Prairie-Chicken — Seen in Red Lake, Polk, Norman, Clay. Recently released birds 6/24 Yellow Medicine (near Clarkfield) BJU, and three *Lac Qui Parle* locations: 7/4 (hen with chicks, near Marsh Lake) BJU, 7/15 (Walter Twp.) BJU, 7/24 (2, Plover Prairie) PHS.

Wild Turkey — Seen in 23 counties as far north as a line through Otter Tail, Todd, Pine. New nesting records for *Kanabec* JMP, *Washington* REH.

Common Loon — Fewest reports since 1990: observed in 30 counties throughout state except for southern regions.

Pied-billed Grebe — Reported in 32 counties in all regions of state except the

Southeast.

Horned Grebe — Unusual report 6/19 Lake (2 on L. Superior) RSF.

Red-necked Grebe — Observed in 18 counties statewide except South-central, Southeast, East-central. New nesting records in *Polk* EEF, *Clay* NAJ, *Lincoln* BJU.

Eared Grebe — Observed in Roseau, Marshall, Pennington, Polk, Clay, Big Stone, Lac Qui Parle, Brown, Stearns, Sherburne, Hennepin.

Western Grebe — Seen in 18 counties in all regions except North-central, Northeast, Southeast. Unusual location 7/1 Dakota (Black Dog L.) JPM, ADS.

Clark's Grebe — Reported 6/2, 6/9 Todd (2 at Lake Osakis) †BWF, JEB, 6/12–7/30 Big Stone (Thielke Lake) †PCC, †PHS, †BJU, m.ob., 6/30 Lac Qui Parle (Big Stone N.W.R.) †BJU.

American White Pelican — Observed in 34 counties in all regions of state.

Double-crested Cormorant — Seen in 40 counties statewide. The Minnesota D.N.R. reports attempted nesting *Mille Lacs* (Mille Lacs N.W.R.).

American Bittern — Reported from 20 counties in all regions of state except South-central, Southeast.

Least Bittern — Reported from Norman, Clay, Otter Tail, Wadena, Todd, Grant, and eight south counties.

Great Blue Heron — Seen in 51 counties throughout state.

Great Egret — Observed in 33 counties in all regions except North-central, Northeast.

Snowy Egret — More reports than usual, following record-high numbers in spring (***The Loon*** 76:193). All reports: 6/2–3 Douglas/Grant (2 at Bah Lakes W.M.A.) BWF, CBr *et al*., 6/3 Lac Qui Parle (Walter Twp.) BJU, 6/24 Big Stone (Odessa Twp.) BJU, 6/25 **Chippewa** (Lac Qui Parle L.) BJU, 7/9 Lincoln (East Twin L.) and Yellow Medicine (Bohemian W.M.A.) BJU, 7/19 Lac Qui Parle (Hantho Twp.) BJU, 7/25 Swift (3 at Shible L., 1 at Holloway W.T.P.) BJU, 7/28 Otter Tail (near Spitzer L.) †JMP.

Little Blue Heron — Only report: 6/2 Big Stone (adult, Prior Twp.) BJU.

Cattle Egret — Record high number of reports: seen 6/1 Lac Qui Parle BJU, 6/2–7/26 Grant (max. 38, Pelican Lake) ph. †CBr, m.ob., 6/2, 7/20–26 Douglas (Bah Lakes W.M.A.) BWF, KTP, EOr, 6/15 Houston (3) FZL, 6/19 Jackson DFN, 6/22 Swift BJU, 7/16 Becker MWy, Otter Tail (no date) JPM.

Green Heron — Observed in 37 counties throughout state.

Black-crowned Night-Heron — Seen in five north and nine south counties.

Yellow-crowned Night-Heron — Only report: one adult 6/24 **Big Stone** (Odessa Twp.) †BJU.

PLEGADIS, sp. — Documented 7/2 Lac Qui Parle (13, Perry Twp.) †BJU.

WOOD STORK — First state record 6/17 **Cook** LB, v.t. BAB *et al.* (***The Loon*** 77:8).

Turkey Vulture — Reported from 41 counties statewide.

Osprey — Fewest reports since 1993: Reported from 18 counties, but not in the southern regions.

Bald Eagle — Observed in 34 counties in all regions of state.

Northern Harrier — Reported from 43 counties in all regions except Southeast.

Sharp-shinned Hawk — Observed in eight north counties.

Cooper's Hawk — Reported from 26 counties in all regions except Northeast and Southwest. New nesting record for *Chippewa* BJU.

Northern Goshawk — Only reports: 7/12 Aitkin CLB, KWR, (no date) Roseau BJS.

Red-shouldered Hawk — Seen in three north and eight south counties.

Broad-winged Hawk — Reported from 24 counties in all regions except Southwest and Southcentral; new nesting record for *Todd* JSK.

Swainson's Hawk — Observed in three north and eight south counties within expected range.

Red-tailed Hawk — Reported from 56 counties statewide; new nesting record in *Cass* JWL.

Rough-legged Hawk — Two reports: 6/6 Polk (Rydell N.W.R.), **7/23** Cottonwood (Red Rock Prairie) †BRB, documentation reviewed by FJN.

American Kestrel — Observed in 53 counties throughout state. New nesting records for *Chippewa* BJU, *Winona* KAK, *Kanabec* JMP.

Merlin — Seen in Cook, St. Louis, Itasca, Cass, Beltrami, Roseau, Marshall, Pennington, Polk.

Peregrine Falcon — Observed in 5

north and 12 south counties.

Yellow Rail — All reports: 6/3 Pine RPR, 6/19–7/6 Aitkin KTP, KRE, DAB, BWF, 6/20–29 Roseau (12+ along county road 123) PHS, KLP, SSP, 6/26 **Red Lake** PHS.

Virginia Rail — Reported from eight north and nine south counties.

Sora — Reported from 25 counties in all regions of state except Southeast.

Common Moorhen — Observed 6/1–7/21 Brown (pair with 8 chicks, Rosenau-Lambrecht W.M.A.) BTS, DAB, BWF, m.ob., 7/16 Stearns (Getty Twp.) BJU.

American Coot — Seen in 23 counties in all regions except Southeast.

Sandhill Crane — Reported in 26 counties statewide except Northeast and Southwest; new nesting records from *Isanti* REH, *Pine* JMP, *Kanabec* JMP, *Todd* JSK, *Winona* NJK.

Black-bellied Plover — All reports: 6/1 Cook RBJ, 6/4 Lac Qui Parle BJU, 6/5 Lac Qui Parle (2) PHS, 6/6 Yellow Medicine BJU, 6/26 Traverse PCC.

American Golden-Plover — All reports from Traverse (Mud L.): spring migrants 6/26 (6) PCC, 7/3 (11) PCC; fall migrant (non-breeding?) 7/31 (1) PCC et al.

SNOWY PLOVER — Eighth state record 6/4–5 **Stearns** (Albany) ph. †KJB; †CBr, †PCC, ph. †PHS, ph. †DTT, †SMT, m.ob (***The Loon*** 77:48–49).

Semipalmated Plover — Spring migrants 6/1–4 Lac Qui Parle BJU. Mid-summer reports 7/1 Lac Qui Parle BJU, 7/3 Traverse PCC, the latter possibly an early fall migrant (***The Loon*** 74:65–82), but no subsequent reports until 7/17 Lac Qui Parle (7), 7/18 Big Stone (2) PCC, PHS. Highest reported count 7/31 Traverse (154 at Mud L.) PCC *et al.*

Killdeer — Reported from 56 counties statewide. Record-high count 7/25 Big Stone (**975**) PHS, JMJ.

American Avocet — Observed throughout season in Big Stone (max. 14, 6/19) PCC, PHS *et al.*, 7/3 Traverse (8 at Mud L.) PCC.

Greater Yellowlegs — Fall migrants reported from two north and nine south counties. Early north 7/3 Traverse (5) PCC. Early south 7/4 Big Stone (2) PHS, JMJ. Highest reported count 7/25 Big Stone (80) PHS, JMJ, but also see fall report.

Lesser Yellowlegs — Spring migrants 6/1, 6/11 Lac Qui Parle BJU, 6/1, 6/2 Big Stone PHS, BJU. Fall migrants reported from 22 counties statewide, beginning 6/19 Big Stone (2) PCC, JGG, 6/26 Big Stone (4) and Traverse (38) PCC. First juveniles and highest reported count 7/25 Big Stone (1514) PHS, JMJ, but also see fall report.

Solitary Sandpiper — Spring migrants 6/1 Lac Qui Parle BJU, 6/3 Lake of the Woods MHK. Fall migrants 7/3 Traverse PCC, 7/4 Big Stone PHS, JMJ; reported from three additional north and eight additional south counties. Highest reported count 7/18 Big Stone (**42**) PCC, PHS, but

also see fall report.

Willet — Observed 6/26, 7/3 Traverse PCC, 7/25 Swift BJU, 7/28 Big Stone BJU, 7/31 Lac Qui Parle PCC *et al.* All reports were of one or two birds. First juvenile 7/25 Big Stone PHS.

Spotted Sandpiper — Seen in 29 counties in all regions of the state except Southeast. Highest reported count 7/25 Big Stone (38) PHS, JMJ. New nesting record *Itasca* EOr.

Upland Sandpiper — Observed in 22 counties in all regions except Northeast and North-central; new nesting records for *Jackson* BRB, *Rice* FVS, *Dakota* SWe.

Whimbrel — Only report: 6/6–8 St. Louis SLF *et al.*

Hudsonian Godwit — Observed 7/30 (1), 7/31 (4) Traverse (Mud L.) KJB, PCC *et al.*

Marbled Godwit — Reported from ten north and two south counties, all in the western half of the state. Highest reported count 6/20 Roseau (64) PHS.

Ruddy Turnstone — Observed 6/1 Big Stone (5) PHS, 6/3 Marshall GHu, 7/30 Big Stone KJB, Mille Lacs (no date, Mille Lacs N.W.R.), MN DNR.

Sanderling — Spring migrants 6/5 Big Stone (2) PHS, 6/6 St. Louis (7) SLF. Early south 7/12 Brown (4) EOr, 7/17, 7/22 Lac Qui Parle m.ob., 7/25 Swift BJU, 7/28 Big Stone BJU (no fall migrants north). Highest reported count 6/1 Big Stone (18) PHS.

Semipalmated Sandpiper — Spring migrants 6/16 Lac Qui Parle BJU, 6/20 Clay CRM; probably still northbound was one **6/26** Big Stone PCC. Early north 7/3 Traverse PCC; fall migrants from two additional north and seven additional south counties. Highest reported counts 6/1 Lac Qui Parle (626) BJU, 7/31 Lac Qui Parle (694) and Traverse (701) PCC *et al.*

Least Sandpiper — Seen in seven north and ten south counties. Late south 6/5 Lac Qui Parle (1) PHS; only additional spring records Big Stone, Stearns. Fall migrants 6/27 Roseau PHS, 7/3 Traverse PCC, 7/4 Lac Qui Parle PHS, JMJ. Highest reported count 7/18 Big Stone (754) PCC, PHS, but also see fall report.

White-rumped Sandpiper — Spring migrants in Roseau, Traverse, Big Stone, Lac Qui Parle, Yellow Medicine, Lincoln, Stearns. Late south 6/19 Big Stone PCC, JGG. Late north 6/27 Roseau PHS, 6/26, **7/3** (non-breeding?) Traverse †PCC. Presumed fall migrants (singles) 7/18 Big Stone †PCC, †PHS, 7/22 Lac Qui Parle †BJU. Highest reported count 6/1 Big Stone (263) PHS.

Baird's Sandpiper — Fewest reports since 1992: only spring migrants 6/2 Big Stone BJU, 6/12 Stearns PEB. Early south 7/17 Lac Qui Parle (3) PCC, PHS. Early north 7/23 Lake and St. Louis JWL. Fall migrants also reported from Big Stone, Swift, Traverse.

Pectoral Sandpiper — Observed in ten north and nine south counties. Recorded at weekly intervals on shorebird surveys in western Minnesota throughout June and early July, suggesting possibility of attempted summering by a few birds, e.g., 6/12 (1), 6/19 (2) Big Stone PCC, JGG, 6/26 Traverse (2) PCC, 7/3 Traverse (8) PCC, 7/11 Big Stone (7) PHS. Please see fall report for high counts.

Dunlin — Spring migrants 6/1 Big Stone (206) PHS, 6/1, 6/6 Lac Qui Parle (570 on 6/1) BJU, as well as Douglas, Lac Qui Parle, Brown; fall migrants reported in Becker, Big Stone, Yellow Medicine, Lincoln.

Stilt Sandpiper — Spring migrants last reported 6/12, **6/19** Big Stone PCC, JGG. Southbound migrants **6/26**, 7/3 Traverse PCC, 7/4, 7/10 Lac Qui Parle PHS, JMJ.

First juvenile 7/25 Big Stone PHS. Highest reported count 7/30 Big Stone (545) BJU. Fall migrants also reported from Chippewa, Swift, Winona.

Buff-breasted Sandpiper — Injured bird **6/26** Big Stone †PCC. Southbound migrants 7/22 Lac Qui Parle KJB, 7/26 Lake JWL, 7/31 Traverse PCC.

RUFF — Reported **7/25–29** Big Stone (Otrey Twp.) ph. †PHS, †JMJ; ph. DAC, †DTT, †SMT, †BJU, m.ob (***The Loon*** 77:50–51). Third county record and 42nd overall.

Short-billed Dowitcher — Reported from two north and eight south counties. Only spring migrant 6/1 Lac Qui Parle BJU; fall migrants **6/27** Roseau (2) PHS, 7/3 Traverse (28) PCC, 7/4 Big Stone PHS, JMJ.

Wilson's Snipe — Seen in 23 counties throughout the state except South-central, Southeast; new nesting record for *Lac Qui Parle* BJU.

American Woodcock — Reported in eleven north counties, and Sherburne, Rice, Waseca.

Wilson's Phalarope — Reported from four north and ten south counties.

Red-necked Phalarope — Observed 6/1, 6/3–7, 7/22, 7/29 Lac Qui Parle BJU, JMP, 6/4, 7/26 Stearns KJB.

Franklin's Gull — Reported from 17 counties throughout state except for eastern regions.

Bonaparte's Gull — More reports than usual. Observed 6/1 Todd KJB, 6/16, 7/11–12 Crow Wing EOr, CRM, 6/20 Beltrami DPJ, 6/20, 6/27 Roseau (216 on 6/27, high number for mid-summer) PHS, 7/25 Itasca EOr, 7/26 Douglas EOr, 7/31 Big Stone SWe.

Ring-billed Gull — Seen in 42 counties statewide.

Herring Gull — Observed in Lake of the Woods, St. Louis, Lake, Itasca, Cook, Mille Lacs, Polk, Big Stone, Lac Qui Parle, Chippewa.

Caspian Tern — Reported from St. Louis, Polk, Clay, Otter Tail, Wadena, Mille Lacs, Big Stone, Yellow Medicine; Minnesota D.N.R. reported nesting in *Mille Lacs* (Mille Lacs N.W.R.).

Common Tern — Observed in Mille Lacs, St. Louis, Itasca, Lake of the Woods, Roseau, Polk.

Forster's Tern — Seen in 23 counties in all regions of the state except Northeast, Southeast.

Black Tern — Observed in 37 counties throughout state, except Northeast, Southeast; new nesting records for *Cottonwood* BRB, *Todd* JSK.

Rock Pigeon — Observed in 47 counties statewide; new nesting records for *Lake* JML, *Big Stone* BJU, *Lac Qui Parle* BJU.

Eurasian Collared-Dove — Nest-building documented in *Dakota* (6/11, Farmington) †TAN (***The Loon*** 77:54); nested again in Houston (Caledonia) KAK, ph. FZL. First

Caspian Tern nest, 21 July 2004, Mille Lacs NWR, Mille Lacs County. Photo by Michelle McDowell.

county records 6/6 **Yellow Medicine** (near Clarkfield) †BJU, 6/28 **Brown**/**Cottonwood** (Comfrey) †CBr. Also reported from known locations in Chippewa (Milan), 7/14 Renville *fide* AXH.

WHITE-WINGED DOVE — Sixth state record 6/16 St. Louis (Gnesen Twp.) CE, †KRE, ph. MH, †PHS.

Mourning Dove — Reported from 54 counties throughout the state.

Black-billed Cuckoo — Fewest reports ever: observed in 20 counties in all regions of the state.

Yellow-billed Cuckoo — Record low number of reports: seen in three north and seven south counties.

Eastern Screech-Owl — Seen in Todd, Big Stone, Chippewa, Yellow Medicine, Murray, Brown.

Great Horned Owl — Reported from 23 counties in all regions of the state except South-central.

BURROWING OWL — Pair near Lewisville (see spring report) disappeared 6/2 Watonwan *fide* AXH.

Barred Owl — Lowest number of reports since 1991: reported from nine north and eight south counties, including 6/25

Great Gray Owl, 5 June 2004, Koochiching County. Photo by Anthony X. Hertzel.

Chippewa BJU.

(nested), Koochiching, Beltrami, Lake of the Woods, Roseau, Aitkin, and 7/15 **Mahnomen** BJU.

Great Gray Owl — Most reports since 1981: observed in Cook, Lake, St. Louis

Long-eared Owl — Reported 6/2, 6/12, 6/5, 6/16–18 *Todd* JSK, BWF, BJU, 6/25 Lac

Common Nighthawk, 15 June 2004, Blue Mounds State Park, Rock County. Photo by Jim Mattsson.

Qui Parle BJU, 7/26 St. Louis JWL.

Short-eared Owl — Observed 6/12 Red Lake (2) PHS, 7/1, 7/24 Lac Qui Parle BJU, 7/24–25 Norman (2 at Neal W.M.A.) RAE, CRM.

Boreal Owl — Only report: 6/8 St. Louis (singing southeast of Hoyt Lakes) JCG.

Common Nighthawk — Record low number of reports: observed in 25 counties thoughout the state.

Whip-poor-will — Reported from Cook (†DLPW), St. Louis, Lake of the Woods, Kittson, Pennington, Red Lake, Wadena, Todd, Sherburne, Dakota, Houston.

Chimney Swift — Seen in 46 counties statewide; new nesting record for Clay RHO.

GREEN VIOLET-EAR — First state record 6/12 **Anoka** (Linwood Twp.) ph. CR (***The Loon*** 77:3–7).

Ruby-throated Hummingbird — Observed in 40 counties in all regions except Southwest.

Belted Kingfisher — Reported from 40 counties statewide.

Red-headed Woodpecker — Fewest reports ever: seen in 29 counties in all regions except Northeast.

Red-bellied Woodpecker — Seen in 32 counties throughout state except Northeast; new nesting record in *Todd* JSK.

Yellow-bellied Sapsucker — Observed in 36 counties statewide; new nesting record for *Chippewa* BJU.

Downy Woodpecker — Reported from 45 counties in all regions of state; new nesting records from *Otter Tail* DTT, SMT, *Houston* KAK.

Hairy Woodpecker — Seen in 47 counties statewide.

American Three-toed Woodpecker — One summer report: 6/22 St. Louis County JWL.

Black-backed Woodpecker — Observed in Cook, Lake, St. Louis, Aitkin, Itasca, Beltrami, Clearwater, and Lake of the Woods.

Northern Flicker — Reported from 53 counties statewide.

Pileated Woodpecker — Fewest reports since 1994: observed in 33 counties in all regions of state except Southwest; new nesting records *Polk fide* EEF, *Otter Tail* DTT, SMT.

Olive-sided Flycatcher — Seen in nine north and nine south counties; late south migrant 6/13 Scott JMP.

Eastern Wood-Pewee — Reported from 48 counties statewide; new nesting record *Pine* JMP.

Yellow-bellied Flycatcher — Observed in ten north and two south counties.

Acadian Flycatcher — Eight territories at Murphy-Hanrehan P.R., Dakota/Scott BAF. Also reported 6/2 Rice TFB, 6/5, 6/26, 7/20 Anoka KJB, 6/8, 6/9, 6/27 Houston DAB, 6/21 Fillmore NBO, 6/13 Hennepin OLJ.

Alder Flycatcher — Reported from 17 north and 6 south counties; late south (away from known breeding areas) 6/25 Rice TFB.

Willow Flycatcher — Observed in 26 counties in all regions of the state except Northeast, North-central.

Least Flycatcher — Reported from 42 counties in all regions except Southeast.

Eastern Phoebe — Reported from 45 counties statewide; new nesting record for *Todd* JSK.

Great Crested Flycatcher — Observed in 48 counties throughout state.

Western Kingbird — Most reports since 1992; seen in 25 counties as far east as Sherburne.

Eastern Kingbird — Reported from 56 counties statewide.

Loggerhead Shrike — All north reports: 6/28 **Kittson** (St. Joseph Twp.) †SSP (***The Loon*** 77:49–50), Clay (Felton Prairie), Norman (7/23, adult feeding young), Todd (2). Also seen in nine south counties.

WHITE-EYED VIREO — Banded 6/5 Clay (Buffalo River S.P.) ph. †GEN, JGa. Third county record and 43rd overall.

Bell's Vireo — Observed 6/5 Dodge OWB, 6/6, 6/27 Winona BWF, DAB, 6/8 Wabasha KTP, 6/16 Blue Earth BTS, 7/4 Waseca JPS.

Yellow-throated Vireo — Reported from 36 counties in all regions of state.

Blue-headed Vireo — Observed in eleven counties in northern regions; first nesting record *Carlton* JWL.

Warbling Vireo — Reported in 45 counties statewide.

Philadelphia Vireo — Seen 6/1 Kanabec JMP, 6/1, 6/2 Clay RHO, DPJ, 6/22 Cook RBJ.

Red-eyed Vireo — Reported from 51 counties throughout state.

Gray Jay — Observed in the northern counties of Lake, St. Louis, Aitkin, Itasca, Cass, Beltrami, Clearwater, and Lake of the Woods.

Blue Jay — Seen in 56 counties statewide.

Black-billed Magpie — Observed in the counties of St. Louis, Beltrami, Lake of the Woods, Roseau, Kittson, Marshall, Pennington, Red Lake, Polk, and Mahnomen.

American Crow — Reported from 59 counties throughout state.

Common Raven — Reported from 20

counties as far south as Anoka.

Horned Lark — Seen in 34 counties in all regions except Northeast.

Purple Martin — Lowest number of reports since 1994: observed in 31 counties in all regions of state except Northeast; first nesting record *Big Stone* BJU.

Tree Swallow — Seen in 55 counties statewide; new nesting record in *Steele* NFT.

Northern Rough-winged Swallow — Observed in 33 counties in all regions of state.

Bank Swallow — Seen in 31 counties in all regions of state except Southeast; new nesting record in *Yellow Medicine* BJU.

Cliff Swallow — Reported from 48 counties statewide.

Barn Swallow — Observed in 62 counties throughout state.

Black-capped Chickadee — Seen in 56 counties in all parts of state.

Boreal Chickadee — Reported 6/15 Lake NRRI, 6/22, 7/11 St. Louis NRRI, SLF, SES, 6/24, 6/29 Itasca CLB, KWR, NRRI, 7/5 Cass NRRI, 7/16 Beltrami BJU.

Tufted Titmouse — Seen throughout summer Fillmore NBO.

Red-breasted Nuthatch — Reported in eleven north and three south counties.

White-breasted Nuthatch — Observed in 55 counties statewide.

Brown Creeper — Seen in Cook, Lake, St. Louis, Itasca, Aitkin, Cass, Wadena, Beltrami, Clearwater, Polk; new nesting record in *Itasca* JWL.

ROCK WREN — Second adult (see spring report) 6/6–7/17 *Clay* (Felton Prairie, 4 young fledged) †PCC, m.ob. First nesting record for this Casual species.

Carolina Wren — Reported without details 7/14+ Hennepin (Coon Rapids Dam R.P.) *fide* AXH. Documented 7/26 Ramsey †NSp.

House Wren — Reported from 57 coun-

ties in all part of state.

Winter Wren — Reported from Cook, Lake, St. Louis, Itasca, Aitkin, Cass, Beltrami, Hubbard, Clearwater, Lake of the Woods, Roseau.

Sedge Wren — Observed in 55 counties statewide.

Marsh Wren — Reported from 39 counties in all regions of state.

Golden-crowned Kinglet — Seen in Cook, Lake, St. Louis, Itasca, Cass, Beltrami, Hubbard, Clearwater.

Ruby-crowned Kinglet — Observed 6/2 Ramsey JEH, 6/2, 6/5, 6/14 Cook RBJ, KTP, NRRI, 6/6 Polk (Rydell N.W.R.), 6/15, 6/19 Lake NRRI, 6/21 St. Louis NRRI, ALE, SES, 7/13 Mille Lacs CRM.

Blue-gray Gnatcatcher — Reported from 21 counties as far north as Cass, Crow Wing.

Eastern Bluebird — Seen in 59 counties statewide.

Veery — Reported 6/8 **Big Stone** RBJ and 30 additional counties in all regions except Southwest.

Swainson's Thrush — Seen in Dakota, Sherburne, Lac Qui Parle, Clay, Polk, Itasca, St. Louis, Lake, Cook.

Sage Thrasher, 26 June 2004, Dodge Nature Center, Ramsey County. Photo by David Nelson.

Hermit Thrush — Observed in 12 north counties.

Wood Thrush — Reported from 26 counties in all regions except Northwest. Numbers down (10 territories) at Murphy-Hanrehan P.R., Dakota/Scott BAF.

American Robin — Seen in 61 counties statewide.

Gray Catbird — Observed in 56 counties in all regions of state.

Northern Mockingbird — Five reports: 6/3 Cook (Spruce Creek) JGW *et al.*, 6/4, 6/27 St. Louis DBF, SLF, 6/6 Yellow Medicine BJU, 6/13 Scott RMD, 7/3 Cook (Gunflint Trail) *fide* DRB.

SAGE THRASHER — Eleventh state re-

cord 6/26 **Ramsey** (Dodge Nature Center) ph. DN.

Brown Thrasher — Seen in 45 counties throughout state.

European Starling — Reported from 57 counties in all regions of state. New nesting record *Pine* JMP.

Cedar Waxwing — Observed in 47 counties statewide.

Blue-winged Warbler — Reported from ten south counties as well as 6/1 Morrison BWF, 6/7, 7/9 Todd JSK.

Golden-winged Warbler — Seen in 18 counties as far south as 6/1, 6/3 Rice TFB; new nesting record *Sherburne* PLJ.

Tennessee Warbler — Observed in eight north and eight south counties, including 7/17 Anoka (Fridley) CF, 7/20 Anoka (3) KJB.

Nashville Warbler — Reported from 15 north counties and 6/1 Lac Qui Parle BJU.

Northern Parula — Seen in Cook, Lake, St. Louis, Itasca, Aitkin, Cass, Beltrami, Hubbard, Clearwater, Anoka. Presumed spring migrant 6/2 Kittson (Twin Lakes) JMJ, SAS. Also reported 6/19 Scott SWe, **7/5** Fillmore NBO, 7/17 Anoka (Fridley) CF.

Yellow Warbler — Reported from 47 counties statewide.

Chestnut-sided Warbler — Tied with 2001 for most reports ever: seen in 29 counties in all parts of state except southern regions.

Magnolia Warbler — Observed in Cook, Lake, St. Louis, Itasca, Aitkin, Cass, Polk, Clay, Otter Tail, Lac Qui Parle, Yellow Medicine; late south 6/6 Yellow Medicine BJU.

Cape May Warbler — Seen 6/4 Cook JEB, RBJ, 6/6 Polk (Rydell N.W.R.), 6/19 Lake NRRI, 6/24, 6/29 Aitkin CLB, KWR, KRE.

Black-throated Blue Warbler — Unusual reports **6/16** Anoka PG, **6/23** Sherburne PJG. Also observed in Cook, Lake, St. Louis, and 7/16 Beltrami BJU.

Yellow-rumped Warbler — Seen in Cook, Lake, St. Louis, Itasca, Cass, Beltrami, Hubbard, Clearwater, Lake of the Woods, Roseau, Polk, Lac Qui Parle; late south (away from known breeding areas) 6/1 Lac Qui Parle BJU.

Black-throated Green Warbler — Observed in ten north counties.

Blackburnian Warbler — Seen in ten north counties; late migrant 6/2 Big Stone BJU.

Pine Warbler — Observed in 13 north and 4 south counties, including 7/26 Ramsey REH.

Mourning Warbler nest, 23 June 2004, west of Crane Lake, St. Louis County. Photo by Jim Lind.

Palm Warbler — Reported in St. Louis, Itasca, Cass, Lake of the Woods, Polk, and new nesting record *Aitkin* BWL.

Bay-breasted Warbler — Highest number of reports ever received: 6/1 Kanabec CAM, 6/1 Lac Qui Parle BJU, 6/2 Pine JMP, 6/4 Cook RBJ, 6/6 Lake of the Woods JMJ, 6/6 Polk (Rydell N.W.R.), 7/23 Becker MWy.

Blackpoll Warbler — Spring migrants 6/1 Kanabec CAM, 6/1 Lac Qui Parle BJU, 6/1 Clay RHO, 6/4 Cook RBJ, 6/6 Otter Tail (Glendalough S.P.), 6/6 Polk (Rydell N.W.R.)

Cerulean Warbler — Numbers down (9 territories) at Murphy-Hanrehan P.R., Dakota/Scott BAF. Also seen in Becker, Otter Tail, Todd, Nicollet, Winona, Ramsey, Anoka, Chisago, Wright.

Black-and-white Warbler — Reported from 15 north and 3 south counties.

American Redstart — Observed in 43 counties statewide; new nesting record for *Todd* JSK.

Prothonotary Warbler — Lowest number of records since 1981: reported 6/6,

6/14 Hennepin EOr, BWF, 6/7, 6/8 Houston FZL, KTP.

Ovenbird — Seen in 35 counties throughout state.

Northern Waterthrush — Observed in Cook, Lake, St. Louis, Itasca, Cass, Beltrami, Marshall, Todd, plus 7/23 Mahnomen CRM.

Louisiana Waterthrush — Reported 6/8 Houston BWF, 6/12 Fillmore NBO, 6/27 Winona DAB, Pine (early July) *fide* AXH.

Kentucky Warbler — Observed 6/2, 6/3, 6/7 Blue Earth (Williams Nature Center) JEB, DAB, BWF, 6/2, 6/5 Scott (Murphy-Hanrehan P.R.) TAN, BAF.

Connecticut Warbler — Seen in nine north counties; late migrant 6/8 **Chippewa** JEB.

Mourning Warbler — Reported in nine north and five south counties, including five territories at Murphy-Hanrehan P.R., Dakota/Scott BAF.

Common Yellowthroat — Seen in 57 counties statewide.

Hooded Warbler — BAF reported 22 territories, 6 failed nests parasitized by cowbirds, an unparasitized nest that fledged 3 Hooded Warblers, and one recently fledged brood at Murphy-Hanrehan P.R., Dakota/Scott. Also observed 6/4 Dakota (Lebanon Hills R.P.) †CBr, LM, 6/19 Nicollet ADS, CBr.

Yellow-breasted Chat, 6 June 2004, Sherburne NWR, Sherburne County. Photo by Jim Mattsson.

Wilson's Warbler — Reported 6/1 Ramsey NSp, 6/4 Cook RBJ, 6/6 Polk (Rydell N.W.R.), **6/13** Brown JSS, 6/23 Lake KRE, 7/3 St. Louis DAB.

Canada Warbler — Seen in Cook, Lake, St. Louis, Itasca, Cass, Clearwater, Pine, Clay.

Yellow-breasted Chat — Most summer reports ever: one from spring was joined by a second bird 6/1, 6/6 Yellow Medicine (Upper Sioux Agency S.P.) BWF, †BJU, 6/5–22 **Sherburne** (Sherburne N.W.R.) ASc, ph. JPM, †PLJ, m.ob., 6/6–7/8 Rice (2 locations, audio recording) TFB, 6/26 Clay (Felton Prairie) KRE.

Summer Tanager — Adult males (see spring report) documented through 7/23 Dakota (Lebanon Hills R.P.) ph. JPM, †CBr, †ADS, and through 7/25 Scott (Murphy-Hanrehan P.R.) †RMD, †BAF, JMP. Both observed advertising for mates to no avail.

Chipping Sparrow feeding Brown-headed Cowbird chick, 6 July 2004, Mendota Heights, Dakota County. Photo by Jo Pasternak.

Scarlet Tanager — Reported from 33 counties throughout state.

Eastern Towhee — Observed in 6 north and 13 south counties.

Chipping Sparrow — Seen in 61 counties statewide.

Clay-colored Sparrow — Most records ever: reported from 53 counties in all regions of state.

Field Sparrow — Observed in 36 counties in all regions except Northeast, and as far northwest as 6/24 Polk (Agassiz Dunes S.N.A.) KLP; new nesting record in *Chippewa* BJU.

Vesper Sparrow — Highest number of reports ever received: seen in 56 counties statewide.

Lark Sparrow — Reported in three north and seven south counties, including pair with begging juvenile 7/4 Brown BTS.

Savannah Sparrow — Observed in 47 counties throughout state; new nesting records in *Lac Qui Parle* BJU, *Todd* JSK.

Grasshopper Sparrow — Seen in 34 counties in all regions except North-central.

Henslow's Sparrow — All north reports: 6/10+ Otter Tail (2 or 3 at Glendalough S.P.) CBr, †DTT, †SMT, m.ob., 6/25 **Polk** (near Tympanuchus W.M.A.) KLP. South reports from Lac Qui Parle, Winona, Rice,

Washington.

Le Conte's Sparrow — Number of reports second only to 2003 (22): seen in 21 counties in all regions except southern.

Nelson's Sharp-tailed Sparrow — Reported from six north counties within usual summer range.

Song Sparrow — Reported from 56 counties statewide.

Lincoln's Sparrow — Record number of reports: seen in Lake, St. Louis, Itasca, Aitkin, Cass, Beltrami, Roseau, Morrison (7/12, CRM).

Swamp Sparrow — Observed in 40 counties throughout state; new nesting records in *Itasca* JWL, *Lac Qui Parle* BJU.

White-throated Sparrow — Tied with 2000 for record low number of reports: seen in eleven north counties. For in-depth discussion of this species' population status, please see ***The Loon*** 76:115–122.

White-crowned Sparrow — Late spring migrants 6/2 Clay RHO, 6/6 Polk (Rydell N.W.R.).

Dark-eyed Junco — Observed 6/6 Lake NRRI, 6/6, 6/20 Polk (Rydell N.W.R.), 6/8 St. Louis SLF, 6/30 Roseau KLP, SSP.

Chestnut-collared Longspur — Reported 6/6–7/27 Clay PHS, m.ob., 6/11 Lac Qui Parle (Yellow Bank Hills S.N.A.) †BJU, 7/9 Yellow Medicine (Fortier Twp.) †BJU.

Indigo Bunting, 2 June 2004, Lebanon Hills, Dakota County. Photo by Jim Mattsson.

Northern Cardinal — Seen in 38 counties in all regions of state.

Rose-breasted Grosbeak — Observed in 50 counties statewide.

Blue Grosbeak — Reported within usual range from Murray, Nobles and Rock, plus 6/4 Lac Qui Parle BJU, 7/18–22 Brown (pair at gravel pit south of Sleepy Eye) BTS, JSS, JEB, RBJ.

Indigo Bunting — Seen in 47 counties statewide.

PAINTED BUNTING — Adult male 6/9–11 **Lyon** (near Marshall) PRD, ph. †RJS, †JGW, female or immature male 6/17 or 6/18 through 6/22 **Olmsted** (Rochester) TD, BOr, ph. RLE. All but 4 of the state's 16 records have occurred within the past ten years.

Dickcissel — Observed in 33 counties south and west of a line from Mahnomen to Houston.

Bobolink — Seen in 56 counties statewide.

Red-winged Blackbird — Observed in 57 counties throughout state.

Eastern Meadowlark — Lowest number of reports since 1985: seen in 6 north and 15 south counties; new nesting record in *Kanabec* JMP.

Western Meadowlark — Reported from 40 counties in all regions of the state except Northeast.

Yellow-headed Blackbird — Seen in 37 counties statewide.

Brewer's Blackbird — Lowest number of reports since 1994: observed in 24 counties in all regions of state. New nesting record in *Pine* JMP.

Common Grackle — Seen in 59 counties throughout state.

Great-tailed Grackle — Only documented reports: 6/10, 6/28 Rock (pair at Hills W.T.P.) †BWF, ph. †CBr.

Brown-headed Cowbird — Repored from 55 counties in all regions of state; new nesting records for *Pine* JMP, *Scott* BAF.

Orchard Oriole — Observed in 22 counties in all regions of state, including adult male lingering at feeder through 6/2 St. Louis (Duluth) DOK, SM.

Baltimore Oriole — Lowest number of reports since 1994: seen in 46 counties statewide.

Purple Finch — Reported from 14 north counties.

House Finch — Observed in 48 counties statewide; new nesting records for *Beltrami* JWL, *Todd* JSK.

Red Crossbill — Seen 6/19 Lake NRRI, 6/24 St. Louis SLF, 6/30 Cass NRRI, 7/16 Beltrami BJU.

White-winged Crossbill — Observed 6/1–6 Beltrami DPJ, 6/17 Cook NRRI, 6/22 Lake KRE, 6/25 Aitkin EOr, 6/28 Lake NRRI.

Pine Siskin — Seen in four north counties and 6/1 Ramsey NSp, Anoka (late July) KJB.

American Goldfinch — Reported in 64 counties statewide; new nesting record in *Itasca* EOr.

Evening Grosbeak — Seen in Cook, St. Louis, Itasca, Aitkin, Beltrami, Hubbard, Clearwater, Lake of the Woods, Carlton.

House Sparrow — Observed in 58 counties throughout state; new nesting records for *Swift* BJU, *Houston* KAK.

County Composite — All counties with reports of nesting activity. Darker shades indicate counties with greater number of records. Twenty-two counties had no reports.

Key to the Seasonal Report

1. Upper case (**LEAST TERN**) indicates a Casual or Accidental species in the state.
2. Dates listed in bold (**10/9**) indicate an occurrence either earlier, later, or within the three earliest or latest dates on file.
3. Counties listed in bold (**Aitkin**) indicate an unusual occurrence for that county.
4. Counties with an underline (**Becker**) indicate a first county record.
5. Counties listed in italics (*Crow Wing*) indicate a first county breeding record.
6. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.
7. Counts listed in bold (**150**) indicate a total within or exceeding the top three high counts for that species.
8. Dagger "†" preceding observer's initials denotes documentation was submitted.
9. Species documented with a photograph are denoted with "ph".
10. Species documented with digital or video tape are denoted with "v.t."

The *Seasonal Report* is a compilation of seasonal bird sightings from throughout Minnesota. We particularly invite reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor, request a report form from the Editor of the *Seasonal Report*, Peder H. Svingen, 2602 East 4th St., Duluth, MN 55812–1533.

Observers

ADS	Andrew D. Smith	AXH	Anthony X. Hertzel
AEB	Al E. Batt	BAB	Boyd A. Blomberg III
ALE	Audrey L. Evers	BAF	Bruce A. Fall
ARo	Alma Ronningen	BAP	Bruce A. Pannkuk
ASc	Al Schirmacher	BBB	Bruce B. Baer
AWJ	Andrew W. Jones	BCM	Chris Mansfield

BJM	Barbara J. Martin
BJS	Beth & Jeff Siverhus
BJU	Bill J. Unzen
BKY	Ben K. Yokel
BLA	Betty L. Ammerman
BR	Bob Rogers
BRB	Brad R. Bolduan
BRK	Byron R. Kinkade
BRL	Bill R. Litkey
BRN	Bill R. Nelson
BRT	Bill R. Tefft
BSe	Blaine Seeliger
BTS	Brian T. Smith
BWF	Ben W. Fritchman
CAK	Chuck A. Krulas
CAM	Craig A. Menze
CB	Carole Brysky
CBr	Conny Brunell
CCB	Chris C. Benson
CE	Chris Elmgren
CF	Cole Foster
ChM	Chet A. Meyers
CJT	Carol & Jim Tveekrem
CLB	Cindy L. Butler
CMN	Connie M. Norheim
CR	Carol Reed
CRM	Craig R. Mandel
CWG	Carl W. Greiner
DAB	David A. Bartkey
DAC	Dave A. Cahlander
DAG	David A. Grosshuesch
DBF	Deborah Buria Falkowski
DBz	Dedrick Benz
DCT	Dianne C. Tuff
DCZ	Dave C. Zumeta
DDM	Dennis D. Martin
DFN	David F. Neitzel
DJS	Dory J. Spence
DKM	Diane K. Millard
DLB	Diane L. Brudelie
DLPW	Deborah L.P. Waters
DMF	Dan M. Floren
DMP	Daphne & Meyers Peterson
DMy	Dave Myher
DN	David Nelson
DOK	Don Kienholz
DPJ	Douglas P. Johnson
DPS	David P. Sovereign
DRB	David R. Benson
DRM	Dennis R. Meyer
DTT	Dan T. Thimgan
DWK	Douglas W. Kieser
EEF	Eve E. Freeberg
EJE	Eddy & Judy Edwards
EOr	Earl Orf
FAE	Fred A. Eckhardt
FJN	Frank J. Nicoletti
FVS	Forest V. Strnad
FZL	Fred Z. Lesher
GB	Gabriel Bertilson
GEN	Gary E. Nielsen
GHu	Gary Huschle
GLS	Gary L. Simonson
GLy	Gladwyn Lynne
GMM	Gretchen M. Mehmel
GO	Gary Otnes
GT	Gary Tischer
HCT	Howard C. Towle
HHD	Herb H. Dingmann
JCG	Janet C. Green
JEB	Jerry E. Bonkoski
JEM	John E. Morrison
JEZ	James E. Zimmerman
JGa	Joe Gartner
JGW	Josh G. Watson
JJS	Jeff J. Stephenson
JLH	James L. Howitz
JLU	Janice & Larry Uden
JMJ	Jeanie M. Joppru
JMP	Jackie M. Potts
JPE	John P. Ellis
JPM	James P. Mattsson
JPS	Julian P. Sellers
JRN	Jeff R. Newman
JSB	Jo & Steve Blanich
JSc	John Schladweiler
JSK	John & Susan Kroll
JSS	Jack Sprenger
JSt	Joachim Strengbom
JWL	James W. Lind
KAK	Karla A. Kinstler
KAR	Kathryn A. Rivers
KIM	Kim I. Metz
KJB	Karl J. Bardon
KKW	Kristine & Kyle Wicklund
KLP	Katy L. Patterson
KRE	Kim R. Eckert
KRS	Karen R. Sussman
KTP	Keith T. Pulles
KWR	Kim W. Risen

LAW	Larry A. Weber
LB	Lynden Blomberg
LBF	Linda B. Felker
LM	Leslie Marcus
LMC	Linda M. Cooper
LS	Linda Sparling
MA	Margaret Anderson
MAJ	Murdoch A. Johnson
MAW	Marlene A. Weber
MH	Mike Hendrickson
MHK	Martin H. Kehoe
MJC	Mary Jo Christopherson
MJF	Merrill J. Frydendall
MMc	Michelle McDowell
MME	Molly M. Evans
MRN	Michael R. North
MSS	Mark Sparky Stensaas
MTA	Tom Auer
MWS	Mike W. Steffes
MWy	Mary Wyatt
NAJ	Nancy A. Jackson
NB	Noah Bertilson
NBO	Nancy B. Overcott
NED	Nelvina E. De Kam
NFT	Nels F. Thompson
NJK	Nancy J. Krage
NRRI	Natural Resources Research Institute
NSp	Nancy Sparrow
OLJ	Oscar L. Johnson
OWB	Bill Bruins
PBD	Pat & Bob Dewenter
PCC	Philip C. Chu
PEB	Paul E. Budde
PEJ	Paul E. Jantscher
PG	Peter Getman
PHS	Peder H. Svingen
PJ	Per Johansson
PJB	Paul J. Binek
PJG	Paul & JoAnn Gunderson
PJR	Pat J. Rice
PLJ	Paul L. Johnson
PRD	Pat & Rose Deutz
PRH	Pete Hoeger
PWP	Paul W. Pedersen
RAE	Ron A. Erpelding
RBJ	Robert B. Janssen
RBW	Bob Williams
RCK	Rose C. Kneeskern
RCS	Rolf C. Smeby
RDK	Ron D. Kneeskern
REH	Robert E. Holtz
RHO	Robert H. O'Connor
RJo	Roland Jordahl
RJS	Roger J. Schroeder
RLE	Bob Ekblad
RMD	Robert M. Dunlap
RNS	Richard N. Smaby
RPR	Robert P. Russell, Jr.
RSF	Randy S. Frederickson
RWS	Robert W. Schroeder
SAS	Shelley A. Steva
SC	Shawn Conrad
SES	Steven E. Schon
SID	Sue Durrant
SLC	Steve L. Carlson
SLF	Steven L. Falkowski
SLL	Sharon L. Lind
SM	Smiley Mehan
SMo	Sue Morton
SMT	Sandy M. Thimgan
SPM	Steven P. Millard
SPS	Steven P. Stucker
SSP	Shane S. Patterson
STW	Sylvia T. Winkelman
SWe	Steve Weston
SWi	Susan Wiste
TAN	Tom A. Nelson
TAT	Tom A. Tustison
TDH	Tim D. Houghton
TEB	Tom & Elizabeth Bell
TES	Thomas E. Straw
TFB	Tom F. Boevers
TPW	Terry P. Wiens
WCM	William C. Marengo
WEN	Warren E. Nelson
WMS	William M. Stauffer
WOS	William O. Stjern

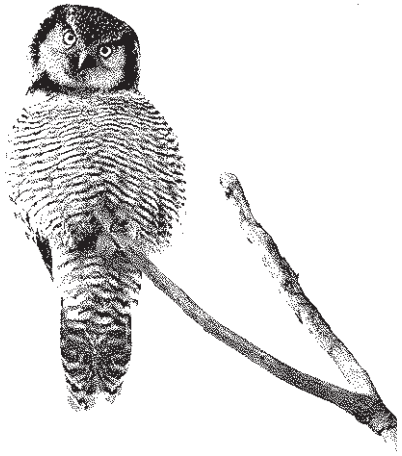
Abbreviations

m.ob.	many observers
N.W.F.R.	National Wildlife & Fish Refuge
N.W.R.	National Wildlife Refuge
P.R.	Park Reserve
R.P.	Regional Park
S.N.A.	Scientific & Natural Area
S.P.	State Park
W.M.A.	Wildlife Management Area
W.P.A.	Waterfowl Production Area
W.T.P.	Wastewater Treatment Ponds

Birding by Hindsight

A Third Look at the Last Ten Years

Kim R. Eckert



Given the breaking news at the time of this writing. I was briefly tempted to entitle this *Hindsight* installment as "A Second Look at Ivory-billed Woodpeckers!" There's even a video of it today on someone's website, as the bird appears quite ghost-like, appropriately enough, as it vanishes into the Arkansas swamp. (It actually looks much like a primitive special effect from some vampire movie of the silent era.) But talk about hindsight! A look at a species no one had positively seen in several decades? Now there's a headline to sell this magazine like proverbial hotcakes off the newsstand.

The Loon, however, is not one of those rags you see at the supermarket check-out with accounts of UFO and Elvis sightings. So perhaps it's better to stick with a less sensational headline on another subject from out of the past. As reported in the previous installment of this series ("A Second Look at the Last Ten Years"), there are now ten years' worth of *Hindsight* articles out there. It might seem easier, though, to wade through an Ivory-billed-infested swamp without getting lost than to navigate through all the information found in these articles. Thus the index in the last issue.

But things obviously change after a decade, and as I compiled that index I occasionally noticed bits of information which could now use some correction or clarification. So, before we proceed with another ten years of *Hindsight* insights, here's an update of the past ten to keep the ID information as current and accurate as possible. These random entries are presented chronologically, with the issues of ***The Loon*** indicated in which the subjects appeared.

Summer 1995 / Shorebirds

Solitary Sandpipers have finely spotted upperparts, of course, not "under-parts" as stated (this was one of several errors introduced during the editing of this article). In addition to their unique tail pattern, be sure to note that Solitarys show blackish underwings in flight; no other Minnesota shorebird shares this field mark.

Stilt Sandpipers in basic plumage also bear a strong resemblance to Dunlins; note the Dunlin's darker overall plumage and leg color.

Fall 1995 / Gulls

A juvenile or first-winter Little Gull, due to its black nape bar and/or blackish "M-pattern" on the wings, can also be mistaken for a Black-legged Kittiwake. (Note that several observers faced this problem in September 2004 at the Superior Entry in Duluth-Superior.)

Winter 1995–96 / First State Records I

Since this article was published, Smew, Wood Stork, Black Vulture, White-tailed

Kite, and White-throated Swift were all added to the state list.

Three additional and recommended articles on Slaty-backed Gull ID were published after this article: see Winter 2002–03 / ID References III.

A Roseate Tern in second-year plumage has as much potential as a juvenile or adult to appear in Minnesota. It can be identified by a combination of its red legs, relatively long black bill, tail streamers extending beyond the folded wing tips, and a dark carpal bar (note that some field guides erroneously state that it lacks a carpal bar at this age).

Summer 1996 / Western Sandpiper

A third reference book on shorebird ID was published this year and is highly recommended: *Shorebirds of North America: The Photographic Guide* by Dennis Paulson.

The feather edges on the upperparts of juvenile Semipalmated Sandpipers can appear quite reddish and Western-like (they do not necessarily "look more buff than rusty" as stated). It is disconcerting that hardly any references stress or illustrate this, and thus little wonder that such Semis are so easily mistaken for Westerns.

Fall 1996 / Ducks

When visible, a narrow whitish or buffy area on the side of the tail on a female-plumaged Green-winged Teal will serve to distinguish it from a Blue-winged; note, however, this mark may not always be present or easily seen.

Females of both Lesser and Greater scaup can show obvious scoter-like head spots; it had been thought that only Greaters have this feature (see Fall 2000 / Field Notes I).

Winter 1996–97 / First State Records II

Since this article was published, Eurasian Collared-Dove has been added to the state list (and is now Regular in status).

Field identification of female-plumaged Black-chinned, Broad-tailed, and Allen's hummingbirds would be difficult, but not as "impossible" as stated. (Such IDs are covered in the two new hummingbird field guides: see Winter 2002–03 / ID References III.)

Couch's Kingbird, as well as Tropical, would have potential as a first state record; note that these two kingbirds are safely separated only if the bird is vocalizing or examined in the hand.

Summer 1998 / Hawks

The tail bands on some immature Red-shouldered Hawks can appear to be wavy or uneven; as a result, such Red-shouldereds have been mistaken for immature Northern Goshawks. Also note a field mark visible in the secondaries of immature Red-shouldereds: they have alternate dark and light banding, unlike typical immature Broad-wingeds which normally have solidly brown secondaries (see Fall 1999 / Ego, Id, and ID).

Fall 1998 / ID References I

Several additional ID reference books of note have been published since this article (not included here are those mentioned in Winter 2002–03 / ID References III):

- Fortunately, the originally proposed title of David Sibley's field guide ("National Audubon Society Master Guide to Birds") was not used.
- A similar guide to Kaufman's *A Field Guide to Advanced Birding* was recently published and is recommended: *Identify Yourself: The 50 Most Common Birding Identification Challenges* by Bill Thompson *et al.* The chapters, which expand on a long-running series of articles in *Bird Watchers Digest*, include in-depth discussions and color illustrations of several ID difficulties.
- The highly comprehensive two-volume reference on raptors by Brian Wheeler (*Raptors of Eastern / Western North America*) greatly expands on his two previous guides (these volumes cost about $50 each, however, and thus are not for everyone).
- As mentioned previously (Summer 1996 / Western Sandpiper), Paulson's new

photographic shorebirds guide is recommended.

• Kevin Zimmer has updated and expanded his book on western birds: its new title is *Birding in the American West.*

• Now recognized as better guides than Jonsson's *Birds of Europe* are *The Complete Guide to the Birds of Europe* by Killian Mullarney *et al.* and *Birds of Europe* by Lars Svensson and Peter Grant. Other than the publication dates (2002 and 1999 respectively), I must admit I don't know what the differences are between them (it appears that most of these books' contents are the same).

• *Birds of North America* by Kenn Kaufman is another field guide on basic ID, and it may be better than the others of this genre (those by Peterson, Robbins, Griggs, Stokes, etc.).

• *Birds of Minnesota and Wisconsin* has some good illustrations, but there is little or no ID information which doesn't already appear in the field guides; the primary contribution of the authors, Bob Janssen and Daryl Tessen, appears to have been the information on status and distribution.

Winter 1998–99 / Range Maps

Lake Winnibigoshish, as well as Mille Lacs and Lake Superior, is a potentially consistent site for Pacific Loon sightings.

Golden Eagles occur as often in spring in Duluth (especially in March along West Skyline Parkway) as they do in fall at Hawk Ridge.

Spring 1999 / Songs IV

Both Eastern and Western meadowlarks give similar "wick" or "wink" call notes.

Fall 1999 / Ego, Id, and ID

Immature Red-shouldered Hawks may show banded secondaries, unlike typical immature Broad-wingeds, but use this potentially useful distinction with caution. This spring I studied — and puzzled over — an immature Broad-winged Hawk which showed noticeable dark and light bands on its secondaries.

Winter 1999–2000 / ID References II

Since this article was published, several additional ID articles have appeared and are recommended (not included here are those mentioned in Winter 2002-03 / ID references III):

swans / ***The Loon*** 75:230–234
ibis / *North American Birds* 54:241–247 and 57:136–139
Mississippi Kite / *Birding* 36:508–519; ***The Loon*** 74:110–112
accipiters / *Birding* 32:428–433
Broad-winged Hawk / *Birding* 34:176–180
Red-tailed Hawk / *Birding* 33:436–446 and 36:500–506
gulls / *Birding* 35:32–37
Thayer's Gull / *Birders Journal* 9:25–33; ***The Loon*** 74:168–173
California Gull / *Birding* 34:540–544
Glaucous-winged Gull / *Birders Journal* 9:25–33
sparrows / ***The Loon*** 72:46–51
longspurs / *Birding* 35:508–514
orioles / *Birding* 33:61–68
redpolls / *Ontario Birds* 10:108–114

Spring 2000 / Sparrows

As mentioned in Winter 2002–03 / ID References III, the photographic guide to sparrows by Beadle and Rising is also recommended.

Observers in recent years have been turning up migrant Nelson's Sharp-tailed Sparrows with increasing frequency, especially in fall (it is therefore misleading to state "this sparrow is hardly ever seen in the state during migration"). Remarkably, there may be a recently discovered specimen from Minnesota of a Saltmarsh Sharp-tailed Sparrow (*Ammodramus caudacutus*); if confirmed, this record would certainly complicate the status and identification of sharp-tailed sparrows.

Summer 2001 / Field Notes II

There may be something in the water, as they say, in Thompson, Manitoba affecting warbler songs. In addition to that atypical Palm Warbler song, I heard and noted an unusual Cape May song there. I wrote it was "totally different and un-

recognizable — a 7-note tweet, tweet, tweet..., like a slow Prothonotary." Another Cape May I heard recently (a spring migrant in Florida) also gave an entirely atypical song: it was a prolonged and disjointed series of soft notes, somewhat like a Blue-gray Gnatcatcher's full song. (It actually sounded more like what the Western *Spindalis* we were looking for is supposed to sound like!)

Winter 2002–03 / ID References III

Although the range maps in the Eastern Sibley guide were revised, literally dozens of them still have noticeable errors in their shading in Minnesota.

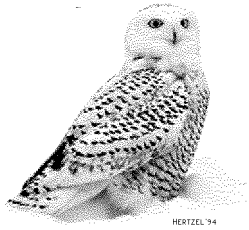
Olsen and Larsson's thoroughly comprehensive *Gulls of North America, Europe, and Asia* was reprinted in 2004; this printing corrected numerous editing errors included in the first printing in 2003 (which was withdrawn soon after publication).

Summer 2004 / Cackling Goose

Additional information on this recently split species is presented in the last issue of ***The Loon*** (76:225–228). It includes an alternate arrangement of the forms of Canada and Cackling geese and reports there are apparently Minnesota specimens of three unexpected Cackling Goose forms: *Branta hutchinsii taverneri*, *B. h. minima*, and *B. h. leucopareia*. (It is not stated, however, what criteria were used to identify the specimens.) With good reason, no attempt is made here to present ID criteria to separate smaller forms of Canada Goose (especially *B. canadensis parvipes*) from Cackling Goose in the field, which is still very much a work in progress.

Well, there you have it. I admit this article may not be as sensational as the current Ivory-billed news, but at least ***The Loon*** has more credibility than those magazines at the check-out stands with all the UFO and Elvis sightings. I'm sure they have some even more ridiculous stories on the way. You know, like the sighting of some extinct bird in an Arkansas swamp.

1921 W. Kent Road, Duluth, MN 55812.



Book Reviews

AUDUBON NORTH AMERICAN BIRD-FEEDER GUIDE, by Robert Burton and Stephen W. Kress. 2005. DK Publishing, Inc. 224 pp. Reviewed by Melissa Block.

I really wanted to like this book. After all, it's an Audubon book, and it's co-authored by Stephen Kress, one of Audubon's own.

On the positive side, the book does have beautiful photos and interesting illustrations. There is an example of an illustration of a backyard song post map that I thought was an interesting idea. However, in the end, the book just didn't make it. I felt the book tried to do too much and ended up falling short of the mark. The book read like it was written in the UK and then adapted for the American market (I mean what the heck is "bird

pudding"). The contents varied widely, from the simplistic to the complex, never striking a sensible middle ground. They tried to cover too much — gardening suggestions, photography, optics, feeder construction, and field guide. The book didn't do any of it very well. Also, some important and interesting facts were lost in the small captions under the smaller photos. Here are a few specific examples:

1) In a section titled "Basics," it is stated "Although birds can obtain much of their water needs from rainwater and dew pecked from grass, adding a water feature, such as a garden pool, will certainly help to increase the variety of your backyard birds and other wildlife." Well… should you or shouldn't you take the time and effort to put in a "garden pool".

2) Under "Specialist Birdfeeders" the word "nyjer" is spelled "nyger." "Nyger" is the spelling used in the UK, which doesn't make it wrong — just not correct for the American audience.

3) The chapter on "Choosing Bird Food" said "Seed mixes vary greatly. The most popular mixes contain mainly white millet, cracked corn, and sunflower seeds." Well, that may be true in the UK (they do love their sparrows) but not here.

4) On "Feeding Hummingbirds" the book states that it is "…best to remove feeders when the first frost arrives to discourage late migrants from lingering." Not true!

5) In that same section it mentions the sugar-water mixture ratio for hummingbirds and says to use to one part sugar to four parts water when first attracting hummingbirds to feeder, but decrease to 1:6 after hummingbirds have found the feeder to reduce damage to liver and encourage hummers to feed more on natural foods. I've asked around and some people have said they'd heard of the 1:6 ratios, but I could find no documentation for this. I'd never heard of it before.

6) The chapter on nest boxes had a number of errors. The list of entrance hole sizes required by various species contained a number of wrong measurements. This chapter also said that to reduce predation (on nest boxes) by mounting them on a fence post. I don't think so, it'd probably increase nest predation.

7) The section on photography was especially confusing. If it was aimed at the beginning photographer, it was too complex. If it was for the advanced photographer, it was too simplistic.

8) One section had a picture of a Scarlet Tanager and identified it as a "Willow Warbler".

9) The chapter on "recognizing birds" mentions "jizz" but never explained what it meant.

10) The same section says that Mourning Doves are often mistaken for kestrels. That's another new one for me.

11). The photograph used to identify the House Finch in the field guide section was not a good one — it looks like the finch has conjunctivitis — not an appealing photo.

I am certainly not an expert birder. I'm somewhere in the middle (OK, lower-middle). I think they were aiming for an audience at my level, and they missed. Too bad…it could have been a great book.

17840 Powderhorn Drive, Minnetonka, MN 55345.

THE LANDSCAPING REVOLUTION, by Andy and Sally Wasowski. 2003. McGraw-Hill. 176 pp. Reviewed by Ethan Perry.

Some of the most rewarding birding experiences come from watching birds — even common ones — using trees or shrubs or flowers or grasses that you planted around your home just for their benefit. Compared to a bare lawn, the number of bird species attracted to a bit of vegetational diversity is astonishing. The satisfying connection to the natural world that takes root when you nurture wildlife habitat back to health in a degraded landscape cannot be matched. A priceless resource for those who want to earn this satisfaction is the DNR publication *Landscaping for Wildlife* by Carroll Henderson. According to Andy Wasowski,

however, landscaping for wildlife is just one part of a larger movement spreading across the land in what he calls the The Landscaping Revolution.

The first photo of this colorful and thoroughly illustrated book shows a rider with a vacuous expression on a mower in front of a suburban home with an expanse of brilliant green and exquisitely boring lawn. The caption reads: "This is the typical American landscape.... No wonder a landscaping revolution has been taking place all over the country."

The humorous approach (especially near the beginning) may get you laughing so hard that the ChemLawn applicators next door may start to wonder what all the fun is about. But the book is also serious. There is a revolution underway, and Wasowski aims to recruit comrades with admitted missionary zeal. He intends to "change your long-held ideas about what constitutes a 'respectable' landscape."

In this respect the book is similar to *Noah's Garden* by Sara Stein, but the similarities end there. While *Noah's Garden* is a rambling and eloquent discourse on Stein's personal gardening "re-education," *The Landscaping Revolution* is a quick-reading manifesto. It is not a how-to book, of which *Natural Landscaping* by Diekelmann, Shuster and Graef is a good example.

"We humans," writes Wasowski, "like to think of ourselves as a rational species. But when you consider how we've been landscaping for the past century and a half, you have to wonder if that's really true." He asks, "What if your car needed a tune-up every month, an oil change every week, and the tires rebalanced every five hundred miles?... Face it, my friend, [the traditional landscape] is a sun-ripened, grade-A, all-American lemon."

Wasowski writes to gardeners, who enjoy working in the yard, and to non-gardeners, who resent every minute that mowing and fertilizing takes from other pastimes. And he's not a purist. He identifies varying styles of natural landscapers, including those who prefer a "natural look," using only native species, and those who maintain lawns and formal gardens, using exotic plants in addition to natives. Giving up exotics is not a requirement for joining the revolution, unless "they require an inordinate amount of work and natural resources to keep them alive" or "they are invasive and harmful" to native ecosystems.

Wasowki's expertise is clearly centered in the Texas region, but he discusses issues of national relevance and uses examples and photos from all over the country. In sidebars sprinkled throughout the text short biographies of diverse "landscaping revolutionaries" add a nice touch. So do the cartoons gleaned from a variety of sources.

Also contributing to the book's humorous flair are chapter titles like "Homogenize Milk, Not Landscapes." In this chapter Wasowski shows us photographs of four typical neighborhood front yards and asks us to guess where each of them is located. Of course they all look nearly identical, with mowed bluegrass and neatly trimmed shrubs. The answers at the end of the chapter are Maryland, Arizona, Ontario, and Iowa. He then shows us photos of four gorgeous yards from around the country, including one prairie near the Twin Cities, all brimming with vitality and stating in no uncertain terms where they are located.

The book does mislead readers on a few points. For example, Wasowski incorrectly attributes high deer densities in suburban areas to a lack of natural habitat, when in fact partially developed landscapes are habitat made in heaven as far as deer are concerned. He does not seem to recognize that unnaturally high deer populations often disrupt entire ecosystems. Wasowski also could have provided advice for finding sources of native plants so that people aren't tempted to dig them up from the local nature preserve.

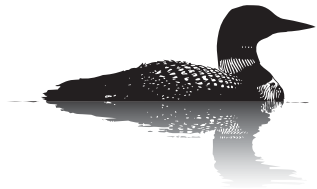
Despite minor faults like these, this book pulses with the energy needed to draw more people into natural landscaping. Wasowski warns against feeling powerless in the face of global environmental problems. He writes, "We're just average

folks.... The temptation is to just sit back and say, let the government handle it.... In fact, we can do a lot as individuals, and we can start right in our own front and back yards."

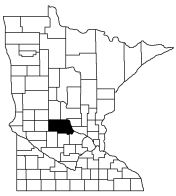
Natural landscaping itself won't save the world, but try telling that to a butterfly that lays her eggs on your new native plants or to children who are turned on to the natural world by taking care of their own backyards. Wasowski quotes Peter Henderson from his 1875 book *Gardening for Pleasure* to illustrate general condescension toward homeowners who do not conform to the mowed lawn: "It is gratifying to know that such neighbors are not numerous, for the example of the majority will soon shame them into decency." Maybe, now, with this book in hand, the growing minority can convince the majority of decency, while sharing a hearty laugh.

1520 N. 9th Avenue E., Duluth, MN 55805.

NOTES OF INTEREST



BRANT IN STEARNS COUNTY — On 21 March 2004, I found a Brant (*Branta bernicla*) at the Paynesville sewage ponds in Stearns County; the bird was present in the vicinity through the following day.



On the 21st, I was searching for geese with little success — the only geese that I found were near open water, and very little water was open; however, while approaching the Paynesville sewage ponds I saw multiple goose flocks in the air. The flocks were apparently departing from, or returning to, the open water of the nearby North Fork of the Crow River.

In one of the flocks was a small goose, and as the flock passed overhead I noted with a surge of excitement that the small individual seemed to have a dark head, neck, and chest, without the white cheeks of a Canada Goose. Still, I was not confident that my initial impressions were accurate, and so was fortunate that the flock in question landed just 250 yards to the north of my position, on the nearest sewage-pond dike; once the flock was on the dike, I scanned through it and quickly confirmed that the small flock member was a Brant.

For the next 30 minutes I watched the Brant almost continuously, and what I observed included the following.

(1) In bulk of body, the Brant was about 50% the size of the ten or so Canada Geese that I used for comparison.

(2) Relative to those Canadas, the Brant was not only smaller but also differently shaped: it had a proportionally shorter, thicker neck and a tiny bill, with the bill being one-quarter to one-third as long as the head.

(3) The Brant's bill, legs, and feet were black, and its eyes were dark.

(4) The Brant's head, neck, breast, and uppermost back were black, with the black of the breast and uppermost back being sharply delineated from the otherwise-paler body plumage; on either side of the neck, just below the head, was a small, transversely oriented white mark.

(5) The Brant's back, scapulars, and upper secondary-coverts were a dark gray-

brown, darker than in the nearby Canada Geese and with just the faintest hint of pale feather margins; the tertials were a darker blackish brown color; and the folded secondaries and primaries were darker still, being blackish.

(6) The ground color of the breast, belly, and flanks was a dull grayish white or whitish gray, and as such was paler than the corresponding plumage areas of nearby Canada Geese; for some of the feathers on the lateral flanks, dark brown feather centers were visible, appearing as irregular dark bars on the part of the flanks just below the wings. The dark feather centers were most evident anteriorly, just behind the black of the breast; posteriorly only scattered dark centers were observed.

(7) The Brant's upper tail-coverts, under tail-coverts, and vent region were white, whereas its tail was black.

This is the fifteenth Brant record for Minnesota (Minnesota Ornithologists' Union Records Committee 2004). Of these, five are from the spring (Huber 1966; Pederson 1987; Glassel 1991; Bardon 2002), with the present one being the earliest; four of the five are from the three-week period between 21 March and 10 April.

The grayish-white or whitish-gray belly of the Paynesville bird indicates that it belongs to *B. b. hrota*, the form of the Brant breeding in Greenland and the eastern Canadian Arctic. Of the 15 Minnesota Brant records, at least nine are referable to subspecies, and six of the nine have been referred to *hrota* (K. Bardon, pers. comm.). **Philip C. Chu, Department of Biology, St. John's University, Collegeville, MN 56321.**

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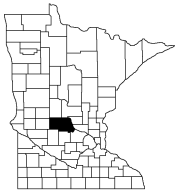
Glassel, R. 1991. Brant at Mountain Lake. ***The Loon*** 63:209.

Huber, R. 1966. The Spring Season. ***The Loon*** 38:84–96

Minnesota Ornithologists' Union Records Committee. 2004. Checklist of the birds of Minnesota. Minnesota Ornithologists' Union, Minneapolis.

Pederson, R. 1987. Brant at Salt Lake. ***The Loon*** 59:149.

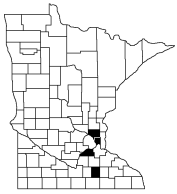
SNOWY PLOVER IN STEARNS COUNTY — On 4 June 2004, while returning to the Twin Cities after doing field work in western Otter Tail County for the Minnesota County Biological Survey, I found a Snowy Plover at the Albany sewage ponds, Stearns County. When I spotted this pale plover, I was immediately suspicious that it may be a Snowy Plover, since it was an odd date and place for a Piping Plover — a quick view through the scope revealed its dark legs and bill and confirmed my suspicions. Detailed study of this bird for the next hour and a half showed that its legs were darkest at the "ankle" joint and on the toes (perhaps partly or entirely due to mud), but were distinctly brownish gray along the midsection of the tarsus, a color not dissimilar to the mud behind the bird (though the mud appeared slightly more brownish). There were no orange or yellow tones present in the legs, as in all plumages of Piping Plover. The legs appeared proportionately longer than my recollection of a Piping Plover's legs. The bill was entirely dark, and appeared noticeably longer and thinner compared to a Piping Plover's bill, which always appears stubby, and has orange color present at the base in breeding plumage.



The Snowy Plover was exceptionally pale-backed, with noticeable wear in the wing coverts and scapulars. There was a dark bar on the forehead above the eye, and a dark, incomplete breast band, diagnosing the bird as an adult in breeding plumage, but my digital photos show that the ear coverts were not distinctly darker than the nape or the back. Many additional observers were able to see the Snowy Plover on both June 4th and 5th. Of the seven previously accepted records for Minnesota, this is the first one "chaseable" since 1982 (!) when one lingered 11–18 July at Morris Point, Lake of

the Woods County (***The Loon*** 54:242). **Karl Bardon, 13073 Hastings Street NE, Blaine, MN 55449**.

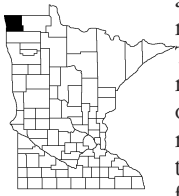
AN INFLUX OF BLACK-NECKED STILTS — An unprecedented number of Black-necked Stilts wandered into Minnesota during Spring 2004 (***The Loon*** 76:197), almost doubling the number of accepted records for this Accidental species from five to nine. The influx began with Anthony Hertzel's discovery of a record-early Black-necked Stilt along the north shore of Spring Lake at Lakeside Park in Mounds View on 14 April 2004; the bird was initially found on the Ramsey County side of the park and delivered an incessant, loud "kiee kiee kiee" as it flew west into Anoka County. About a month later, six birds were discovered in two locations on the same weekend — three found by Gary Johnson at Spindler's Pond near Rice Lake State Park, Steele County, and three found by Bill Marengo at the Belle Plaine wastewater treatment ponds, Scott County. At least one of the Steele County birds was photographed, and all three of the Scott County birds were photographed separately. The birds in Steele County could not be found after the second day, but those in Scott County lingered 16–27 May and triggered speculation about the possibility of nesting before they disappeared. The eighth bird found in Minnesota this spring was a one-day wonder in a restored wetland near Lake Lillian, Kandiyohi County.



Except for a pair of stilts near Alberta, Stevens County, 12–19 July 1989 (***The Loon*** 61:139–140), previous Minnesota records have also been apparent spring migrants: one at Roseau River W.M.A., Roseau County, 23–25 April 1989 (***The Loon*** 61:197), two at Old Cedar Avenue bridge, Hennepin County, 4 June 1992 (***The Loon*** 64:166–167), one at Pierce Lake, Martin County, 24 May 2000 (***The Loon*** 72:240–241), and two near Montrose, Wright County, 25 May 2003 (***The Loon*** 75:200).

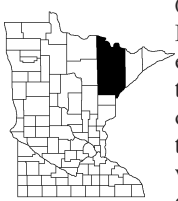
If records elsewhere are predictive, it seems likely that Black-necked Stilts will attempt nesting in Minnesota in the near future. This species has already nested in South Dakota (*South Dakota Bird Notes* 46:72–73) and at least five times in North Dakota, including locations as close to Minnesota as the Grand Forks lagoons in 1999 and near Alice, Cass County in 2001. Extralimital breeding has occurred as far east as Wisconsin (*Passenger Pigeon* 61:470), Michigan (*North American Birds* 57:495), Illinois (*Meadowlark* 4:6–7), Kentucky (*Kentucky Warbler* 69:65–68), Tennessee (*Migrant* 56:1–3), and Missouri (*Bluebird* 58:7–11). **Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812.**

LOGGERHEAD SHRIKE IN KITTSON COUNTY — On 28 June 2004, I discovered a Loggerhead Shrike about ½ mile north of the intersection of township roads T63 and T55 in west-central St. Joseph Township, Kittson County, T163 R47 sections 17/18 (seen in both sections, on both sides of the road). I watched this shrike for at least 45 seconds while it was perched on a utility line positioned directly above a brushy barbed-wire fence row. This fence row ran alongside semi-open, moderately grazed pasture interspersed with patchy aspen parkland. At this time, I noted the following characteristics: kingbird-sized songbird with a relatively long, somewhat rounded black tail with white edges; large head featuring a short, thick, black bill with a slight hook at the tip of the upper mandible; pale-gray underparts; wide black "mask" on the face (beginning at base of bill and running back through and past the eye) bordered by medium-gray coloration on top of the head and white on the malar and sides of the throat; wings black with small white patches. The shrike eventually flew down and across the road about 15 meters in front of my viewing position. During this flight (conducted with quick wing beats), the elongated, flashy white wing patches were obvious on the black wings. I could also see that the back was the



same medium-gray color as the top of the head. The shrike then landed and moved into a clump of shrubs and low saplings located across the road from its original position, thus ending my viewing session. **Shane S. Patterson, 2517 Jensen Avenue #336, Ames, IA 50010.**

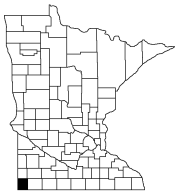
MARBLED GODWIT FLOCK AT DULUTH — On 17 May 2004, I watched a flock of



65 Marbled Godwits fly in near-perfect synchronicity around Interstate Island in the Duluth-Superior harbor while calling vigorously. Apparently, they had been flushed from the island by personnel monitoring the Common Tern nesting colony. The godwits continued circling and calling for about five minutes and I managed to take some pictures of the flock in flight before they departed to the east. My very next stop was Park Point, where there were 5 Marbled Godwits on the back side of Hearding Island with 13 Whimbrel. It's possible that these godwits were from the large flock, but they were probably migrating separately, since the large flock kept in tight formation. It was thrilling to see and hear so many godwits together!

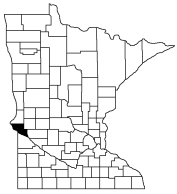
This species is unusual at Duluth and along the North Shore, and most reports are of singles or small numbers of birds. A cursory look at seasonal reports for the past 25 years revealed a few previous records of Marbled Godwit flocks along the North Shore, primarily at Duluth during spring migration. Kim Eckert reported up to 13 at Duluth, 12–27 May 1985 (***The Loon*** 57:158), Molly Evans saw a flock of 24 there on 21 May 1997 (***The Loon*** 69:195), Bill Marengo documented a flock of 30 at 40th Avenue West, Duluth, 23 May 1999 (***The Loon*** 71:198), and Josh Watson observed about a dozen at Grand Marais, Cook County, 12 May 2004 (***The Loon*** 76:199). The only fall record of a large flock along the North Shore was 25 Marbled Godwits seen by Mike Hendrickson at Duluth, 22 August 1986 (***The Loon*** 59:82). **Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812.**

SAY'S PHOEBE IN ROCK COUNTY — On 19 May 2004, I identified a Say's Phoebe



at Blue Mounds State Park, Rock County. On my way back to the car, I saw a phoebe on a lower branch of a small tree not too far off the path. There were not many trees or bushes on that side of the path and a grassy area was beyond. The bird stayed in the area and I watched him for a long time. The first I saw was a rusty belly, grayish at the throat (a Say's, I'm thinking) and as he flew from perch to perch, catching insects and never in a hurry, I changed postitions and could see that its head and tail and wings were blackish, and that the back was a lighter color. I finally walked towards my car and he flew away. My notes state, "looks and acts like a phoebe, few feet above ground, flies short distances for insects and flies to different perch, light rusty belly, throat grayish, back lighter than head and black tail, wagged its tail once." **Nelvina De Kam, 53 – 20th Avenue, Edgerton, MN 56128.**

ANOTHER RUFF IN BIG STONE COUNTY — At 10:45 A.M. on 25 July 2004, during



a periodic survey of shorebirds in Big Stone County, we discovered an adult male Ruff (*Philomachus pugnax*) in the NW ¼ of section 17, T122N, R45W (Otrey Township). Peder first spotted the bird and immediately recognized it as this species; after Jeanie watched the bird for a few minutes, Peder dictated a description which was written down by Jeanie on one of the survey forms. We also obtained digital photographs through a Leica Televid APO 77mm spotting scope using a Nikon Coolpix 4500.

Though Peder had previously seen this species in Alaska, California, North Dakota, and several times in Minnesota (including one as recently as 9 May 2004 in Big Stone County), neither of us had ever seen one in this plumage. The bird had lost its "ruff" and looked whitish on the face, foreneck, and upper breast, but otherwise looked mostly black. We immediately called Anthony Hertzel who posted the sighting to MOU-net and we also made phone calls to birders for whom we had cell phone numbers.

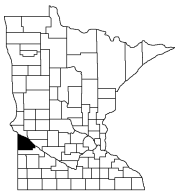
Description of the bird: Large, fat, dumpy-looking, hump-backed, long-legged shorebird with a proportionately small head. It was much larger in body size and bulk than the Lesser Yellowlegs (*Tringa flavipes*) in the same field of view. We estimated that it was about the same size as a Greater Yellowlegs (*T. melanoleuca*); though none were at this location, we had seen them at several survey sites earlier in the day. The Ruff foraged by walking about constantly along the edge of the slough and picking at the mud with its bill. Its bill color and shape were difficult to determine due to distance and the fact that it never stopped moving and foraging, but its bill looked dark with at least a hint of orange at the base. Its eye color could not be determined, but its leg color was obvious — bright orange.

Most of its plumage was blackish, including the crown, nape, back, scapulars, lower chest, and flanks. The wing coverts looked dark brown (blackish) with brownish to brownish-gray edging. Its tertials were similar in color to the median and greater secondary wing coverts, and either covered or obscured the tail. The dark areas of its plumage contrasted dramatically with its pale face, whitish cheeks, and whitish throat and foreneck, with the white extending onto its upper chest and meeting the black in a V-shaped pattern. The vent and under-tail coverts were also white and contrasted with its black flanks. We heard no vocalizations from this bird and never saw it in flight.

Bob Dunlap, Craig Mandel, Denny and Barb Martin, Steve and Diane Millard, and Jeff Stephenson were among the many observers who arrived in time to see this bird on the 25th. Dave Cahlander photographed it on the 26th, and it was documented and photographed by Dan and Sandy Thimgan on the 27th. Bill Unzen also documented it on the 28th. This species is notorious for disappearing soon after its intial discovery, and although it was exciting to find this bird, we were most pleased that so many other birders got to see it. The Ruff was last reported on the 29th, unfortunately just before the start of the Big Stone N.W.R. shorebird workshop.

This represents the third occurrence of this Casual species in Big Stone County; a basic-plumaged female was found by Karl Bardon at Thielke Lake during a shorebird survey 15 June 1999 (***The Loon*** 72:55–56), and another female was documented by Philip Chu and Peder Svingen in section 29, Otrey Township, 9 May 2004 (***The Loon*** 76:236). Interestingly, there were no accepted records of this species between 1994 and 1999, but including this one, there have now been nine records in six years. **Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812, and Jeanie M. Joppru, 16269 – 160th Street NE, Thief River Falls, MN 56701.**

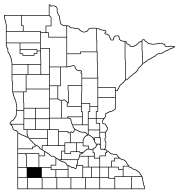
GREATER WHITE-FRONTED GOOSE IN SUMMER — On 4 July 2004, while conducting a shorebird survey at Salt Lake, Lac Qui Parle County, we observed an apparently healthy Greater White-fronted Goose (*Anser albifrons*) on both sides of the Minnesota-South Dakota state line. It loosely associated with Canada Geese (*Branta canadensis*). We watched it for several minutes through a Leica Televid APO 77mm spotting scope from a distance of about 200 yards, while looking towards the north at 8:15 A.M. Our field notes state, "Orange legs, feet, and bill, mostly brown overall, white lores and forehead, blackish around eye, breast brownish-gray with darker blotches across breast." Peder saw it again on the 10th and



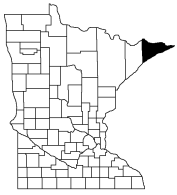
Philip Chu and Peder refound it on the 17th, but we were unable to refind it on the 25th of July or thereafter. Several weeks later, we learned that Bill Unzen also had seen this bird at Salt Lake on 26 June.

This represents about the ninth summer record for Minnesota (not including birds found in August, which may also have been released, injured, or oversummering). The first summer record was at Agassiz N.W.R., Marshall County, 11 July 1984 (***The Loon*** 57:40). Others were in St. Louis County 9 June 1990, Roseau County 4 July 1992, Rock County 24 July 1999, Meeker County 2 July 2000, Sherburne County 6 June 2002, Isanti County (same bird?) 7 June 2002, and Stearns County 3 July 2002. Minnesota has late May records from a number of locations, so early June dates probably represent late northbound migrants, but this still leaves six July records. It's interesting that most of the summer records have occurred within the past five years. **Jeanie M. Joppru, 16269 – 160th St. NE, Thief River Falls, MN 56701, and Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812.**

LAZULI BUNTING IN MURRAY COUNTY — On 27 May 2004, I observed an adult male Lazuli Bunting in my back yard in section 32, Moulton Township, Murray County. I first saw it in a tree at 8:00 A.M. for about five minutes, then saw it again on the ground for about ten seconds at 3:00 P.M. This is the way it went: I stepped outside at 8:00 A.M. to listen and look for birds. In a tree nearby, I saw a blue bird with light orangish color on its breast. Not a bluebird bill — more finch-like. Its head was all one color, and the throat was also blue, unlike the Eastern Bluebird — different color blue also. It also had white wing bars. I'm thinking Lazuli Bunting! I checked the bird books and that's what it was. I saw one with Kim Eckert and the M.O.U. group at Blue Mounds State Park last May. I was so excited to see it in my back yard! **Nelvina De Kam, 53 – 20th Avenue, Edgerton, MN 56128.**

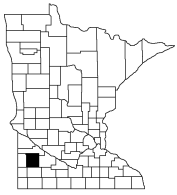


SAGE THRASHER IN COOK COUNTY — On 11 May 2004, I noticed a Sage Thrasher walking in our lakeside yard in Schroeder, Cook County. Overall, the bird appeared gray and was a little smaller than a robin. Its black beak looked small and thin for a bird of this size. Also, the yellow iris was prominent. I noted a gray head and back, upper breast heavily streaked with darker gray, and sides and rest of breast more finely streaked. There were wing bars but they were rather faint, not crisp.



The next day was cloudy and overcast. I saw the bird fly into and then out of a small brushy patch in the side of our yard. At that time, I was looking at the grayish back and the white corners of its tail. At about noon this same day, my husband, Thomas Spence, and I observed it walking in an area of long, dead grass and plants at the edge of a cliff that overlooks Lake Superior. We did not see it again after the 12th. **Dory Spence, 52 Cliff Cove Road, Schroeder, MN 55613.**

SCISSOR-TAILED FLYCATCHER IN LYON COUNTY — On 12 May 2004 at noon, I was scouting Camden State Park in Lyon County for the best birding areas and found a Scissor-tailed Flycatcher. I was planning a birding day trip for the Lakeview 6th graders. The weather was sunny; the temperature was 45° F., and the wind was 10–15 miles per hour. The bird was observed in a prairie grass area 30–50 yards in width bordered by a wooded area on one side and a dirt road on the other. The road parallels Minnesota State Highway 23 and leads from the park entrance to the upper campgrounds. The observation was made about midway between the entrance and the campground on the west side of the road, about 30 yards

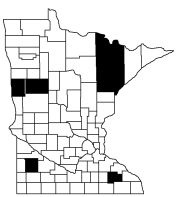


in from the road.

I first observed the bird with the naked eye from my car. I saw the white head of a bird perched on some tall prairie grass. It was about 30 yards away. Using my Bushnell 10x45 binoculars, I was able to observe the bird quite well. I noted that the bird was at least 12 inches long (I could not see its tail at this time). It appeared mostly white, with pinkish-red on its breast right next to the wings, and a bit of red on the top of the head. The wings were black, as was the bill. I knew immediately that it was most likely a Scissor-tailed Flycatcher. To confirm this, the bird had the sense to fly about 20 feet from one perch to another. I then was able to observe its tail which was definitely scissor-like and very long — almost as long as the bird itself. I also observed the bird with my Leupold Wind River spotting scope.

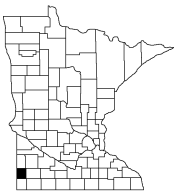
I watched the bird for about 20 minutes. I knew that the bird was a casual visitor to the area. When I returned to the car, I checked my Peterson field guide to verify the identification. I took no written notes, nor did I take pictures. I reported the bird to the DNR employee at the park and posted the observation on MNbird and MOU-net. My previous experience with this bird is nil — this was a first time sighting for me. I had previously studied the bird in several field guides and Kenn Kaufman's *Lives of North American Birds*. My husband had visited Oklahoma in the spring of 2003. At that time he saw a Scissor-tailed Flycatcher. It was upon his return that I turned to my books for information and identification... just to see what he had seen! **Sue Morton, RR #1, Box 34A, Cottonwood, MN 56229**.

PAINTED BUNTING: COMING SOON TO A FEEDER NEAR YOU — No fewer than five Painted Buntings wandered to Minnesota in 2004. Adult males showed up at feeders in Becker, Clay, and St. Louis counties in mid-May (***The Loon*** 76:218), another adult male visited a feeder in Lyon County, 9–11 June, and a female or immature male was photographed at Rochester during the third week of June (***The Loon*** 76:37). The latter represents Minnesota's first record of a non-adult male since a worn specimen of a possibly escaped female was taken in Lac Qui Parle County, 2 May 1893 (*Auk* 29:247). None of the five birds in 2004 showed signs of prior captivity in terms of their behavior, condition or color of plumage, or soft parts.



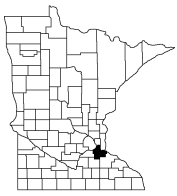
The vast majority of Minnesota records are recent (13 of 17 records in the past ten-years). This species appears to be increasing as a vagrant to the Great Lakes Basin and elsewhere in North America. Several years ago, I compiled and analyzed a half-century of extralimital records of the Painted Bunting in North America, and found that about 75% of mid-continental records were of adult males April–June. It's possible that so-called "green buntings" are being overlooked at feeders in Minnesota, since females and immatures should furnish more than just one or two records. **Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812.**

ROCK WREN IN PIPESTONE COUNTY — On 2 May 2004, we (Rick Hoyme, Chuck Krulas, Jake Musser, Carol Schumacher, Jeff Stephenson, and I) found a Rock Wren near the dam at Split Rock Creek State Park, Pipestone County. The bird was around six inches in length and noticeably larger than a House Wren. Its belly and vent were a plain, pale buffy or cream in color, appearing almost light pinkish. The breast was off-white with fine brownish streaking. The throat was also off-white in color, but with minimal brown streaking. The bird's upperparts were grayish, contrasting with the lighter underparts. The back was finely streaked with white spots. The otherwise grayish head consisted of a pale



buffy supercilium, bordered below by a darker coloration. This created the impression of a dark horizontal line through the eye, and directly above this line, a pale buffy line. The under-tail coverts were pale with contrasting dark barring. In flight, the tail pattern was striking; all of the tail feathers except the middle two had pale buffy tips. This greatly contrasted with the rest of the tail, which was grayish. In flight, the rump was also visible, appearing chestnut in coloration. The legs, as well as the somewhat long, decurved bill, were dark. When perched, the bird would frequently perform a bobbing motion, similar to the bobbing behavior of a Spotted Sandpiper. We watched the bird for about four minutes and as close as 20 feet on a partly cloudy day around 10:00 A.M., but were unable to find it again. We later heard that Peder Svingen was able to refind it that evening, and that Nelvina De Kam saw it again in the morning on 3 May. I saw the Rock Wren that was at Acacia Cemetery in Dakota County last year, and that was my only previous Rock Wren observation in Minnesota, but I have seen this species on numerous occasions in Arizona. **Bob Dunlap, 1194 Wildwood Court, Chaska, MN 55318**.

EURASIAN COLLARED-DOVE NEST IN DAKOTA COUNTY — At 9:54 A.M. on 11 June 2004, I saw two Eurasian Collared-Doves building a nest in Farmington, Dakota County. The nest was at the northeast corner of Division and Oak streets (a location where Eurasian Collared-Doves had been previously reported).



I spent 25 minutes observing the birds at the nest. During that time, I was able to get excellent looks of both birds using Nikon Venturer 10x42 binoculars and a Leica Televid APO scope (mostly set to 20 power). I viewed the perched birds from several different angles at distances of less than 20 feet to more than 50 feet, and had many chances to see one of the birds in flight. The sky was cloudy during this observation. (By the way, during my observations of the nesting birds, I saw at least two other Eurasian Collared-Doves in the area.)

I first became aware of the birds when I heard their characteristic, steadily repeated "coo COOO cup" vocalizations. I then saw the two birds at the nest, which was on a horizontal branch about 20 feet up in a maple tree, several feet from the trunk. One bird would fly off to the southeast, always to return within 2–7 minutes carrying a leafless twig roughly 5 inches long. Every time the bird returned, I would hear the "coo COOO cup" vocalizations. It appeared that sometimes this bird would place the twig into the nest, and sometimes it would pass the twig to the second bird for placement into the nest. During the observation, it appeared that the same bird was always gathering twigs, and that the other bird always remained on the nest. The bird fetching twigs always flew off to the southeast, usually out of sight, but sometimes it flew to the ground in plain sight within 50 feet or so. I saw it pick up several twigs from the sidewalk, then discard them before finally choosing one to be carried back to the nest.

On the perched birds I noted the large overall size and pale gray-tan color (Mourning Doves were available nearby for visual and also vocal comparison). I noted the dark primaries and the lack of black spots on the folded wing, and I also noted the dark neck-ring. I noted that the tail tip was square. On the underside of the bird, I noted that the tail was white, with gray under-tail coverts and dark outer web. On the flying bird, I saw the wide, square tail with white corners on the top side, and I saw the gray band across the wing coverts.

Mourning Dove was ruled out by the vocalizations, square tail, larger size, dark neck-ring, and lack of black wing-spots on these birds. Ringed Turtle-Dove was ruled out by the darker overall color, vocalizations, larger size, gray under-tail coverts with dark outer web, and dark primaries on these perched birds. **Tom Nelson, 37 Nord Circle Road, North Oaks, MN 55127**.

Partial albino Red-tailed Hawk, 22 June 2004, Douglas County. Photo by Sparky Stensaas.

In This Issue

Purpose of the M.O.U.

The purpose of the MOU is the promotion of a broad program of conservation and natural history study, primarily in the field of ornithology.

To achieve this objective, the Union urges and promotes interest in field studies and observation of birds by individual members and affiliated bird clubs. We publish a quarterly journal, ***The Loon***, and a newsletter, *Minnesota Birding*; we conduct field trips; we encourage and sponsor the preservation of natural areas; and we hold seminars where research reports, unusual observations, and conservation discussions are presented.

We are supported by dues from members, affiliated clubs, and special gifts. Any or all aspects of the MOU program could be expanded significantly with gifts, memorials, or bequests willed to the organization.

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Club information and other announcements of general interest should be sent to the Editor of *The Newsletter* — see inside front cover for contact information. Bird sighting reports for each season should be sent to the Editor of "The Seasonal Report" — see "Key to The Seasonal Report" for contact information.

printed on recycled paper

The Loon

SUMMER 2005
VOLUME 77 — NUMBER 2

Journal of the Minnesota Ornithologists' Union

THE MINNESOTA ORNITHOLOGISTS' UNION
J.F. Bell Museum of Natural History
University of Minnesota
10 Church Street Southeast
Minneapolis, Minnesota 55455–0104

The Loon, Minnesota's journal of birds, is published four times each year by the MOU, the statewide bird organization. All members receive this publication and also our newsletter, *Minnesota Birding.*

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ISSN 0024–645X

First Confirmed Breeding of the Rock Wren in Minnesota

Philip C. Chu

On 8 May 2004, Bill Marengo found a Rock Wren (*Salpinctes obsoletus*) in the Felton Prairie area (Budde *et al.* 2004) — specifically, Section 6 of Keene Township, Clay County. When the wren was discovered it was singing, indicating that it was a male (so far as is known, only male Rock Wrens sing, Lowther *et al.* 2000).

Sporadic observations of the wren were reported on the MOU's internet list-service through 6 June. Then on 13 June, Herb Dingmann found two birds there. On 2 July, Craig Menze observed a chick, thereby confirming that breeding had occurred.

This Rock Wren record is Minnesota's twentieth, and is also the state's first confirmed-breeding record (Minnesota Ornithologists' Union Records Committee 2004; Svingen 2004); here, I describe my own observations as they pertain to the record in question.

On 17 July 2004 from 9:20 A.M. to 10:30 A.M., I visited the Felton site and quickly located two adult Rock Wrens. I recognized them as wrens by their shape, which was roughly House-Wren-like, and by the barring on their remiges and rectrices; having recognized them as wrens, I identified them as Rock Wrens because of the following.

(1) For each, the bill was proportionately longer than that of a House Wren.

(2) For both, the crown, hindneck, back, and scapulars were marked with fine dusky spots or short bars.

(3) On both, the pale underparts were unmarked except for fine, dusky streaks on the breast and bold black bars on the under-tail coverts.

(4) For each, the tail had a blackish subterminal band and a pale tip.

The two differed slightly in appearance, with one (hereafter, adult A) having brighter, more rufescent rump-sides, a weaker buff tinge to the underparts, and more heavily barred under-tail coverts than the other (adult B).

The area in which the wrens were located is mainly dry tall-grass prairie. Within this prairie, multiple gravel-pits have been excavated, and the wrens were in the western-most pit, repeatedly visiting a rock pile in the pit's northwest quadrant. This rock pile is roughly teardrop-shaped, being about 100 feet long, 60 feet wide at the broad end of the teardrop, and 12 feet high. It is composed of coarse gravel together with larger rocks one to three feet in diameter (P. Beauzay, pers. comm.).

On this rock pile, I eventually observed not only the two adults but also four chicks. The chicks were smaller than the adults, their bills had conspicuous yellow flanges at the gape, and their tails were very short, just barely projecting beyond the upper-tail coverts. Given that chicks as young as 14 days may leave the nest (Merola 1995), and that a chick was first observed on 2 July, 15 days before my observations, when I saw the chicks the oldest was at least 29 days old.

For the first ten minutes of my visit, I saw only adult B, carrying a moth in its bill and acting in a way that seemed rather agitated — moving from rock to rock on the rock pile, and never standing in one place for more than a few seconds. Even when standing it was in motion, occasionally bobbing by bending at the tibiotarsal-tarsometatarsal joint — a movement that adult A also performed occasionally.

For the next five minutes, adult B was joined by adult A and by two Vesper

Rock Wren, 30 June 2004, Felton Prairie, Clay County. Photo by Sparky Stensaas.

Sparrows (*Pooecetes gramineus*). While adult B continued to move agitatedly about the rock pile, carrying the moth in its bill, adult A repeatedly displaced one or another of the Vesper Sparrows until the sparrows left the rock pile altogether.

Finally, about 15 minutes into the observation period, adult B disappeared into a space between rocks low on the east side of the rock pile; a few seconds later it emerged without the moth. Then, both adults vanished.

About ten minutes later, adult A appeared again, and shortly thereafter I saw one chick, standing in the same area to which food had been taken previously. The chick begged every time adult A came near it, even though adult A was not carrying any food.

Within the next 10 or 15 minutes, adult B appeared, and I gradually saw additional chicks — first a second, then a third, and finally a fourth — until all four chicks and both adults were visible simultaneously.

The area of the rock pile in which chicks were observed may not be the area in which the nest was located. According to Lowther *et al.* (2000), once chicks leave the nest they move as a group from one sheltered location to another, not only within but also outside of the parents' territory. The chicks may stay at each location for up to an hour, but eventually one moves to a new location, and the others follow shortly thereafter.

During the 70-minute observation period, I saw the adults bring three food items to the rock pile. Adult B brought two insects, one the aforementioned moth (*Lepidoptera*) and the other a cricket (*Orthoptera*); adult A brought just one item, a caterpillar (*Lepidoptera*). Items fed to young in Kansas (Matiasek 1998) included not only lepidopterans and orthopterans but also beetles (*Coleoptera*) and spiders (*Araneae*).

On the single occasion when adult A brought food to the rock pile, it passed

the food item to adult B; adult B then moved a few yards to where the chicks were and stuffed the item into a chick's mouth. This observation suggests that adult A was the male of the pair, and adult B the female. Male Rock Wrens sometimes pass food to females — Merola (1995) recorded males feeding females during both courtship and incubation — but there is no published account of females passing food to males. Moreover, males of other wren species have been recorded delivering food items to females, who then give the food to a chick (Carolina Wren [*Thryothorus ludovicianus*], Laskey 1948, Haggerty and Morton 1995; Bewick's Wren [*Thryomanes bewickii*], Kennedy and White 1997; House Wren [*Troglodytes aedon*], Johnson 1998).

The 17 July observations described above are the last for the Felton Rock Wrens (Kessen and Svingen 2005). Whether this is because they left the area or because no observers looked for them after the 17th is uncertain.

The Rock Wren was first documented in Minnesota on 13 May 1922, when an individual was collected in Pipestone County (Peterson 1923). Presently it is considered to be Casual, with accepted records from five years during the ten-year period from 1995 through 2004 (Tustison 1998, Svingen 1999, 2002, 2004, Budde and Svingen 2003, Budde *et al.* 2003, 2004, Monson Geerts 2004, Dunlap 2005). Minnesota has one previous record of attempted breeding, from Beltrami County, in which a pair exhibited behavior consistent with nest-building but disappeared after the presumed nest-site area was disturbed (Schmierer 1984).

Acknowledgments

Patrick Beauzay graciously provided general information about the Felton Prairie area and specific information about the rock pile on which the Rock Wrens were observed.

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MacGillivray's Warblers in Minnesota and Problems of Identification

Robert B. Janssen[1], Jay Pitocchelli[2], and Peter Larson[2]

Among North American warblers, separating Mourning Warbler (*Oporornis philadelphia*) and MacGillivray's (*Oporornis tolmiei*) Warbler presents one of the most difficult challenges for amateur and professional ornithologists. Immature males of these species are difficult to separate because both have eye-arcs and faint black feathering on the upper breast and lower throat (Figure 1). Separation of adult female MacGillivray's Warblers and immature females of both species is also difficult because they have eye-arcs and light colored breasts (Figure 1). Most immature female MacGillivray's Warblers have whitish throats versus immature Mourning females with yellowish throats and a broken breast band, but Pyle and Henderson (1990) observed overlap in some mist-netted birds from California. Further confusion is caused by the rare presence of eye-arcs in some adult Mourning Warblers (Hall 1979, Pitocchelli 1990).

This problem may be a contributing reason why the MacGillivray's Warbler is apparently so scarce in Minnesota. The basis for its inclusion on the official state list is a single specimen (MMNH 14053) taken 11 May 1958 at Madison, Lac Qui Parle County (Peterson 1958, Green 1981). Dr. Walter Breckenridge believed that a second specimen (MMNH 12316) taken at Madison, Lac Qui Parle County on 6 June 1956, was also a MacGillivray's Warbler but it has been since declared a hybrid MacGillivray's X Mourning Warbler. In addition to specimens, senior author Robert Janssen has reported two accounts of alleged sightings of MacGillivray's Warblers in Minnesota. Janssen (1965) observed what he believed to be an incompletely molted male MacGillivray's Warbler at the Lake Harriet Refuge in Hennepin County on 20 May 1964. He noted an incomplete eye-ring, broken in the front and back, similar to eye-arcs found in adult MacGillivray's Warblers. Janssen's written description was compared with the two specimens mentioned above, but the sighting was not accepted due to unanswered questions about the observation

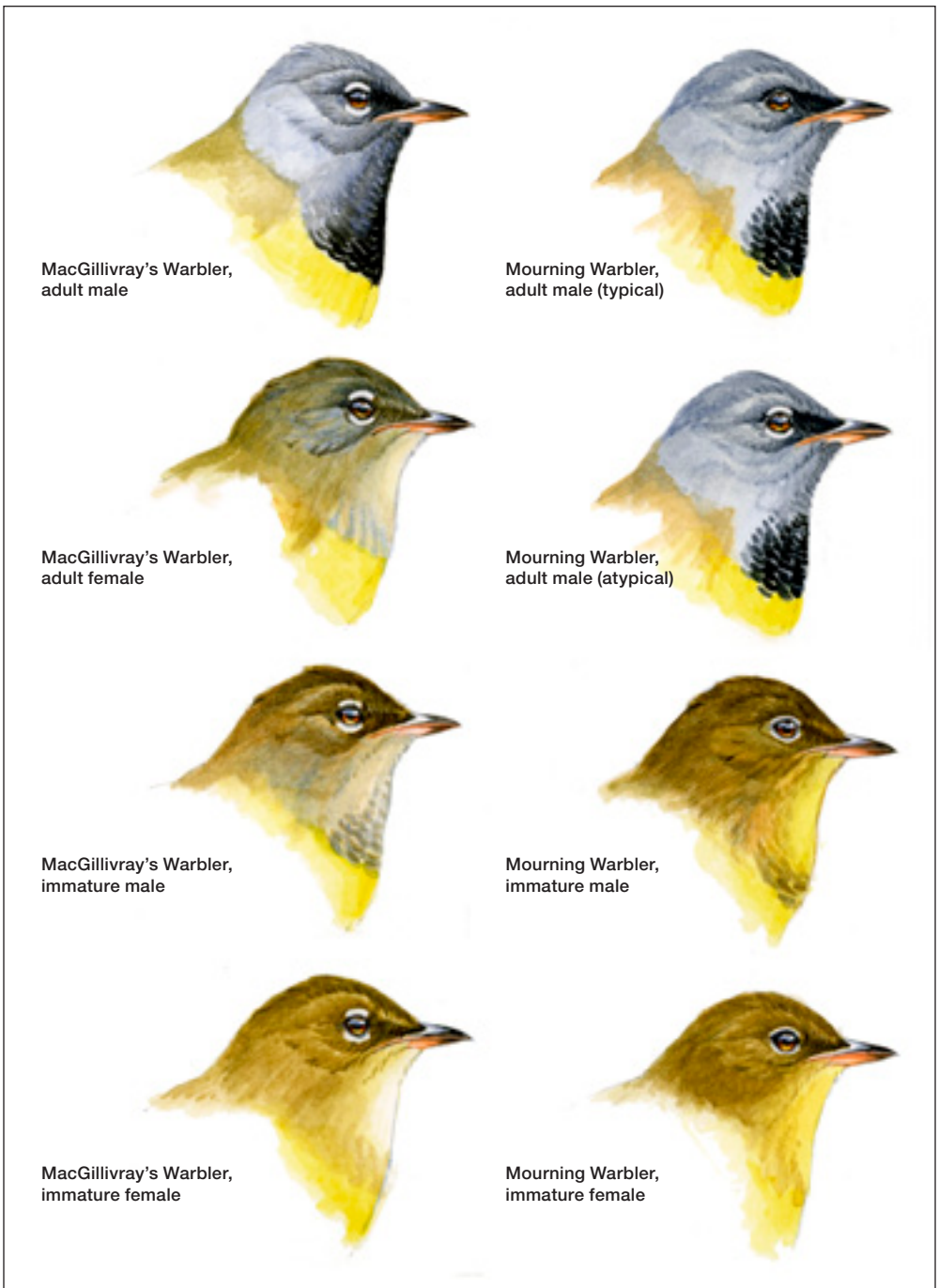

Figure 1. MacGillivray's and Mourning warblers (see text). Art by Scott Krysch.

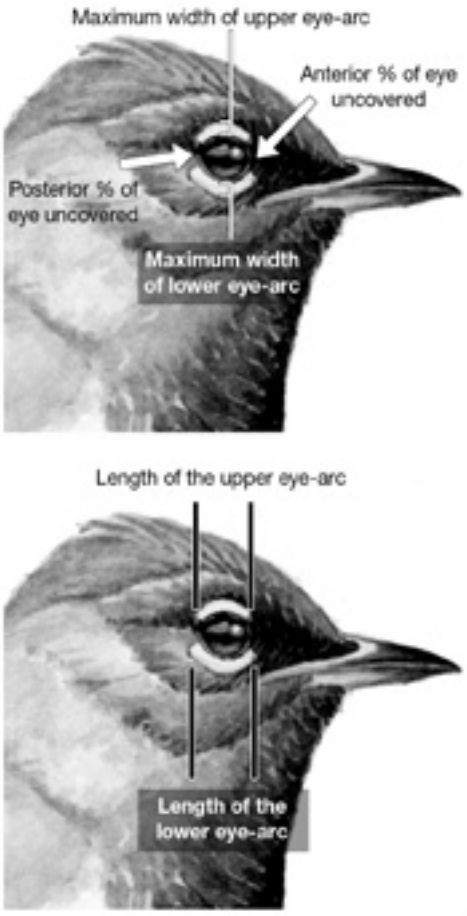

Figure 2. Eye-arc measurements from round study skins.

and Janssen's reservations and lack of knowledge of molt sequence in Mourning and MacGillivray's warblers.

Twenty-nine years later, on 27 August, 2003, Janssen, along with Jerry Bonkoski, made a second sighting of a possible MacGillivray's Warbler while conducting a bird survey at Big Stone Lake State Park in Big Stone County. They believed that this was a female MacGillivray's Warbler based on the presence of bold, thick, abrupt white eye-arcs. Janssen's sighting was not accepted by MOURC based on the documentation submitted, and reservations were based in part on the presence of eye-arcs in extreme specimens of adult male Mourning Warblers collected by Pitocchelli (1990) throughout Canada and immature Mourning Warblers of both sexes in Basic I plumage (Pyle and Henderson 1990, Pitocchelli 1993, Curson *et al.* 1994, Sibley 2000 and other field guides to North American birds).

These sight records have pointed out an important problem with field identification of Mourning and MacGillivray's warblers in Minnesota using eye-arcs. Are there size differences in eye-arcs between Mourning and MacGillivray's warblers? If they are different, are the size differences large enough for reliable detection in the field? To answer these questions, we conducted research at two levels. First, we compared sources from the literature, including field guides and scientific papers, to see if a consensus existed among ornithologists on the reliability of eye-arcs for identifying Mourning and MacGillivray's warblers. Second, we measured various aspects of the eye-arc character from adult and immature MacGillivray's Warblers, adult Connecticut Warblers (*Oporornis agilis*), and immature Mourning Warblers. In this paper, we summarize our results and make some recommendations about the usefulness of eye-arcs for field identification of *Oporornis* warblers.

Methods

We compared species descriptions from ten popular field guides and four papers from the scientific literature. We specifically considered the authors' opinions on shape and size of the eye-arcs in Mourning and MacGillivray's warblers and the eye-rings of Connecticut Warblers. We summarize their interpretations of the eye-arc characteristic below and also in Appendix 1.

Our second analysis was whether measurements of eye-arcs and eye-rings differed among *Oporornis* warblers. Although some authors stated that size and shape of eye-arcs differ among species (see summaries below), eye-arc characteristics have never been measured and therefore, these differences never have

Table 1. Measurements of the eye-arc of *Oporornis* warblers (also refer to Figure 2).

Measurement	Description
Maximum width of the upper eye-arc	Maximum distance from the orbital ring of the eye, moving towards the crown, to the outermost white feathers of the upper eye-arc
Maximum width of the lower eye-arc	Maximum distance from the orbital ring of the eye, moving towards the cheek, to the outermost white feathers of the lower eye-arc
Upper eye-arc length	Distance along the orbital ring of the eye from the base of the first white feather of the upper eye-arc, posteriad to the base of the last white feather
Lower eye-arc length	Distance along the orbital ring of the eye from the base of the first white feather of the lower eye-arc, posteriad to the base of the last white feather
% of the eye uncovered	The sum of the anterior and posterior distances around the eye not covered by white feathers of the eye-arcs divided by the perimeter of the orbital ring

Table 2. Elementary statistics for eye-rings and eye-arcs of *Oporornis* warblers (standard deviation, *n* in parentheses).

Measurement	MacGillivray's [2]	Mourning [2]	Connecticut [2]	Significance Level
Max. Width – upper eye-arc [1]	0.90 (0.17, 39)	0.70 (.21, 15)	0.67 (0.16, 9)	ANOVA - 0.0001, SNK – 0.05
Max. Width – lower eye-arc [1]	1.19 (0.25, 39)	0.86 (0.23, 17)	—	0.0001
Upper eye-arc – Length [1]	2.25 (0.50, 37)	3.74 (0.85, 12)	—	0.0001
Lower eye-arc – Length [1]	2.85 (0.46, 37)	3.52 (0.68, 12)	—	0.0001
% of the Eye Uncovered	53.88% (0.37, 37)	33.41% (1.50, 13)	—	0.006

1 - all measurements in mm
2 – males, females, adults, immatures combined within each species

been quantified. In an attempt to resolve this problem, we took the following measurements from round skins for comparisons among species: maximum width of the upper eye-arc, maximum width of the lower eye-arc, upper eye-arc length, lower eye-arc length, percent of the eye uncovered by white feathers of the eye-arcs (measurements described in Table 1, Figure 2). The eye-arcs and eye-rings are made up of two rows of small bristly feathers around the orbital ring of the eye that cannot be measured using calipers. Therefore, we took measurements using digital image analysis because of the small size of the eye-arcs. Digital photographs of the eye-arcs and eye-rings were taken with a Nikon Coolpix 995 digital camera and Olympus B-061 dissecting microscope. Measurements were made from digital photographs of each specimen using NIH Image for the Macintosh (developed at the U.S. National Institutes of Health and available on the Internet at http://rsb.info.nih.gov/nih-image/).

We compared measurements among three groups: MaGillivray's Warblers (n = 40), Mourning Warblers (n = 17) and Connecticut Warblers (n = 10). Although our samples for each species, except Mourning Warblers, were composed of adults, immatures, males, and females, we lumped these subgroups together because comparisons within species (e.g., Student's t test with a Bonferroni correction and Analysis of Variance –ANOVA, not shown here)

suggested that differences among subgroups did not exist or were equivocal. We only measured eye-arcs of immature male and female Mourning Warblers. We did not include adult Mourning Warblers with eye-arcs because of the logistical difficulties in obtaining these rare specimens from museum collections. Measurements of the flat skins of adult Mourning Warblers with eye-arcs obtained by Pitocchelli (1990) were not comparable to measurements taken with round skins. (A *round skin* is a specimen stuffed with cotton and containing the limbs and partial skull. A *flat skin* is not stuffed and typically lacks the skull and limbs from one side of the body, either left or right. The skeletal elements that were removed have been prepared as partial skeletons.)

We computed elementary statistics of the measurements for each species (Table 2) and produced boxplots (Figures 3–7). The boxplots contain the mean, lines that represent the range from minimum to maximum values, and boxes that enclose values within plus or minus two standard errors of the mean. We produced the plots using StatCrunch (West *et al.* 2002). For maximum width of the upper eye-arc we performed an ANOVA to determine if differences existed among means of Connecticut, Mourning and MacGillivray's warblers. An ANOVA was followed by a Student-Newman-Keuls (SNK) post-hoc test to determine which species differed from each other. This analysis was the only statistical comparison that included Connecticut Warblers. For the remaining measurements we used a Student's t test with the Bonferroni correction (Rice 1989) to compare Mourning versus MacGillivray's Warblers. The percent of the eye-uncovered data were transformed prior to statistical analyses using the arcsin transformation. For reporting purposes in Table 2, we converted the arcsin means from the statistical analyses back into their original units of percents.

Results

Our survey of the literature revealed that ornithologists differed in their reliance on the use of eye-arcs in separating specimens and birds in the field. We divided authors into three categories: 1) Eye-arcs are different and distinct, 2) Eye-arcs are not different, 3) Mixed feelings in that the differences in eye-arcs might be useful to separate specimens or mist-netted birds but may not be distinctive enough for identification through the binoculars of a field observer. We selected quotes from one authority in each category that were indicative of views shared by other authors in the same category, (for quotes from all authors see Appendix 1).

1) Eye-arcs are different and distinct

"The combination of the width, extent, abruptness, and color of the eye-ring is unquestionably the most reliable criterion for separating fall immature Mourning and MacGillivray's Warblers in the field. In Mourning, the eye-ring varies quite considerably, but is always thinner and more extensive and is usually duller white or yellower than that of MacGillivray's" (Pyle and Henderson 1990, p. 227).

2) Eye-arcs are not different

"The gray hood and broken eye-ring are diagnostic except in fall when it is impossible to separate this species from the immature and female Mourning Warbler in the limited area where both occur" (Robbins *et al.* 1983, p. 290).

3) Mixed

"Separation of females and immature Mourning and MacGillivray's is more difficult and some birds may not be identifiable in the field. The lack of eye-arcs indicates Mourning (many adult females). In female and immature Mournings that do show eye-arcs, these vary from white to buffy or even pale yellow and are thin but extensive, often forming a complete but narrow ring. All MacGillivray's show evident white or whitish eye-arcs that are relatively thick and blunt, never forming a complete ring" (Dunn and Garrett (1997, p. 494).

We also found that ornithologists have

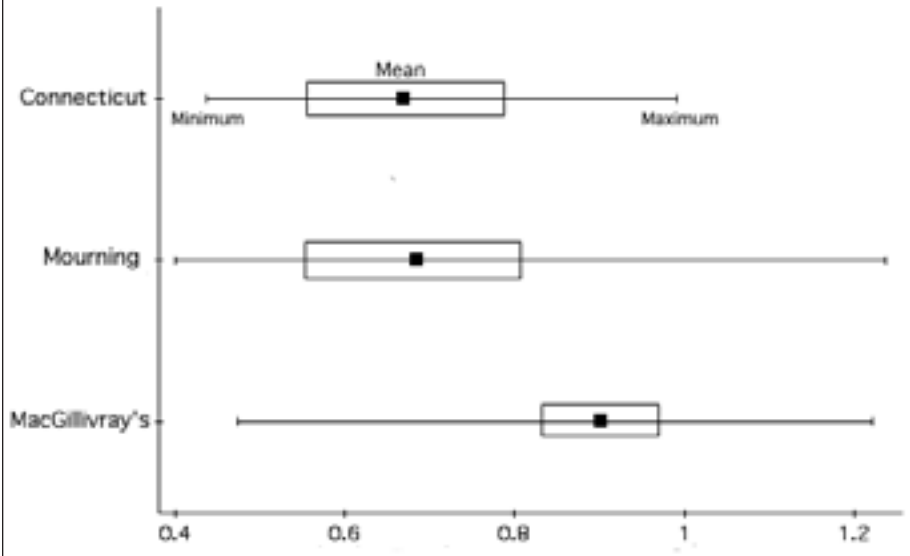

Figure 3. Maximum width of the superior (upper) eye-arc (mm).

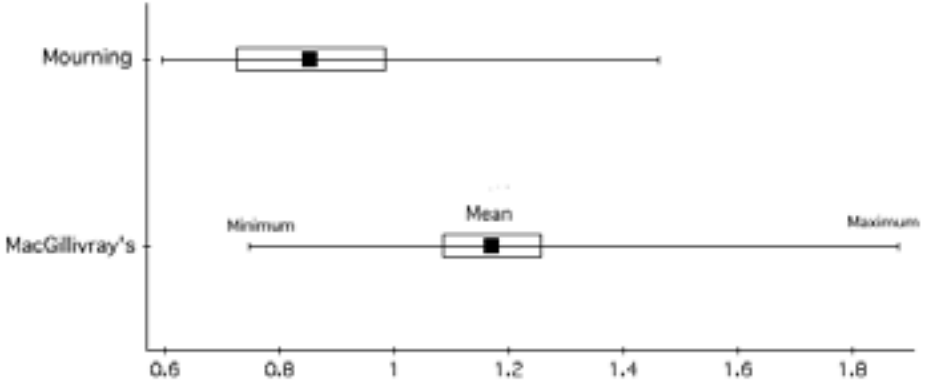

Figure 4. Maximum width of the inferior (lower) eye-arc (mm).

used the terms eye-ring, eye-arc, and eye-crescent to describe the pattern of white feathering around the eye of *Oporornis* warblers. The terms have been used interchangeably and may cause confusion with field identification. We examined eye-arcs and eye-rings in Connecticut, MacGillivray's, and Mourning warblers under a dissecting microscope. The eye-ring or rimal feathering of Connecticut Warblers is formed by two rows of white bristly feathers along the entire orbital ring of the eye. Eye-arcs of MacGillivray's and Mourning warblers are formed by a

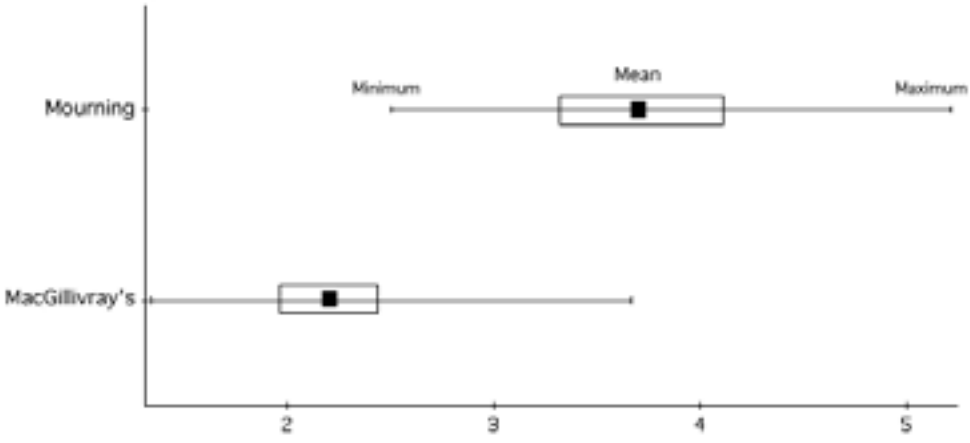

Figure 5. Length of the superior (upper) eye-arc (mm).

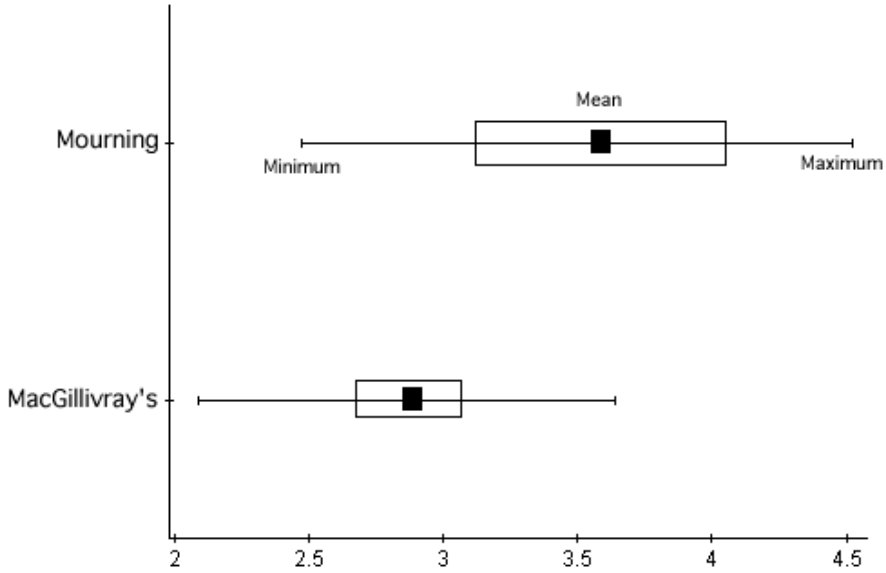

Figure 6. Length of the inferior (lower) eye-arc (mm).

break in the two rows of white feathers, one at the nasal canthus or front of the eye and one at the temporal canthus or back of the eye (terminology from Proctor and Lynch 1993). These feathers were always white in Connecticut and MacGillivray's warblers but were yellow or white with yellow tips in some Mourning Warblers. The extent of the white feathers along the contour of the eye varies among these three species and we make some recommendations on clarifying how the

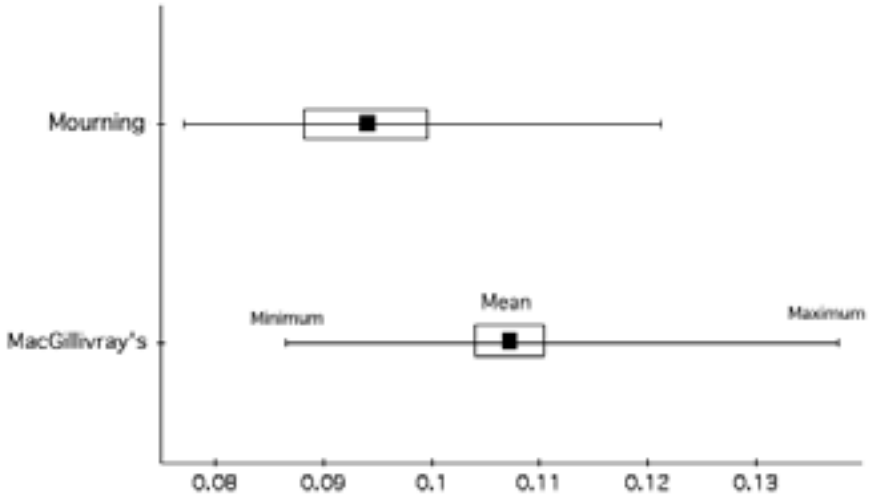

Figure 7. Percent of the eye uncovered by eye-arcs (arcsin).

current terminology should be applied in this genus later in the Discussion.

Several authors (Pyle and Henderson 1990, Curson *et al.* 1994, Stokes and Stokes 1996, Dunn and Garrett 1997, Kaufman 2000, Sibley 2000, Stokes and Stokes 2004) consider the eye-rings of Connecticut Warblers and eye-arcs of Mourning Warblers to be thinner than the eye-arcs of the MacGillivray's Warblers, similar to the difference between the thin line of a pencil versus the thick line of a felt pen. We addressed this problem by comparing measurements of the eye-arc and eye-ring character. Our results showed that the eye-arcs of MacGillivray's Warblers are thicker than those of Mourning Warblers or the eye-ring of the Connecticut Warbler (Table 2, Figures 3 and 4). For the maximum width of the upper eye-arc, an ANOVA detected a highly significant difference among species ($F=10.24$, $df=2, 61$, $p<0.0001$). The results of an SNK test showed that Mourning and Connecticut warblers did not differ from each other, but as a homogeneous subset, they differed from the MacGillivray's Warbler ($p<0.05$, Table 2). This difference is illustrated in Figure 3 but the boxplot also shows overlap in the ranges of measurements for these species. The maximum width of the lower eye-arcs of Mourning and MacGillivray's warblers was also different ($t=4.76$, $df=33.5$, two-tailed, $p<0.0001$) but there was some overlap in measurements (Figure 4).

The upper and lower eye-arcs of Mourning Warblers are longer than MacGillivray's Warblers. There were significant differences between these species in both the upper ($t=-5.77$, $df=13.5$, two-tailed, $p<0.0001$) and lower ($t=-3.19$, $df=14.2$, two-tailed, $p<0.006$) eye-arc lengths (Figure 5, 6). The longer eye-arcs of Mourning Warblers also left a smaller percentage of the eye uncovered by white feathers ($t=8.00$, $df=48$, two-tailed, $p<0.0001$), Figure 7). Over 50% of the eye is uncovered in MacGillivray's Warblers whereas 33% or less is uncovered in Mourning Warblers (Table 2). Note also some overlap existed for each of these measurements.

Discussion

An overview of the literature showed that some ornithologists noted distinct differences in the shape and size of the eye-arc character (Appendix 1): eye-arcs

of MacGillivray's Warblers are shorter and thicker than Mourning Warblers. These differences were borne out in our statistical comparisons of the size of the eye-arcs and the percent of the eye uncovered by eye-arcs. The average width of the eye-arc of MacGillivray's Warblers was greater than eye-arcs of Mourning Warblers and the eye-ring of Connecticut Warblers. The eye-arcs of MacGillivray's Warblers have an abrupt appearance because they are shorter, and leave less of the eye covered. Although we found statistical differences that reinforced the opinions of some ornithologists that the eye-arcs of these species are different, does that mean that these differences are reliable for field identification?

We share the mixed feelings of some ornithologists about using eye-arcs to separate these species. We feel that only extremely competent observers with extensive experience should use this field mark to separate these species for several reasons.

1. Authors of field guides use a combination of the scientific literature, field experience, and observation of museum specimens. Detailed plumage descriptions are typically based on specimens, and for most species, are 100% reliable for discrimination in the field and in the hand. However, for difficult species like Mourning and MacGillivray's warblers with subtle plumage differences, extending specimen-based observations to field conditions may not be possible.

2. It is difficult to take measurements from prepared study skins. These measurements were the best available to us but they could be confounded by differences among preparers of the skins (i.e. the amount of cotton in the eye), age of the skins, damage during shotgun collecting (e.g., loss of feathers covering the eye, tearing or damage to the skin around the eye), etc. An analysis of eye-arc measurements would best be made from digital images of fresh specimens, prior to preparation.

3. Our sample sizes were small and we know that Mourning Warblers are highly variable. Several authors have shown that examination of new materials from this species (e.g., mist-netted birds — Pyle and Henderson 1990, museum specimens — Pitocchelli 1992) has revealed more overlap with MacGillivray's Warblers than had been previously thought. Although our statistical comparisons revealed significant differences between species, the boxplots (Figures 3–7) also showed that some extreme specimens of MacGillivray's Warblers fell into the range of Mourning Warblers and vice-versa. We would feel much more comfortable advocating the use of these characters if there were no overlap in measurements.

4. We are skeptical that the statistical differences we found are easiy seen in the field. The differences in the upper and lower eye-arc widths are 0.20 mm and 0.33 mm respectively. The average length of the upper eye-arc of Mourning Warblers is 1.49 mm larger than MacGillivray's Warblers, but there is only a 0.67 mm difference for the lower eye-arc. A Mourning Warbler has about 67% of the eye covered by eye-arcs versus 50% in MacGillivray's Warblers (Table 2). Although there are clear statistical differences, it would be difficult for an observer to detect these differences from shy and flighty birds that inhabit dense vegetation. Even at close range under optimal viewing conditions, humans probably cannot consistently detect these small measurement differences. It would take an observer with extensive field experience with immature birds in both species' ranges to make a reliable identification.

In conclusion, we urge extreme caution using eye-arc differences for field identification of these species. The best discriminator of these species is still Lanyon and Bull's (1967) wing-tail measurement which is impossible to obtain without a bird in hand. Without the good fortune of obtaining a specimen or capturing live birds in mist-nets, this problem will continue to be a source of frustration for Minnesota ornithologists trying to determine the status of MacGillivray's Warbler.

Our final goal was to clarify the ter-

minology describing this field mark in the genus *Oporornis*. Several terms have been used interchangeably to describe the white feathers of the eye in this genus: eye-ring, broken eye-ring, eye-arcs, and eye-crescents. Based on field observations and various field guides, our consensus is that an eye-ring is a thin, solid line of white feathers around the entire orbital ring of the eye — typical of all Connecticut Warblers. Although rare, some extreme Mourning Warblers also possess this complete eye-ring (Pyle and Henderson 1990, Stokes and Stokes 1996, Dunn and Garrett 1997, *National Geographic Guide* 2000, Pitocchelli personal observations). We advocate maintaining the current use of this term to describe complete eye-rings in all Connecticut Warblers and the rare, extreme Mourning Warblers mentioned above. The use of the term in this genus is also consistent with its use in other species of wood-warblers.

Eye-crescents have been used interchangeably with eye-arcs. We suggest eliminating eye-crescents that imply the anterior and posterior ends of eye-arcs come to a point (e.g., like a crescent moon). In the genus *Oporornis*, the ends are blunt (Dunn and Garrett 1997), always forming an arc and never a crescent.

Eye-arcs and broken eye-rings present a special problem because they have been used to describe similar field marks in several warbler species. Sibley (2000) used broken eye-rings to describe incomplete eye-rings of Orange-crowned Warblers (*Vermivora celata*), Kirtland's Warblers (*Dendroica kirtlandii*), Common Yellowthroat variants (*Geothlypis trichas*), Gray-crowned Yellowthroats (*Geothlypis poliocephala*), Golden-crowned Warblers (*Basileuterus culicivorus*) and Mourning Warblers. In these species, the breaks are usually small gaps that occur at the nasal and temporal canthi of the eye. The white feathering of the eyes of Mourning Warblers is thin like a Connecticut Warbler and ranges from a complete eye-ring to short eye-arcs similar to MacGillivray's Warblers. The term broken eye-ring could still be applied to Mourning Warblers.

Sibley (2000) uses the term eye-arcs to describe white feathers above and/or below the eye in Northern Parulas (*Parula americana*), 1st-year Black-throated Blue Warblers (*Dendroica caerulescens*), Painted Redstarts (*Myioborus pictus*) and MacGillivray's Warblers. These are species where the arcs are thick and bold. Eye-arcs can be used to describe the arcs of all MacGillivray's Warblers and some Mourning Warblers that show overlap in eye-arc measurements (Figures 3–7). The term broken eye-ring, sensu Sibley (2000), would not apply to MacGillivray's Warblers. Based on our measurement comparisons, we suggest following Sibley's usage of broken eye-ring to describe Mourning Warblers, and using the term eye-arcs for MacGillivray's Warblers.

Acknowledgments

We thank George Barrowclough, Peter Capainolo, and Chris Blake of the Ornithology Department of the American Museum of Natural History for lending us specimens of *Oporornis* warblers for this study. We also thank Scott Krysch for his warbler illustrations.

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Appendix 1

Authors and their opinions on the use of eye-arcs for identifying Mourning and MacGillivray's warblers.

Eye-arcs are different and distinct

Curson *et al.* (1994)

MacGillivray's Warbler: "note especially the bold white eye-crescents, the appearance of a full unbroken breast band in all plumages and lack of yellowish throat in any plumage (a few first-years may have a faint yellowish wash)." The illustration by Quinn of a first year female found on plate 53d very closely matches the bird described by Janssen and Bonkoski at Big Stone Lake State Park.

Mourning Warbler: "MacGillivray's always has bold white eye crescents which are thicker and more obvious than the thin, broken whitish eye-ring of female and first-year Mourning; but it requires careful viewing to appreciate it."

Stokes and Stokes (1996)
MacGillivray's Warbler: "All plumages have broken white eye-ring that looks like a broad white crescent above and below eye."
Mourning Warbler: "female very faint broken whitish eye-ring which may occasionally be complete."

Kaufman (2000)
MacGillivray's Warbler: "Sharp white crescents above and below eye, best distinction from next two species (Mourning and Connecticut warblers)."

Sibley (2000)
MacGillivray's Warbler: "Broad, short white eye-arcs distinctive in all plumages."
Mourning Warbler: "occasional individuals show narrow, partial eye-ring, never broad eye-arcs like MacGillivray's."

Stokes and Stokes (2004)
MacGillivray's Warbler: "Bold white crescents above and below eye."
Mourning Warbler immatures: "Broken eye-ring thicker than adult females but still thin."

Eye-arcs are not different

Lanyon and Bull (1967)
"It is probably true that all or vitually all Connecticut Warblers have the eye-ring complete regardless of age or sex. We have never personally seen one that did not. The configuration of the eye-ring in MacGillivray's Warblers appears to be equally consistent regardless of age or sex, *i.e* incomplete with the white being confined to the areas above and below the eye. But the eye-ring is quite variable as a character in all ages and sexes of Mourning Warblers. An adult female *Oporornis* (AMNH 788789) collected in May 1967 at Kalbfleisch Field Research Station of the American Museum of Natural History, Huntington, New York, had a conspicuous but incomplete eye-ring confined to the areas above and below the eye. A field observer would have been tempted to identify this bird as a MacGillivray's Warbler except for the extra-limital nature of the record. But the "wing minus tail" measurement of 12 mm clearly making it a Mourning Warbler."

Robbins *et al.* (1983)
MacGillivray's Warbler: "The gray hood and broken eye-ring are diagnostic except in fall when it is impossible to separate this species from the immature and female Mourning Warbler in the limited area where both occur."

Peterson (1990)
The only mention of this issue is that female and immature of both species (Mourning and MacGillivray's) are difficult to separate from one another.

Pitocchelli (1993)
"Most but not all adult Mourning Warblers lack the broken white eye-rings (eye-arcs) typical of MacGillivray's Warbler. Immatures indistinguishable from MacGillivray's Warblers except for W-T; this measurement is equivocal for extreme specimens."

Pitocchelli (1995)
Species most similar to MacGillivray's Warbler is its eastern counterpart, Mourning Warbler. Plumage characters and external measurements can be used to separate the species in most cases (Lanyon and Bull 1967, Hall 1979, Pitocchelli 1990). However, some individuals may exhibit characteristics intermediate between the 2 species. Most adult Mourning Warblers lack the eye crescents present in adult MacGillivray's Warblers. Most adult females are separable by presence or absence of eye crescents, but some adult female Mourning Warblers also have eye crescents. Immatures of both species have yellow underparts, olive-green upperparts, and eye crescents, but crescents shorter and wider in MacGillivray's Warbler."

Mixed

Griggs (1997)

MacGillivray's Warbler: "Female and immature have browner hoods, fainter eye-rings. Similar to Mourning Warbler, very rare but annual migrant in west; lacks eye-ring." The latter statement refers to spring females.

Mourning Warbler: "Hood browner, fainter in female and imm.; yellow can extend onto throat; may show faint, broken eye-ring."

Dunn and Garrett (1997)

MacGillivray's Warbler: "particular attention should be paid to the extent and shape of the eye-arcs. Prominent white arcs are shown above and below the eye in all plumages. Females and immatures are pale gray to whitish (rarely dingy yellowish) on the throat." And finally under first fall female (MacGillivray's) "distinct creamy white eye-arcs."

Mourning Warbler: "The separation of Mourning and MacGillivray's warblers is perhaps the most difficult identification problem among North American warblers. Individual variation is considerable in Mourning Warblers with all age and sex classes. Separation from the closely related MacGillivray's Warbler can be difficult in all plumages."

National Geographic (2000)

MacGillivray's Warbler: "Bold white crescents above and below the eye distinguish all plumages from male Mourning and Connecticut warblers. Crescents may be very hard to distinguish from the thin nearly complete eye-ring on female and immature Mourning Warblers."

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The Fall Season

1 August through 30 November 2004

Tom Auer[1], Paul E. Budde[2], James W. Lind[3], and Peder H. Svingen[4]

A juvenile **Black-bellied Whistling-Duck** found in Big Stone County 1 August disappeared shortly after its discovery — where on Earth did it hatch? Observers responding to requests for documentation of the recently split **Cackling Goose** found identification problems posed by the remaining members of the Canada Goose complex. Surveys at Rice Lake N.W.R. greatly enhanced our understanding of the fall staging of waterfowl at this Aitkin County refuge. Imagine the potential for insight if data from all state, federal, and private sources were combined into one seasonal report!

Red-throated Loon was absent from Lake Superior for the first time since 1999, but five or six **Pacific Loons** along the North Shore and another three or four away from Lake Superior made Fall 2004 one of this species' best ever. Pre-migratory fall staging of the **Common Loon** at Lakes Winnibigoshish and Mille Lacs improved compared to recent years. Almost exactly one year after a pair was found at Big Stone N.W.R., an adult **Neotropic Cormorant** was discovered by shorebird surveyors in Big Stone County. Six or seven **Snowy Egrets** topped off its best year ever in Minnesota.

The newly minted Hawk Ridge Bird Observatory (H.R.B.O.) remained faithful to its roots by conducting the 33rd consecutive fall census of raptors at Hawk Ridge in Duluth and continuing its banding operations for raptors and passerines. Highlights included three **Mississippi Kites** at the main overlook and seven species of owls banded. Please become a member and support the research and educational activites of H.R.B.O. at P.O. Box 3006, Duluth, MN 55803 or online at <www.hawkridge.org>.

Shorebird surveys in Big Stone and Lac Qui Parle counties and at Mud Lake, Traverse County, consistently recorded ±20 species and thousands of individuals into mid-September. Weekend totals included 15,232 shorebirds (23 species) 6–7 August, 17,757 shorebirds (23 species) 21–22 August, and 14,578 shorebirds (21 species) 4–5 September. Besides the aforementioned Neotropic Cormorant, the best find during the surveys was a **Red Phalarope** at Salt Lake; earlier in the year, surveyors turned up a Cinnamon Teal, Curlew Sandpiper, and two Ruffs!

Above-average numbers of **jaegers**, plus two **Little Gulls**, a **Lesser Black-backed Gull**, two **Great Black-backed Gulls**, two or more **Sabine's Gulls**, and an adult **Arctic Tern**, brought excitement to the Superior Entry in Duluth again this fall. Almost exactly 12 years after one was banded at Hawk Ridge in Duluth, a **Common Ground-Dove** was serendipitously found along the shoulder of state highway 61 in Lake County by birders stopping to look for a hawk owl! Speaking of owls, record-high numbers of **Northern Hawk Owls**, **Great Gray Owls**, and **Boreal Owls** were detected; their numbers, movements, behavior, economic impact, mortality, and distribution will be chronicled in future issues of ***The Loon***.

Continuing the recent trend of discoveries by "young birders" in the state was the **Clark's Nutcracker** spotted by 4½ year-old Al Robertson at his family's bird feeder in Silver Bay. Cognizant of the recent pattern of late fall vagrancy by Cave Swallows to the Great Lakes and the Northeast, Doug Kieser carefully studied and documented a record-late **Cliff Swallow** along the North Shore of Lake Superior on 7 November.

Peak **warbler** variety included 21 species at Duluth 23 September (MTA, KRE). The only rare warbler this fall was Minnesota's fifth **Townsend's Warbler** at Linwood Lake in mid-September. Somewhat reminiscent of the "good old days" were vagrant **Lark Buntings** in two locations along the North Shore of Lake Superior. **Nelson's Sharp-tailed Sparrows** and **Smith's Longspurs** were detected in several locations, but not as many as last fall.

Weather Summary: Continuing the trend persisting since May, early August was dry and cool with record cold temperatures in several locations, including International Falls, where the high of 49° F 10 August was its coldest maximum temperature for August. Embarrass in northern St. Louis County recorded a low of 20° on the 21st and it was the coldest August on record for Alexandria and St. Cloud. All regions were at least 4° F below normal for the entire month. Heavy rain fell in parts of southwestern Minnesota 23–24 August.

In a dramatic reversal, all nine regions reported average temperatures of three or more degrees above normal during September, and except in the Northeast where precipitation was near normal, the entire state received above average rainfall — especially the West-central and North-central regions, where precipitation was over four inches above normal. The mercury rose above 80° F 13 times in the Twin Cities during September, ushering in the sixth warmest meteorological autumn (1 September through 30 November) on record — which followed the Twin Cities' fourteenth coldest meteorological summer (1 June through 31 August). September was also warmer than August at Duluth.

Temperatures and precipitation were both above normal for most of the state during October. A narrow band of heavy rain from Madison, Lac Qui Parle County to Pine City, Pine County produced local flooding in late October. November was

mild, with temperatures 4½° F or more above normal in all regions. Snowfall was insignificant: by the 20th of December, only 1.5 inches had officially fallen at the Twin Cities International Airport.

Presumed escapes and exotics: Female **Baglafecht Weaver (***Ploceus baglafecht***)** late October at feeder in Freeport, Stearns County (PAH, ph. DAC).

Undocumented reports: **Tricolored Heron** 8/17 Winona (Whitewater W.M.A.); **Yellow-crowned Night-Heron** 9/11 (immature at Pigs Eye L.); ***Plegadis* ibis** 8/28 Lac Qui Parle (10 at Haydenville W.M.A., Arena Twp.), 9/25 Big Stone (3 in Toqua Twp.), 9/26 Big Stone (6 in Malta Twp.); **Ferruginous Hawk** 10/9 Norman (Sandpiper Prairie S.N.A.), **Gyrfalcon** 10/3 H.R.B.O., Duluth, 10/4 Lake (Knife River); **Little Gull** 9/19 Cass (L. Winnibigoshish); **Lesser Black-backed Gull** 9/5 Anoka (adult at Centerville L.); **Sabine's Gull** 9/19 Cass (L. Winnibigoshish), 10/8 Beltrami (L. Bemidji); **Scissor-tailed Flycatcher** 10/9 St. Louis (C.R. 5); **Orange-crowned Warbler** 8/4 Murray.

Acknowledgments: We thank Dave Carman, Dave Evans, Frank Nicoletti, and the Hawk Ridge Bird Observatory for data from Hawk Ridge in Duluth. Dave Benson, Anthony Hertzel, and Jeanie Joppru sent transcripts of weekly birding reports. Michelle McDowell sent waterfowl survey data from Rice Lake N.W.R. Medians of recent arrival and departure dates were calculated by Paul Budde from published and unpublished seasonal report data from 1985 through 2003. Many thanks to all of our contributors; we are especially grateful to those who submit data each season.

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Key to the Seasonal Report

1. Upper case (**LEAST TERN**) indicates a Casual or Accidental species in the state.
2. Dates listed in bold (**10/9**) indicate an occurrence either earlier, later, or within the three earliest or latest dates on file.
3. Counties listed in bold (**Aitkin**) indicate an unusual occurrence for that county.
4. Counties with an underline (**Becker**) indicate a first county record.
5. Counties listed in italics (*Crow Wing*) indicate a first county breeding record.
6. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.
7. Counts listed in bold (**150**) indicate a total within or exceeding the top three high counts for that species.
8. Dagger "†" preceding observer's initials denotes documentation was submitted.
9. Species documented with a photograph are denoted with "ph".
10. Species documented with digital or video tape are denoted with "v.t."

The *Seasonal Report* is a compilation of seasonal bird sightings from throughout Minnesota. We particularly invite reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor, request a report form from the Editor of the *Seasonal Report*, Peder H. Svingen, 2602 East 4th St., Duluth, MN 55812–1533.

BLACK-BELLIED WHISTLING-DUCK — Seventh state record **8/1 Big Stone** (Otrey Twp.) †JMP.

Greater White-fronted Goose — Only reports: 10/12 Itasca (41) RBJ, **11/11** Red Lake (25) SAS.

Snow Goose — Seen in 9 north and 12 south counties. Oversummering birds in Douglas 8/2–9/17 (injured) m.ob., 8/2–19 Yellow Medicine (3) m.ob., 8/15–29 Big

Cackling Goose, 16 October 2004, Silver Bay, Lake County. Photo by Anthony X. Hertzel.

Partial albino Canada Goose, 15 September 2004, Dakota County. Photo by James P. Mattsson.

Stone PHS, JMJ, 8/21 Lac Qui Parle (3) PHS. Early north migrants 9/7 St. Louis FJN, 9/25 Red Lake JMJ. Early south 9/14 Wabasha (3) BRL, 9/25 Brown JSS. Late north 10/24 Lake ADS, JPM, 10/30 Cook JEB. Late south 11/24 Mower RCK, RDK, 11/28 Rice TFB; also see winter report.

Ross's Goose — All reports: **9/8 Koochiching** (record-early, five miles west of Littlefork) †LS, 9/30–10/17 St. Louis (Park Point) †MH, m.ob., 10/4 Steele (2 at Morehouse Park, Owatonna) ph. NFT, 10/14–16 Brown (Somsen Slough W.M.A.) †BTS.

Cackling Goose — This recent split from the Canada Goose was documented by photograph or audio recordings in 4 north and 4 south counties, and by written details in 13 additional counties, none in the Southeast. Early north 9/21 Cook (Tofte) ph. EEO, 9/21–22 Lake (Fenstad's Resort) ph. EEO, 9/25 Lake (Knife River, gave a one-syllabled, high-pitched, soft "screech" vaguely reminiscent of a grackle and somewhat Snow Goose-like) †KRE *et al*. Also photographed 9/30–10/2 St. Louis (2 at Stoney Point) KRE, MH, 10/10 St. Louis (6 at Park Point, Duluth) PHS, 10/16 Lake (15–20 at Silver Bay) AXH, PHS, 10/23 Lake (91 at Two Harbors) PCC, PHS, 10/24 Cook (3 at Lutsen) PCC, JWL, PHS. Early south 10/2–3 Rice (vocalized) DAB, FVS, 10/3 Big Stone (2 near Correll) †PHS, 10/9–11 Jackson (6) DDM, BJM, †PHS. Photographed 10/22+ Hennepin (Lakewood Cemetery) ChM, PEB, 11/5 Dakota JPM, 11/23 Anoka (Blaine) CBr. Digital audio recording 11/26 Waseca (Loon L.) JPS. Peak counts 10/13 Polk (**650** at Crookston) ph. †PHS, 10/20 Big Stone (335 in Prior Twp.) †PHS. Late north 10/29 Lake (83) ph. JWL, 10/31 Pennington (one at Thief River Falls) †JMJ, 11/4 Clay (one at Moorhead) †DPJ. Late south 11/25 Meeker (3 at L. Ripley) †DMF, 11/29 Dakota (30 at Eagan) †CBr, but also see winter report. Observers are asked to document all sightings with notes, photographs, and/or recordings to improve our understanding of this species in the state.

Canada Goose — Reported throughout the state and the season.

Mute Swan — Birds of uncertain origin reported 10/29–11/20 Rice (2) TFB, FVS.

Trumpeter Swan — Statewide total of >190 Trumpeters in 11 north and 12 south counties. Peak counts 8/29 Otter Tail (50) DTT, SMT, 11/14 Becker (25 on Town Lake) *fide* JMJ.

Tundra Swan — Seen in 11 north and 13 south counties. Oversummering birds in Polk 8/31 (3) EEF. Early north 10/2 Lake JWL, 10/17 St. Louis FJN and Polk (61) JMJ. Early south 10/18 Freeborn AEB, 10/31 Mower RCK, RDK, Houston FZL. High count 11/30 Houston (8,000 at Pool #8, includes birds in Wisconsin) FZL. Late north 11/20 Cass DPJ, PJR, 11/28 Todd JSK, SID. Please see winter report for late south migrants.

Wood Duck — Reported from 19 north and 28 south counties, none in the Southwest. Record-high count 9/27 Aitkin (**11,066**) Rice Lake N.W.R. Late north 11/8 Hubbard MAW, 11/17 St. Louis LAW, but also see winter report.

Gadwall — Found in 10 north and 24 south counties in all regions. Late north 11/7 Marshall PHS, 11/9 Polk EEF. Please see winter report for additional migrants and overwintering birds.

American Wigeon — Seen in 9 north and 16 south counties, none in the Southwest. High count 10/26 Aitkin (2,514) Rice Lake N.W.R. Late north 11/9 Polk EEF, 11/23 St. Louis JRN. Please see winter report for late south migrants.

American Black Duck — All north reports: Aitkin, Cook, Lake, Marshall, Pennington, Roseau, St. Louis. Early south 8/7 Big Stone (Big Stone Twp.) PCC, 8/21 Freeborn AEB. Reported from five additional south counties, none in the Southwest.

Mallard — Reported throughout the state. High count 10/14 Aitkin (123,952) Rice Lake N.W.R.

Blue-winged Teal — Observed in 17 north and 20 south counties. Second highest count 9/27 Aitkin (**21,977**) Rice Lake N.W.R. Late north 10/21 Aitkin PEJ, 10/30 Cook RBJ. Late south 10/21 Nobles LBF, 11/3 Olmsted PWP.

Northern Shoveler — Reported from 12 north and 27 south counties. Highest reported count 11/6 Polk (400) EEF. Late north 11/17 Polk EEF, 11/30 St. Louis SLF. See winter report for late south migrants.

Northern Pintail — Seen in 10 north and 19 south counties. High count 10/26 Aitkin (3,314) Rice Lake N.W.R. Late north 11/22 Clay BWF. See winter report for late south migrants.

Green-winged Teal — Found in 16 north and 21 south counties. Second highest count 10/14 Aitkin (**11,716**) Rice Lake N.W.R. Late north 11/4 Todd RBJ, 11/22 Clay BWF. Late south 11/20 Nicollet DLB, 11/24 Houston FZL, but also see winter report.

Canvasback — Observed in 8 north and 11 south counties, none in North-central or Southwest. Peak count 11/9 Houston (41,575 at Pool #8, includes birds in Wisconsin) Upper Mississippi River N.W.F.R. Late north 10/31 Polk EEF, Lake JPM, 11/7 Marshall PHS. Please see winter report for late south migrants.

Redhead — Reported from 5 north and 16 south counties. No significant high counts. Late north 11/7 Marshall PHS, 11/9 Polk EEF. Please see winter report for late south migrants.

Ring-necked Duck — Reported from 13 north and 17 south counties. High count 10/20 Aitkin (166,270) Rice Lake N.W.R. Late north 11/9 Polk EEF, 11/28 St. Louis SLF, but also see winter report.

Greater Scaup — Found in seven north and two south counties. Early north 9/22 St. Louis JWL. Late north 11/7 Marshall PHS, but also see winter report. All south

reports: 11/7–20 Meeker DMF, 11/21–29 Houston m.ob.

Lesser Scaup — Seen in 12 north and 13 south counties. High count 10/26 Aitkin (1,251) Rice Lake N.W.R. Please see winter report for late migrants.

Harlequin Duck — Two reports from L. Superior: 10/19–23 Cook (2 at Grand Marais) SLF, m.ob., 10/20–31 Lake (immature at Two Harbors) JWL, m.ob.

Surf Scoter — Many north reports from L. Superior: 9/30–11/14 Cook (max. 9 at Paradise Beach and one at Good Harbor Bay) m.ob., 10/3–31 St. Louis (max. **10** at Duluth) MH, m.ob., 10/15–11/6 Lake (max. 8 at Two Harbors, 10/24) DPJ, m.ob. All south reports: 11/13–16 Winona (single at Prairie Island) DBz, 11/14+ Meeker (max. 5 at L. Ripley) DMF, 11/21 Houston (female near Reno) DFN, PEJ. Also see winter report.

White-winged Scoter — All north reports from L. Superior: 10/9–11/14 Cook (reports from several locations, max. **21** on 10/28) RBJ, m.ob., 10/10–19 St. Louis (2 at Park Point) PHS, KRE. All south reports: 10/26 **Chisago** (female shot at Rush L., male also seen) ph. *fide* RPR, 10/28 Dakota (10 at L. Byllesby) JPM, 11/13 Meeker (2 at L. Ripley) DMF, 11/13 Wabasha (one at Peterson L.) *fide* AXH. Also see winter report.

Black Scoter — All reports from L. Superior: 10/15–11/10 (max. 8 at Duluth) BWF, PHS, m.ob., 10/16 Lake (one at Silver Bay) PCC, PHS, 10/16–11/14 Cook (reports of 1–4 individuals from several locations) m.ob.

Long-tailed Duck — Early north 10/17 Cook EEO, 10/23 Lake (Two Harbors) JWL. High count 11/1 Cook (35 at Cascade R.) BJM, DDM. Only report away from L. Superior: 11/7 Meeker (one at L. Ripley) DMF.

Bufflehead — Seen in 17 north and 16 south counties. Early south 9/12 Hennepin SLC, 9/26 Big Stone PHS. High count 11/3 Polk (40) EEF.

Common Goldeneye — Found in 19 north and 14 south counties, none in the Southwest. Early south 10/22 Meeker DMF, 10/25 Sherburne PEJ. No significant high counts.

BARROW'S GOLDENEYE — Adult male 11/21 Houston (Pool #8) †DFN, †PEJ. Third November record from this location since 2001.

Hooded Merganser — Reported from 14 north and 18 south counties, none in the Southwest. High counts 11/27 Meeker (**1,335** at L. Ripley) DMF, 10/20 Beltrami (100 at L. Bemidji) PJR.

Common Merganser — Seen in 13 north and 13 south counties, none in Southwest. Early south **8/23** Carver (2) EEO, then none until 11/13 Anoka REH, Wabasha JLU. High count 11/30 Wabasha (est. 20,000) RPR.

Red-breasted Merganser — Scarce for third consecutive fall (only reported from nine counties). Adult with 10 young seen 8/2 Cass (Ten Mile L.) PEB. No other north reports away from L. Superior until 11/6 Wadena PJB. Only south report: 11/25 Meeker DMF.

Ruddy Duck — Found in 5 north and 21 south counties, none in North-central or Northeast. High count 10/12 Polk (400) EEF. Late north 11/7 Marshall PHS. Late south 11/21 Winona and Houston DFN, 11/26 Waseca JPS. Also see winter report.

Gray Partridge — All north reports: 9/11 Clay (6) fide JMJ, 10/2 Pennington JMJ, 10/17 Wilkin BJU. Seen in 10 south counties, including 8/15 Houston (3) FZL. High counts 8/14 Lac Qui Parle (23) KTP, 9/18 Cottonwood (19) BRB. Also reported from Big Stone (3), Brown, Freeborn, Meeker, Traverse (8), Watonwan (12), Yellow Medicine (13).

Ring-necked Pheasant — Observed in 33 counties as far north as Clay in the Northwest, Wadena in the North-central, and Kanabec and Pine in the East-central region.

Ruffed Grouse — Observed in 14 north and 5 south counties, including 10/31 Goodhue LBF.

Spruce Grouse — Reported from Beltrami, Cook, Koochiching (max. 3 along C.R. 13) m.ob., Lake, Lake of the Woods (max. 3 in three locations) GMM, RBJ, MHK.

Sharp-tailed Grouse — Reported from Aitkin (max. 11, WEN), Kanabec (max. 10, JMP), Lake of the Woods (21 along C.R. 80) MHK, Pine (max. 14, JMP), Polk, Red Lake (2) PHS, Roseau, St. Louis (max. 11 in Sax Zim, RBW).

Greater Prairie-Chicken — North reports from Clay (72) RBJ, Norman, Otter Tail (40) *fide* JMJ, and Wilkin (max. 30) DPJ. Only south report: 8/22 Lac Qui Parle ChH, presumably related to D.N.R. releases at Plover Prairie.

Wild Turkey — Reported from 26 counties as far north as Clay, Wadena, and Pine (max. 26, JMP). Some north reports probably refer to recently released birds.

Red-throated Loon — Only reports: 10/3 **Mille Lacs** (Wigwam Bay, Mille Lacs L.) †ASc, 10/14 Crow Wing (St. Albans Bay, Mille Lacs L., same as 10/3?) AXH. Also note probable Red-throated 10/23 Mille Lacs (Vineland Bay) KRE *et al.* First fall without a report from Lake Superior since 1999.

Pacific Loon — More reports than usual, with singles reported on L. Superior 9/30 Cook (Tofte) †KRE, 10/10–30 St. Louis (Park Point) †MH, m.ob., 10/23 Cook (Paradise Beach) MH, MTA, 10/26 Lake (Agate Bay) DA, 10/31–11/7 Cook (Grand Marais; same as 10/23?) KRE, m.ob., **11/20–27** Lake (second latest north; Agate Bay; same as 10/26?) ph. JWL. Inland reports 10/11–12 Beltrami (L. Bemidji, vent strap and incomplete chin strap seen) †BJU, 10/23–28 Mille Lacs (Wigwam Bay and Vineland Bay, Mille Lacs L.) KRE, CRM, 10/24 Itasca (Plug Hat Point, L. Winnibigoshish) KRE, 11/3 **Otter Tail** (Molly Stark L.) †RBJ, 11/21 Crow Wing (Garrison Bay, Mille Lacs L.; same as 10/23–28?) †CAM.

Common Loon — Found in 20 north and 13 south counties in all regions. Premigratory staging at L. Winnibigoshish (peak count of 1,158 on 10/9) best since Fall 1999. Peak counts on Mille Lacs L. 10/14 (1,467, with 252 near Malmo) AXH, PHS, 10/19 (1,545, with 785 at Liberty Beach) AXH, PHS. Late north 11/10 Itasca JEB, 11/12 Aitkin MRN. Late south 11/24 Hennepin PEB and Houston FZL, but also see winter report.

Pied-billed Grebe — Reported from 15 north and 25 south counties. Second highest fall count 10/23 Meeker (**373** on L. Ripley) DMF. Late north 11/4 Hubbard MAW, 11/6 Polk EEF. Late south 11/8 Hennepin SLC, 11/28 Wright REH.

Horned Grebe — Observed in nine north and seven south counties, none in Southwest. Early north 8/22 Lake JWL, 9/11 Clay *fide* JMJ. Early south 9/12 Hennepin SLC. Late north 11/3 Otter Tail JEB, RBJ, 11/12 Cook SLF. Late south 11/26+ Meeker DMF, 11/29 Houston FZL, but also see winter report.

Red-necked Grebe — Seen in nine north and three south counties, including 10/2 Dakota ADS, JPM. Late north 10/30 Lake JPM, 10/31 Cook JWL, Marshall JMJ, but also see winter report. No representative late south dates.

Eared Grebe — Reported from eight north and seven south counties. No reports from eastern regions. Late north 10/14 **Itasca** EEO, 10/23 Pennington JMJ. Late south 10/22 Stearns PCC, 11/3 Rice TFB.

Great Blue Heron, 6 September 2004, St. Paul, Ramsey County. Photo by Ron Green.

Western Grebe — Seen in eight north and six south counties. Unusual locations 8/26–28 Lake (Two Harbors) ph. JWL, 9/25–10/15 St. Louis (Park Point) KRE, m.ob. Late north 10/24 Itasca SC and Douglas JPE, 11/7 Marshall PHS. Late south 10/25 Rice TFB.

Clark's Grebe — All reports: 8/1 Big Stone (documented since spring at Thielke L.) m.ob., 8/5 Yellow Medicine (Timm L.) †CBr, LM, 8/15 Douglas (L. Osakis) †KRE.

American White Pelican — Seen in 14 north and 29 south counties statewide. Several Northeast reports, including 8/21–10/4 St. Louis (peak count of 113 on 9/7 at H.R.B.O.) FJN, 8/21 St. Louis (Ely) SES, 8/22–10/9 Cook (Grand Marais) m.ob. High count 9/16 Dakota (2,100 at Black Dog L.) SWe. Late north 11/21 Cook (Taconite Harbor) ARu, 11/22 Lake (same bird?) UK. Late south 11/24 Houston FZL, 11/27 Hennepin DWK, but also see winter report.

NEOTROPIC CORMORANT — Third state record 8/15 **Big Stone** (adult in Otrey Township) †PHS, †PCC, ph. KRE, m.ob. Location is less than ten miles from Big Stone N.W.R., where two adults were found 12 August 2003 (***The Loon*** 76:46).

Double-crested Cormorant — Observed in 18 north and 32 south counties in all regions. Peak count 9/16 Dakota (1,200 at Black Dog L.) SWe. Late north 11/11 Crow Wing RBJ, 11/28 St. Louis JRN. Late south 11/21 Meeker DMF, 11/27 Hennepin DWK, but also see winter report.

American Bittern — Reported from six north and six south counties. Late north 9/18 St. Louis SLF. Late south 10/12 Big Stone PHS.

Least Bittern — All reports: 8/9–11 Hennepin (Old Cedar Ave.) m.ob., 8/18 Winona CAS, 8/26 Lyon RJS.

Great Blue Heron — Reported from 23 north and 34 south counties. Late north

Neotropic Cormorant, 15 August 2004, Otrey Township, Big Stone County. Photo by Kim Eckert.

11/17 Polk EEF, 11/22 Clay EEF.

Great Egret — Seen in 9 north and 29 south counties in all regions. Unusual reports 8/17 St. Louis (Embarrass) ALE, 8/18 Lake (Two Harbors) JWL and St. Louis (Duluth) MH, FJN, 8/25 St. Louis (Manganika L.) SLF. Peak count 8/13 Waseca (77) JEZ. Late north 10/16 Polk EEF. Late south 11/2 Ramsey REH, 11/11 Dakota SWe.

Snowy Egret — All reports: 8/14 Grant (two in Pelican Lake Twp.) KRE, 8/27 Traverse (Bois de Sioux R.) *fide* AXH, 8/28 Lac Qui Parle (Manfred Twp.) BRL, 8/31 Murray (Lake Sarah Twp.) RJS, 9/1 Lyon (Sham L.) SMo, 9/21 Lyon (Island L.) RJS.

Little Blue Heron — No reports.

Cattle Egret — All reports: 8/2 Douglas JPE, 8/3–14 Grant (max. 45 near Pelican L.) KRE, JPE, 8/14 Big Stone (Malta Twp.) †JPE, 9/5 Wilkin (13) †BWF, 10/20 Big Stone (Graceville) PHS, 10/23–27 Lake (5 at Two Harbors) PCC, PHS, 10/31 Cook JWH, 11/10 Otter Tail EJE, **11/16** (record-late north date) Roseau †MBr, SWd.

Green Heron — Seen in 12 north and 19 south counties. Late north 9/18 Todd JSK,

SID, 10/1 St. Louis EEO. Late south 9/26 Mower RCK, RDK, 10/7 Meeker DMF — but also see winter report!

Black-crowned Night-Heron — Reported from four north counties, including 8/2 Cass PEB, 9/4 (late north) Marshall JMJ. Observed in nine south counties, none after September except 11/24 Ramsey *fide* AXH.

Yellow-crowned Night-Heron — Only documented report: 8/27 Dakota (adult at Lily L.) RPR, †CBr, ph. JPM. First fall record since 1993!

***PLEGADIS*, sp?** — Documented 9/18 Big Stone (2 at West Toqua L.) †RHO, 10/3 Big Stone (3 in Odessa Twp.) ph. †PHS, 10/13 Lyon (Black Rush L.) †RJS, 11/7 Wilkin (Prairie View Twp.) †EJE. Also see undocumented reports.

Turkey Vulture — Seen in 23 north and 28 south counties. See Table 1 for high count. Late north 10/25 St. Louis (H.R.B.O.) FJN, DSC, 11/6 Polk EEF. Late south 10/16 Rice DAB, 10/18 Olmsted PWP.

Osprey — Reported from 14 north and 16 south counties in all regions. Peak count 9/11 St. Louis (47 at H.R.B.O.) FJN, DSC. Late north 10/19 Otter Tail JEB, RBJ, 11/4 Becker JEB. Late south 10/21 Rock LBF, 11/17 Rice TFB.

MISSISSIPPI KITE — Three different juveniles at H.R.B.O. — **8/30**, 9/7, 9/8 †FJN *et al.* The 9/8 bird was identifiably photographed.

Bald Eagle — Seen in 20 north and 30 south counties in all regions. See Table 1 for peak count.

Northern Harrier — Reported from 21 north and 17 south counties. Late north 11/22 Aitkin DWK, 11/27 St. Louis PEB, but also see winter report.

Sharp-shinned Hawk — Observed in 15 north and 21 south counties. Early south 9/5 Dakota TAT, 9/9 Houston FZL. Third highest count 9/25 St. Louis (**1,844** at H.R.B.O.) FJN, DSC. Late north 11/22 St. Louis (H.R.B.O.) FJN, DSC, 11/25 Otter Tail DTT, SMT, but also see winter report.

Cooper's Hawk — Seen in 14 north and 27 south counties, but none in Southwest. See Table 1 for high count. Late north (median 10/31) 11/9 St. Louis (H.R.B.O.) FJN, DSC, 11/24 Wadena PJB, but also see winter report.

Northern Goshawk — All north reports: Carlton, Cass, Cook, Clay, Itasca, Lake, Marshall, Otter Tail, Pine, St. Louis. Only south reports: 10/9 Hennepin OLJ, 10/10, 11/13 Meeker DMF, 11/13 Hennepin AXH.

Red-shouldered Hawk — All north reports: 8/3 Douglas JPE, 8/3–9/14 Todd JSK, SID, 8/30 Otter Tail JEB, RBJ, 9/26 Becker DFN, plus total of three at H.R.B.O. in Duluth between 10/2 and 10/17 (FJN, DSC). Observed in seven south counties as far west as Carver.

Broad-winged Hawk — Reported from 16 north and 19 south counties, none in the Southwest. Peak counts 9/16 St. Louis (31,021 at H.R.B.O.) FJN, DSC (see Table 1), 9/17 Rice (286) DAB, Houston (145) FZL, 9/25 Carver (197) WCM. Late north 10/14 St. Louis (H.R.B.O.) FJN, DSC, 10/16 Pine PEB. Late south 10/2 Waseca JPS, 10/10 Meeker DMF.

Swainson's Hawk — All north reports: 8/5 Roseau *fide* JMJ, 8/31 Wilkin RBJ, 9/11 Clay *fide* JMJ, and total of five at H.R.B.O. in Duluth between 9/7 and 9/24 (FJN, DSC). Reported from eight south counties, including 9/10 Steele (2) NFT, and (late south) 9/21 Dakota JPM.

Red-tailed Hawk — Reported from 61 counties statewide. Peak count 10/16 St. Louis (680 at H.R.B.O.) FJN, DSC. Below-average season at H.R.B.O., but the total of 6553 included a number of dark morphs, several "Harlan's", one "Krider's",

Species	Aug	Sep	Oct	Nov	Total	Peak	Date	Range
Turkey Vulture	4	528	753	0	1285	202	10/3	8/30–10/25
Osprey	85	299	7	0	391	47	9/11	8/15–10/15
Mississippi Kite	1	2	0	0	3	—	singles	8/30–9/8
Bald Eagle	241	792	959	1597	3589	213	11/21	8/17–11/30
Northern Harrier	109	186	103	5	403	20	9/26	8/15–11/15
Sharp-shinned Hawk	618	11061	5167	58	16904	1844	9/25	8/15–11/22
Cooper's Hawk	11	141	24	2	178	21	9/11	8/18–11/09
Northern Goshawk	9	92	453	320	874	62	10/17	8/17–11/30
Red-shouldered Hawk	0	0	3	0	3	—	singles	10/02–10/17
Broad-winged Hawk	278	49290	19	0	49587	31021	9/16	8/15–10/14
Swainson's Hawk	0	5	0	0	5	3	9/16	9/07–9/24
Red-tailed Hawk	148	1504	4721	180	6553	680	10/16	8/17–11/29
Rough-legged Hawk	0	1	512	193	706	122	10/17	9/26–11/25
Golden Eagle	0	0	52	95	147	16	11/4	10/02–11/30
American Kestrel	81	1681	247	2	2011	556	9/25	8/15–11/10
Merlin	18	134	64	3	219	15	9/6	8/17–11/21
Gyrfalcon*	0	0	1	0	1	1	10/3	—
Peregrine Falcon	1	79	19	1	100	20	9/25	8/28–11/19
Totals	1604	65795	13104	2456	82959			
Days	17	29	30	29	105			
Hours	220.5	341.75	346.5	245.5	1154.25			

Table 1. Monthly and seasonal totals, peak flight and date, and range of occurrence at Hawk Ridge Bird Observatory, Duluth, St. Louis County, Fall 2004. *Undocumented.

and several intergrades.

Ferruginous Hawk — Only documented report: 10/13 Clay (adult at Felton Prairie) †PHS.

Rough-legged Hawk — Seen in 18 north but only 5 south counties. Early north (median 9/20) 9/4 Marshall JMJ, 9/26 St. Louis (H.R.B.O.) FJN, DSC. Early south 10/2 Washington REH, 10/12 Sherburne JMP.

Golden Eagle — Total of 147 at H.R.B.O. (161 last fall) beginning 10/2 St. Louis FJN. Early north away from Hawk Ridge 10/12 Itasca RBJ; additional north reports from Clay, Marshall, Polk. Early south 10/3 Big Stone (juvenile) PHS, 10/12 Nicollet RMD; also seen in Carver, Meeker, Watonwan.

American Kestrel — Reported from only 18 north and 21 south counties (57 total counties last fall). Numbers up at H.R.B.O. (2011 vs. 1484 last fall); second-highest count 9/25 (**556**) FJN, DSC. Also see Table 1.

Merlin — Reported from 13 north and 12 south counties in all regions. Downward trend continues at H.R.B.O. Probable early north migrant 8/14 Traverse BWF. Early south (away from known breeding locations in Twin Cities) **8/8** Sherburne PIJ, 8/30 Freeborn AEB. Only report from Southwest: 9/25 Cottonwood BTS.

Peregrine Falcon — Reported from only 5 north and 11 south counties, but above-average total of 100 at H.R.B.O.. Early north 8/13 Koochiching EEO, 8/17 St. Louis (Embarrass) ALE; also reported from Clay, Itasca, Mahnomen. Probable early south migrants 8/19 Anoka BRL, 8/29 Big Stone JMJ and Carver RMD.

Prairie Falcon — No reports.

Yellow Rail — All reports: 9/22 or 9/23 **Swift** (tower kill near Appleton) DSo *fide* CH, 9/24 Hennepin (Crow-Hassan Park) †SLC, 9/24 **Mille Lacs** (Four Brooks

W.M.A.) †BH, 10/5 **Cottonwood** (Expandere W.M.A.) BRB, 10/7 Jackson (Timber Lake W.M.A.) BRB.

Virginia Rail — One north report: 8/1 St. Louis SLF. Reported from only four south counties; late south 9/28 Hennepin SLC.

Sora — Found in only seven counties (30 last fall). Late north 9/6 Wadena PJB. Late south 10/9 Hennepin DWK.

Common Moorhen — Progeny of nesting pair (see summer report) last seen 9/28 Brown BTS.

American Coot — Reported from only 21 counties (50 last fall). Highest reported count 10/14 Aitkin (17,102) Rice Lake N.W.R.

Sandhill Crane — Reported from 15 north and 12 south counties. No reports from the Southwest. Best season ever at H.R.B.O, Duluth (total 277, including peak of 98 on 10/16) FJN. No significant counts elsewhere. Late north 11/4 Otter Tail SPM. Late south 11/25 Sherburne (6) †ES, but also see winter report!

Black-bellied Plover — Observed in five north and ten south counties in all regions except the Southeast. Early north 8/6 (4), 8/12 (6) Traverse (Mud L.) KJB; arrived elsewhere 8/20 St. Louis (2) FJN. Early south 8/16 Hennepin WCM, 8/21 Freeborn AEB and Lac Qui Parle (2) PCC *et al.* Highest reported count 9/7 St. Louis (29 at Duluth) PHS. First juveniles 9/11 Traverse PCC, 9/12 Big Stone PHS *et al.* Late north 10/21 Polk (5) PHS, 10/24 St. Louis (10) TAT. Late south 10/20 Big Stone (1) and Lac Qui Parle (10) PHS, 10/21, 11/5 Dakota JPM.

American Golden-Plover — Observed in 8 north and 15 south counties. Early north (all at Mud L. — also see summer report) 8/12 Traverse (1) KJB, 8/21 Traverse (10) PCC *et al.* First reported away from Mud L. 9/7 St. Louis (6) PHS. Early south 8/10 Carver OLJ, 8/14 Hennepin DWK. First juvenile 9/4 Traverse PCC. Numbers up in St. Louis, especially at H.R.B.O. in Duluth, where 280 in three flocks 9/23 were followed by an amazing 415 on 9/30 (FJN, DSC). Noteworthy counts 10/2 Wilkin (125 in three flocks) DTT, SMT, 10/11 Clay (102) BWF, 10/11 Lac Qui Parle (224 at Salt L.) PHS, 10/14 Cottonwood (160 near L. Hanska) JPM. Late north 10/23 Lake PHS, 10/29 St. Louis (7) KTP. Late south 11/6 Dakota (1) BRL, 11/8 Brown (1) BTS.

Semipalmated Plover — Observed in 9 north and 11 south counties in all regions except the Southeast. Please see summer report for high count and fall migrants. First juveniles 8/12 Traverse KJB, 8/14 Marshall PHS. Late north 9/18 Todd JSK, SID, 9/22 St. Louis JWL. Late south 10/11 Yellow Medicine (2) PHS, 10/12 Big Stone (2) PHS.

Piping Plover — No reports.

Killdeer — Reported from 16 north and 30 south counties statewide. Please see summer report for record-high count (**975**) in Big Stone; additional tallies there 8/1 (869) PHS *et al.*, 8/7 (836) KJB, PCC, 8/15 (891) PCC, PHS. High counts elsewhere 8/6 Traverse (418 at Mud L.) KJB, 8/21 Lac Qui Parle (**808**) PCC *et al.*, 9/4 Dakota (337 at sod farms) SWe. Late north 10/16 Wadena PJB, 10/17, 10/21 Polk JMJ, PHS. Late south 11/30+ Houston FZL, also see winter report.

American Avocet — All sightings: 8/1 Big Stone (2) PHS, 8/6, 8/12 Traverse (1) KJB, 8/9 Hennepin (1) DWK, WCM, 8/15 Anoka (3) JEH, 9/26 Yellow Medicine (1) PCC, PHS.

Greater Yellowlegs — Reported from 13 north and 21 south counties. Record-high fall count 8/1 Big Stone (**176**) PHS, RSF, JMJ. First juvenile 8/12 Traverse KJB. Late north 10/27 Polk EEF, 11/4 Todd RBJ. Late south 11/8 Hennepin SLC, 11/18 Faribault JEB.

Lesser Yellowlegs — Observed in 15

north and 20 south counties. Record-high fall count 8/1 Big Stone (**2316**) PHS, RSF, JMJ; subsequent tallies there 8/7 (2185) KJB, PCC, 8/15 (1935) PCC, PHS. Highest reported count elsewhere 8/6 Traverse (1800 at Mud L.) KJB. Late north 10/21 Polk (2) PHS, 10/26 Pine (1) JMP. Late south 11/4 Benton RBJ, 11/5 Dakota JPM.

Solitary Sandpiper — Reported from 13 north and 15 south counties in all regions. Record-high fall counts 8/1 Big Stone (**44**) PHS, RSF, JMJ, 8/7 Big Stone (**40**) KJB, PCC. Late north 9/18 St. Louis SLF, 9/25 Clay RHO. Late south 9/20–21 Olmsted PWP, 10/3 Dakota JPM.

Willet — All reports: 8/1 Big Stone (2) PHS, plus singles 8/6–7 Lac Qui Parle KJB, BRL, 8/21 Meeker DMF, 8/21 Traverse PCC.

Spotted Sandpiper — Reported from 13 north and 16 south counties. Highest reported count 8/1 Big Stone (41) PHS, RSF, JMJ. Late north 10/2–3 Wilkin DTT, SMT, PHS, **10/30** Mille Lacs †DWK. Late south 10/9 Dakota ADS, 10/12 Big Stone PHS.

Upland Sandpiper — Only north report 8/6 Traverse KJB. Five reports from Big Stone, where last seen 8/29 (1) PHS, JMJ.

Whimbrel — Only report: 8/28 St. Louis (one at 40th Ave. West, Duluth) JLR.

Hudsonian Godwit — All north reports from Traverse (Mud L., also see summer report): 8/6 (3) KJB, 8/21 (1) PCC *et al.* Only south report: 10/1 Olmsted (3 at East Landfill Reservoir, Rochester) JWH.

Marbled Godwit — All north reports: 8/2 Roseau (28) PHS, 8/6 (3), 8/12 (1) Traverse KJB, plus three observations at Agassiz N.W.R., Marshall County 8/2 (4) PHS, 8/7 (1) JMJ, 8/16 (2) EEF. No south reports.

Ruddy Turnstone — Scarce statewide for the third consecutive fall; all singles, except 9/5 Big Stone (3) PHS. Only north reports: 8/2 Douglas JPE, 9/18 St. Louis JMP. Early south (but see summer report) 8/24 Hennepin WCM. First juvenile 9/4 Lac Qui Parle PCC. All other reports: 9/5 Freeborn AEB, 9/11 Lac Qui Parle PCC *et al.*

Red Knot — Two reports of single birds: 8/18–19 St. Louis ph. MH, DOK, JWL, m.ob., 8/25 Beltrami (Lower Red L. at Waskish) RBJ.

Sanderling — Reported from five north and ten south counties. Early north 8/21 Traverse PCC; please see summer report for early south migrants. First juvenile 8/28 Traverse PCC. Apart from second highest fall count 9/8 St. Louis (**150** at Park Point, Duluth) PHS, relatively scarce for the fourth consecutive fall along the North Shore of L. Superior. Late north 10/28 Lake JWL, 10/30 Cook (2) JWL, PHS and Mille Lacs (1) DWK. Late south 10/20 Lac Qui Parle (3) PHS, 10/23 Goodhue (1) BRL.

Semipalmated Sandpiper — Reported from 9 north and 15 south counties in all regions. First juvenile 8/6 Traverse KJB. Highest reported count 8/22 Big Stone (1228) PHS. Late north 10/20 St. Louis LAW, 10/21 Polk (2) PHS. Late south 10/19 Yellow Medicine PHS, 10/20 Lac Qui Parle (3) PHS, **11/8** Brown (3, latest south date) BTS.

Least Sandpiper — Reported from 13 north and 17 south counties. Highest reported counts 8/28 Traverse (**1561** at Mud L.) PCC, 9/4 Lac Qui Parle (1306) PCC, PHS, 9/5 Big Stone (1496) PHS. Late north 10/2 Wilkin DTT, SMT, 10/13 (1), 10/21 Polk (5) PHS. Late south 10/20 Lac Qui Parle (28) PHS, 10/21 Nobles (2) LBF.

White-rumped Sandpiper — Except for undocumented reports in August, all north reports occured between 10/16 (Cook MTA and Lake PHS) and 10/24 (Lake and St. Louis m.ob.). Early south 8/15 Big Stone (1) †PCC, †PHS, 9/11 Anoka SWe. Late south 10/28 (5), **11/5** (2,

latest south date) Dakota JPM. **Note**: Undocumented reports of fall migrant Whiterumpeds prior to September are not published.

Baird's Sandpiper — Reported from 11 north and 13 south counties in all regions. Best migration ever documented in Westcentral, e.g., total of 784 in two counties 8/28 and total of 896 in three counties 9/4. First juvenile 8/12 Traverse KJB. Record-high count 8/28 Traverse (**625** at Mud L.) PCC; noteworthy tallies 8/22 Big Stone (**256**) PHS, 9/4 Lac Qui Parle (**445** at Salt L.) PCC, PHS. Late north 9/28 Crow Wing JEB, 10/2 Lake JWL and Wilkin DTT, SMT. Late south 10/28 Dakota JPM, 10/29 Brown BTS, Dakota ADS and Mower RCK, RDK.

Pectoral Sandpiper — Observed in 12 north and 18 south counties statewide. First juvenile 8/2 Marshall PHS. Totals >1000 on five consecutive surveys in Big Stone County between 8/7 (1116) and 9/5 (1384); highest reported counts 8/22 Big Stone (**3179**) PHS, 8/28 Traverse (**2466** at Mud L.) PCC. Late north 10/29 St. Louis PHS, 10/30 Lake JWL. Late south 11/6 Brown BTS and Dakota BRL, 11/13 Dakota JPM.

Dunlin — Relatively scarce for the fourth consecutive fall, especially along the North Shore of L. Superior. Reported from 15 counties (14 last fall, 16 in Fall 2002). Early north 8/21 Traverse (1) PCC, then no reports until October. Early south 8/28 Lac Qui Parle (juvenile — rarely found in Minnesota) ph. PHS, JMJ, 9/18 Cottonwood (1) HCT. Highest reported count 10/20 Lac Qui Parle (101) PHS. Late north 10/21 Polk PHS, 10/26 Mille Lacs CRM. Late south 11/6 Dakota (3) BRL, 11/8 Brown (2) BTS.

Stilt Sandpiper — Reported from 10 north and 11 south counties. Please see summer report for first fall migrants. Highest reported counts 8/7 Big Stone (**1177**) KJB, PCC, 8/21 Traverse (**1185**) PCC *et al.* Only north report after early September: 10/15 Lake (1) KTP. Only south reports after mid-October: 10/20 Big Stone (2) and Lac Qui Parle (3) PHS.

Buff-breasted Sandpiper — Numbers down for the 2nd consecutive fall, especially at Dakota County sod farms. Statewide total of about 80 individuals in 15 counties (194 last fall, 547 in Fall 2002, 550+ in Fall 2001). No reports from Northwest or Southeast. All counts single digits. Please see summer report for first fall migrants. First juvenile 8/21 Lac Qui Parle PCC *et al.* First county occurrence 8/22 **Crow Wing** RBJ. Late north 9/13–16 Cook SGu, 9/23 Lake JWL. Late south 9/19 Lac Qui Parle PCC, PHS, 9/25 Brown BTS.

Short-billed Dowitcher — North reports from Lake, Marshall, Traverse; also seen in six south counties. Please see summer report for first fall migrants. First juvenile 8/2 Marshall PHS. Highest reported counts 8/6 Traverse (31) KJB, 8/7 Big Stone (34) KJB, PCC. Late north 9/4 Marshall (calling juvenile) KRE, 9/11 Traverse (5) PCC. Late south 9/18 Yellow Medicine PHS, 9/19, **10/12** Big Stone (record-late, juvenile identified by tertial pattern) PHS.

Long-billed Dowitcher — Reported from only three north and six south counties. Early north 8/14 Marshall (3 at Agassiz N.W.R.) JMJ, PHS. Early south 9/5 Big Stone (4) PHS. First juveniles 9/18 Yellow Medicine PHS, 9/19 Big Stone PHS and Lac Qui Parle PCC. Highest reported count 10/12 Big Stone (97) PHS. Late north 10/21 Polk (5) PHS. Late south 10/20 Big Stone (47) and Lac Qui Parle (20) PHS.

dowitcher, sp. — Reported 9/12 Lac Qui Parle WCM, 9/26 Brown BTS, 10/20 Rock LBF. A total of 71 dowitchers were prudently left unidentified during shorebird surveys in western Minnesota, including 9/11 Traverse (30) PCC.

Wilson's Snipe — Seen in 16 north and 19 south counties. Highest reported count 10/20 Lac Qui Parle (37) PHS. Late

Red Phalarope, 11 September 2004, Lac Qui Parle County. Photo by Jim Lind.

north (away from Duluth, where overwintered) 10/23 Lake PHS, 10/25 Mille Lacs NAJ. Late south 11/27 Scott DWK, 11/30+ Houston FZL, also see winter report.

American Woodcock — Observed in seven north and four south counties. Late north 10/12 Carlton LAW, 11/6 St. Louis JWL. Late south 10/25 Dakota ADS, 11/2 Hennepin SLC.

Wilson's Phalarope — Numbers down >50% compared to last two years. Statewide total of 275+ individuals in six north and five south counties (600+ last fall, 620+ in Fall 2002). All reports from western regions except Carver, Freeborn. Highest reported count 8/15 Big Stone (73 on survey route) PCC, PHS. Late north 9/2 Polk EEF, 9/4 Traverse PCC. Late south 9/11 Lac Qui Parle PCC, 9/11, 9/18 Yellow Medicine PHS *et al.*

Red-necked Phalarope — Numbers down for 2nd consecutive fall, though number of counties (6 north, 10 south) similar to last two years. Statewide total of 163+ individuals (263+ last fall). Early north 8/18 Todd (2) BWF, 8/20 Clay SWe. Please see summer report for early south migrants. Highest reported counts 9/5 Big Stone (44) PHS, 9/11 Lac Qui Parle (47 at Salt L.) PCC. Late north 9/14 Polk (4) EEF, 9/27 **St. Louis** (one at Biwabik W.T.P.) †SLF. Late south 9/26 Lac Qui Parle (5) PCC, 9/27 Brown (2) BTS.

RED PHALAROPE — Thirteenth state record **9/11–13 Lac Qui Parle** (juvenile at Salt L.) †PCC; also documented ph. DAC, †JMJ, ph. †JWL, ph. †PHS.

POMARINE JAEGER — Fifteenth state record 9/7 St. Louis (juvenile at Park Point, Duluth) †PHS (***The Loon*** 77:117).

Parasitic Jaeger — Documented at Park Point, Duluth 9/10 (juvenile dark morph and adult light morph) †MTA, 9/23 (*fide* MH), 9/26–27 (adult light morph) †MTA, †PHS *et al.*

jaeger, sp? — Reported at Duluth 9/6 (1), 9/15 (4), 9/16–18 (1), 9/24–25 (1), 9/27 (2), 10/19 (1).

Franklin's Gull — Observed in 9 north and 21 south counties in all regions, including unusual location 9/8 St. Louis (Park Point, Duluth) †MTA, ph. PHS. Highest reported counts 10/2 Waseca (1500 at Clear L.) JPS, 10/13 Polk (1200 at landfill) PHS. Late north 11/3 Wilkin JEB, RBJ. Late south 11/11 Stearns RPR.

Little Gull — Two reports at Superior Entry, St. Louis County: 9/24–27 (juvenile) SP, RJ, †MTA, †MH *et al.*, 10/10–15 (first-winter) †MH, †PHS.

BLACK-HEADED GULL — One adult in basic plumage found by Lee Schoenewe on Iowa side of border at Spirit L. 9/26 and documented on Minnesota side of border 9/27–10/17 Jackson †DCh, †CBr, ph. †PHS. This would have been Minnesota's seventh consecutive fall record, except that last fall's bird remains undocumented.

Bonaparte's Gull — Reported from 15 north and 10 south counties, none in the Southeast. Juvenile photographed 8/22 Cook (Grand Portage) TN. No August

reports south (but see summer report). Fall staging peaked 10/9 L. Winnibigoshish (2113, including 304 immatures) PHS, KRS; numbers down at Mille Lacs L. AXH, PHS. Late north 11/19 Beltrami RBJ, 11/21 Crow Wing CAM. Late south 11/23 Dakota JPM, 11/30 Ramsey (1) BRL.

Ring-billed Gull — Reported statewide. Highest reported count 11/20 Rice (2500+) DAB.

CALIFORNIA GULL — Juvenile at L. Calhoun 10/31–**11/15** Hennepin †BAF; also documented by †PEB, ph. †JPM, †PHS.

Herring Gull — Reported from 11 north and 13 south counties in all regions. Highest reported count 10/15 St. Louis (2300 at Duluth) PHS.

Thayer's Gull — Numbers up along the North Shore of L. Superior: at least 14 individuals beginning 10/15 St. Louis PHS, 10/16 Cook and Lake MTA *et al.* Record-early south **9/18, 9/24–26** Hennepin (one or two adults at L. Calhoun) †PEB, m.ob. Early south away from Hennepin 10/29–30 Dakota (1st-winter) JPM, PEB; only south report away from Twin Cities 11/14 **Meeker** (adult at L. Ripley) DMF. Highest reported counts 11/7 Hennepin (4) PEB, 11/15 Dakota (4) JPM.

Iceland Gull — No reports.

Lesser Black-backed Gull — An adult on the Minnesota side of the Superior Entry was well described 10/31 St. Louis †DBz. All south reports: 9/16+ Hennepin (adult at L. Calhoun) †CBr, m.ob., presumably the same bird also seen at Black Dog L. beginning 9/27 Dakota †ADS *et al.* An adult 10/13 **Lyon** (Black Rush L.) †RJS had a "very dark gray mantle" but was unexpectedly described as only slightly larger than nearby Ring-billed Gulls.

Glaucous Gull — At least nine individuals found along the North Shore of L. Superior beginning 10/18 St. Louis PHS, 10/19 Lake JWL. First adult 10/24 Cook MTA, PCC, PHS. Only south report: 11/28 Hennepin PEB.

Great Black-backed Gull — First-winter birds on St. Louis County side of Superior Entry 10/11 (1) †DA, 10/23 (2) †MH, ph. BSc. Only south report: **11/20** Hennepin (first-winter at L. Calhoun, second earliest south date) †PEB, †BAF.

SABINE'S GULL — Single juveniles at Duluth, St. Louis County 9/15 (Park Point) †MH, 9/22 (Park Point) †MH, 9/24–26 (Superior Entry) †MTA, †MH *et al.* (***The Loon*** 77:116) — the latter two possibly the same individual. First county record 9/16–21 **Crow Wing** (Ironton W.T.P.) †JEB; also documented by ph. JSB, †CBr, †PHS.

Caspian Tern — Found in nine north and eight south counties, none in Southwest or Southeast. Highest reported count 9/4 Roseau (24) KRE *et al.* Departed well before recent medians north (10/4) and south (10/2). Late north 9/8 Roseau NAJ. Late south 9/24 Brown BTS and Hennepin SLC.

Common Tern — North reports from Cass, Crow Wing, Itasca, Roseau, and (late north and second highest fall count) 9/22 St. Louis (**200**+) PHS. Only south reports: Freeborn, Hennepin, and (late south) 9/22 Rice TFB.

ARCTIC TERN — Furnishing the third fall record in five years at the Superior Entry was an adult in alternate plumage 9/25–27 St. Louis SP, TRS; documentation submitted by †MTA, †MH, †PHS, †JGW. Sixteenth state record.

Forster's Tern — Reported from only nine counties. Late north 9/26–27 St. Louis KRE, PHS, 10/9 Beltrami DPJ; also seen in Itasca, Todd. All south reports: Big Stone, 9/14, 9/24 (late south) Hennepin SLC, Meeker, Rice, Steele.

Black Tern — Reported from 8 north and 10 south counties, none in Southwest or Southeast. No significant counts. Late

north 9/6 Wadena PJB, 9/22 St. Louis PHS. Late south 9/11 Lac Qui Parle PHS, 9/12 Big Stone JMJ.

Rock Pigeon — Statewide.

Eurasian Collared-Dove — New locations 8/21 **Swift** (3 at Benson) ph. †PHS, 9/11–10/11 **Lac Qui Parle** (2 at Marietta) †BWF, ph. †PHS, 10/10 Rock (near Blue Mounds S.P.) †JGW *et al.* Continuing reports from Chippewa (Milan), Dakota (Farmington), and Renville (Olivia).

Mourning Dove — Reported throughout the state. Highest reported count 8/21 Dakota (**250** at Empire) SWe. Noteworthy concentration 11/29 St. Louis (44 at Duluth, large number this late in season) JRN.

COMMON GROUND-DOVE — Second state record 10/17–19 **Lake** (state highway 61 near Beaver Bay) †PCC, RAE; also documented †CBr, †KRE, ph. AXH, ph. †JWL, ph. †PHS.

Black-billed Cuckoo — Only north reports: Polk, St. Louis, Wadena (late north 8/27, PJB). Observed in six south counties, including (late south) 8/28 Freeborn AEB, 8/29 Big Stone JMJ.

Yellow-billed Cuckoo — Only north report: 9/6 **St. Louis** (40th Ave. West) MTA. South reports from Big Stone, Brown, Freeborn, and (late south) 9/4 Rice DAB, FVS.

Eastern Screech-Owl — All reports: Brown, Freeborn, Houston (2 locations), Todd, Wright.

Great Horned Owl — Reported from 14 north and 14 south counties in all regions except Southwest.

Snowy Owl — Total of 16 birds in 8 north counties beginning 10/19 Marshall *fide* CSt, 10/23 Cook PCC, PHS, 10/24 Polk *fide* JMJ. Only south report: found dead 11/22 Cottonwood (hit by motorized vehicle, Windom) BRB.

Northern Hawk Owl — Biggest invasion in state history beginning 10/3 St. Louis (Stone Lake Road) DWi, 10/14 Lake of the Woods (south of Baudette) HH, 10/15 Lake (near Beaver Bay) CBr, LM.

Barred Owl — Observed in 11 north and 12 south counties within usual range. Number of reports almost identical to last fall.

Great Gray Owl — Largest documented irruption in Minnesota history. August birds in Marshall (Agassiz N.W.R.) and St. Louis (Sax-Zim bog), and 9/19 Roseau MBr had probably summered, but five at the Northwest Angle 10/15+ Lake of the Woods HH *et al.* were harbingers of the thousands that eventually entered the state. Please see future issues of ***The Loon*** for details of this and other species during the irruption.

Long-eared Owl — North reports from Lake and St. Louis, including 50 banded at H.R.B.O. (compare with 60 last fall, DLE *et al.*). All south reports: Meeker, Ramsey, Wright (8) DMF.

Short-eared Owl — More reports than usual, especially along the North Shore of L. Superior, where totals by county were Cook (5), Lake (10), St. Louis (12). Statewide total of about 43 individuals in 12 counties; found in all regions except South-central. One found dead 11/14 Aitkin WEN; all other north reports away from Northeast: 10/7 Clay (Bluestem Prairie) JGa, 10/8 Otter Tail (Otter Tail Prairie) JGa, 10/20 Traverse PHS, 11/7 Wilkin (4, west of Rothsay) EJE. Highest reported count 10/7 St. Louis (6 at 40th Avenue West, Duluth) JWB. All south reports: 10/2–22 Cottonwood (max. 3 at Red Rock Prairie) BRB, LBF, DDM, BJM, BTS, 10/15 Fillmore (Hvoslef W.M.A.) NBO, 10/18–25 Dakota (Black Dog Fen) ADS, JPM, 11/20 Meeker (Kingston South Twp.) DMF.

Boreal Owl — Record-high irruption; previous record exceeded by the total of 268 banded in St. Louis by FJN alone!

Northern Saw-whet Owl — Observed in five north and three south counties. Total of 369 banded at H.R.B.O. (653 last fall) with juvenile/adult ratio of 0.65 (1.40 last fall, 1.01 in Fall 2002) DLE *et al*. Total of 111 banded 10/2–25 Lake (Castle Danger) DAG, JWL. Total of 88 banded 9/17–11/1 Itasca (Big Fork) DRM. All south reports: 10/9 (Cedar L.), 11/27+ (Bass Ponds) Hennepin SLC, DWK *et al*., 10/28, 11/24 Rice TFB, 11/10 Ramsey AXH.

Common Nighthawk — Reported from 11 north and 22 south counties. Highest reported count only 1276 at Two Harbors, Lake County (8/17, JWL). Late north 9/23 Todd MRN, 9/28 Crow Wing JEB. Late south 9/29 Mower RDK, RCK, 10/5 Dakota ADS.

Whip-poor-will — Only north report: 9/13 Lake of the Woods MHK. All south reports: 8/15 Sherburne PLJ, 9/26 Hennepin (male at Cedar L.) SLC.

Chimney Swift — Observed in 10 north and 22 south counties. Late north (median 9/15) 9/6 St. Louis SLF and Wadena PJB. Late south (median 10/9) 10/4 Hennepin RBJ, only October report.

Ruby-throated Hummingbird — Seen in 19 north and 25 south counties in all regions except Southwest. Highest reported counts 8/14 Itasca (9) EEO, 8/21 Lake (10) JWL. Late north (median 9/23) 9/24 Clay RHO and Otter Tail ARo, 9/27 Hubbard MAW. Late south (median 10/8) 10/1 Dakota JPM, 10/26 Blue Earth BRL.

***SELASPHORUS*, sp.** — Adult female Rufous/Allen's Hummingbird at feeder 11/16–12/3 St. Louis (Duluth) vt. †LME; written details also provided by †KRE, †PHS, photographed by m.ob.

Belted Kingfisher — Reported from 48 counties in all regions except Southwest. Lingered through 11/28 St. Louis (Duluth) JRN, but see winter report.

Red-headed Woodpecker — Reported from 5 north and 17 south counties. Three reports from Duluth: 9/14 (2) MTA, 9/17 (adult at H.R.B.O.) FJN, 9/26 (juvenile at H.R.B.O.) FJN, the latter also late north. All other north reports: Cass, Clearwater, Polk, Wadena (4 in two locations). Twenty birds inhabited one square mile at Cedar Creek Natural History Area, Anoka County JLH. Additional reports of multiple birds in Houston (6+), Lac Qui Parle (3), Sherburne (max. 9).

Long-eared Owl, 15 August 2004, St. Paul, Ramsey County. Photo by Scott B. Meyer.

Red-bellied Woodpecker — Observed in 40 counties as far north as Pennington and Polk in the Northwest, Beltrami, Cass and Itasca in the North-central, and St. Louis (Duluth) in the Northeast.

Yellow-bellied Sapsucker — Reported from 13 north and 11 south counties. Late north 10/24 Carlton LAW, 10/26 Pine JMP. Five October reports south, including (late south) 10/17 Hennepin SLC, but also

see winter report.

Downy Woodpecker — Statewide.

Hairy Woodpecker — Statewide.

American Three-toed Woodpecker — Pair with one juvenile throughout August and September in Koochiching (county road 13) m.ob. Only other report: 10/28 St. Louis (near Virginia) †SLF.

Black-backed Woodpecker — Good numbers found in all three counties along the North Shore of L. Superior, especially at H.R.B.O. (total of 22 for season, beginning 9/13 FJN). Only reports away from Northeast: Clearwater, Koochiching, Lake of the Woods.

Northern Flicker — Observed in 17 north and 27 south counties. Peak migration 9/22 Cass and Crow Wing MRN. Highest reported count 9/23 Clay (20 at Gooseberry Park, Moorhead) RHO.

Pileated Woodpecker — Reported from 44 counties in all regions, including two reports from Southwest: 10/11 **Rock** (juvenile at Luverne) †DCh, CFe, MZ, 10/21 **Nobles** (West Graham L.) LBF.

Olive-sided Flycatcher — Reported from 9 north and 14 south counties. Early south 8/12 Sherburne PLJ, 8/14 Anoka DWK. Late north 9/10 St. Louis SLF, 9/11 Clay MM *fide* JMJ (median 9/7). Late south 9/22 Brown JSS, Olmsted LBF, 9/23 Hennepin TAT (median 9/21).

Eastern Wood-Pewee — Found in all regions except the Southwest. All September north reports: 9/8 Otter Tail JEB, 9/9 Clay JEB, 9/16 Carlton LAW. Frequent south reports through 9/21 Hennepin TAT, then only 10/3 Wabasha JLU.

Yellow-bellied Flycatcher — All reports: 8/26 Fillmore NBO, 9/6 Wilkin RAE.

Acadian Flycatcher — South reports of vocalizing birds: 8/6 Rice TFB, 8/14 Hennepin DWK, 8/15 Dakota DWK, 9/2 Fillmore NBO, 9/13 Fillmore NBO.

Alder Flycatcher — Vocalizing 8/1 Pine (8) JMP, 9/5 Brown JSS. **Note**: During spring and fall migration, undocumented records of *Empidonax* flycatchers are not published in this report. Please be sure to indicate how birds were identified on the Seasonal Report form.

Willow Flycatcher — Vocalizing 8/2 Pine JMP, 8/8 Brown BTS.

Least Flycatcher — Late north 8/31 Polk (7) EEF, 9/23 Pine JMP. Late south 9/3 Hennepin TAT, 9/15 Brown JSS.

***Empidonax*, sp.** — A late, unidentified flycatcher was found 10/2 Lake JWL.

Eastern Phoebe — Reported from all regions. Found north through 10/9, then only 10/20 Clay JEB, 11/1 Otter Tail DTT, SMT (median 10/14). Late south 10/16 Brown and Rice, 10/21 Dakota JPM, 10/23 Hennepin SLC (median 10/31).

Great Crested Flycatcher — No reports from Southwest or Northeast. Late north 9/7 Polk EEF, 9/16 Crow Wing JEB. Late south 9/22 Stearns STW, 9/23 Hennepin TAT.

Western Kingbird — All August and September reports north were from the Northwest and West-central regions, culminating with 9/10 Wilkin DTT, SMT (same as median). Late migrant(s) reported along North Shore of Lake Superior **10/30** Cook (Tofte) KRE, **10/31** (second latest statewide) Lake JPM. South reports during August from Big Stone, Yellow Medicine, Sherburne, and Meeker, then 9/13 **Steele** (Rice Lake S.P.) †LBF.

Eastern Kingbird — Found in 11 north and 24 south counties. Peak numbers 8/31 Polk (11) EEF, 8/24 St. Louis (10) NAJ. Late north 9/12 Wadena PLB, 9/16 Crow Wing JEB, 9/25 Lake JWL (median 9/18). Late south 9/12 Lac Qui Parle WCM, 9/18 Scott

Scissor-tailed Flycatcher, 9 October 2004, Duluth, St. Louis County. Photo by Mike Hendrickson.

WCM (median 9/23).

SCISSOR-TAILED FLYCATCHER — Second county record 9/6 Wilkin (Anna Gronseth Prairie) †RAE; the first was at Rothsay W.M.A., 21 October 1994 (***The Loon*** 67:63). More expected was one along the North Shore of Lake Superior 10/7–9 St. Louis (40th Avenue West/Erie Pier area, Duluth) †MTA; documentation also provided by †CBr, ph. MH, ph. EEO, †PHS.

Loggerhead Shrike — All reports: 8/1 Le Sueur (Kasota Prairie) WCM, 8/2 Dakota (2 at 160th and Emery, Vermilion Twp.) JPM, 8/4 Dakota (3 at 170th and Emery, Vermilion Twp.) JPM, 8/7 Dakota (location?) ADS, 8/27 Meeker (Darwin Twp.) DMF.

Northern Shrike — Reported from 16 north counties during October and 3 additional counties in November. Early north 10/4 St. Louis KRS, 10/9 St. Louis (3) FJN, 10/11 Itasca RBJ. Found in seven south counties during October and six additional counties in November. Early south 10/20 Big Stone PHS, 10/22 Hennepin SLC (median 10/15).

Bell's Vireo — No reports.

Yellow-throated Vireo — Late north 9/14 St. Louis MTA, **10/19** Otter Tail JEB, **10/20** (previous record late north was 10/6) Clay JEB. Late south 9/24 Houston FZL, 9/25 Dakota SWe, 10/7 Houston FZL.

Blue-headed Vireo — Early south 8/5 Sherburne PLJ, 8/17 Hennepin ChM. Most south reports between early September and mid-October. Late south 10/15 Blue Earth DPJ, 10/23 Hennepin SLC and

Clark's Nutcracker, 24 October 2004, Silver Bay, Lake County. Photo by James P. Mattsson.

Waseca JPS. All October north reports: 10/4 St. Louis SLF, 10/7 Polk EEF, 10/9 St. Louis EEO.

Warbling Vireo — North dates later than median departure (9/10): 9/11 St. Louis MTA, 9/19 St. Louis JWL, 10/19 Otter Tail JEB. Late south 9/14 Hennepin SLC, 9/18 Nicollet RMD (median 9/25).

Philadelphia Vireo — Probable early north migrant 8/15 Douglas KRE. Many north reports up through late dates 9/25 St. Louis JJS, 9/26 Lake TAT. South extreme dates both two days later than recent medians. Early south 8/21 Dakota JPM. Late south 10/1 Le Sueur WCM. All other south reports between 9/7 and 9/21.

Red-eyed Vireo — All October reports: 10/4 Hennepin BRL, 10/16 Cook PHS, 10/19 Otter Tail JEB.

Gray Jay — Reported from all northern border counties, plus Clearwater, Itasca, Aitkin, and Carlton. Peak number 10/31 Lake (15) PHS.

Blue Jay — Reported statewide.

CLARK'S NUTCRACKER — Second county record and 18th overall 10/14–24 **Lake** (Silver Bay) AR, PR, vt. SR. Many thanks to the Robertsens and the community of Silver Bay for welcoming birders, and to all who provided written or photographic documentation. First occurrence since 1986 and the first to be seen by many observers since one overwintered in Hennepin 1972–73 (***The Loon*** 45:20–21).

Black-billed Magpie — Reported within usual range from five Northwest and four North-central counties, plus St. Louis. Largest concentrations were **110** in a single flock at Agassiz N.W.R., Marshall

County (9/4, JMJ, KRE *et al*., second highest count for state), 55 at Warroad W.T.P., Roseau County (9/4, *fide* KRE), 36 near Big Falls, Koochiching County (8/25, CBr, LM), and 35 near Meadowlands, St. Louis County (8/22, JPE).

American Crow — Reported throughout the state. Highest reported count 10/13 Kanabec (**2000**) CAM.

Common Raven — Found in the majority of Northwest and North-central counties, and throughout the Northeast. Also reported from Todd, Kanabec, Pine. All south reports: 9/10+ Anoka (Linwood Twp.), 9/26 Chisago (Wild River S.P.) DCZ, 11/27 Sherburne (Ann Lake Campground) BWF.

Horned Lark — Found in all regions. Last north reports 11/13 Lake JWL, 11/14 Cook and St. Louis SLF, but also see winter report. South reports continued through the end of the season.

Purple Martin — High count 30 to 40 at Minnesota Point, St. Louis County (KRE, mid-August). Late north 9/5 Roseau JJS, 9/6 Cook JWL, 9/8 Otter Tail JEB (same as median). Late south 9/13 Dodge LBF, 9/17 Lac Qui Parle FAE (median 9/14).

Tree Swallow — Highest reported count 9/11 Otter Tail (1500) JMP. Late north 9/25 Wadena PLB (median 10/3). Late south 10/11 Houston FZL, 10/12 Big Stone PHS (median 10/18).

Northern Rough-winged Swallow — All north reports: 8/27 Lake JWL, 9/4 Todd CAM, 9/8 Otter Tail JEB. South reports from Sherburne, Meeker, Rice, Hennepin, Winona and Fillmore in August, then only 9/7 Hennepin WCM — compare to median south departure (10/3).

Bank Swallow — All north reports: 8/8 Lake JWL, 8/24 Itasca JEB, 9/4 Todd CAM. South reports from eight counties, including latest observation 8/29 Hennepin SLC (median 9/16).

Cliff Swallow — Much more widespread than the prior two species. Found in 11 north and 15 south counties. Late north 9/18 St. Louis JMP and Wadena PLB, **11/7** (prior statewide late date 10/19; observer carefully studied the bird to ensure it was not a first state record Cave Swallow!) Cook †DWK. September south records: 9/8 Olmsted PWP, 9/13 Dodge LBF, 9/18 Brown BRB (median 9/28).

Barn Swallow — Second-highest fall count 9/16 Polk (**790**) EEF. Late north 10/1 Lake JWL, 10/12 Clay PHS, 10/19 Otter Tail JEB. Late south 10/2 Dakota ADS, Olmsted PWP, Waseca JPS (median 10/16).

Black-capped Chickadee — Reported throughout the state.

Boreal Chickadee — Found in Beltrami, Itasca, Koochiching, St. Louis, and Lake. Apparent migrants found at the mouth of the Knife R. 9/25 Lake KRE, JWL, SLL.

Tufted Titmouse — Only reported from Fillmore, where seen throughout the period (NBO).

Red-breasted Nuthatch — Reported from 21 north and 22 south counties in all regions. North reports throughout the season. Early south 8/9 Sherburne PLJ, 8/21 Hennepin SLC, 8/23 Houston FZL.

White-breasted Nuthatch — Found statewide

Brown Creeper — Reported from all regions, including 9/18 Scott WCM, 9/24 Hennepin SLC, and five more south counties by the end of the month.

Carolina Wren — All reports: 8/12 Houston (Reno) FZL, 9/15 Hennepin (Old Cedar Ave. Bridge) JEP, 10/23 Hennepin (Wayzata) *fide* AXH, 10/28 Hennepin (location?) SLC, 11/1 Anoka (Coon Rapids Dam) PHS.

House Wren — Most north reports ended by mid-September, but numerous south birds lingered into early October. Late north 9/23 Clay RHO, 10/2 Lake JWL, St. Louis FJN (median 10/5). Late south 10/11 Rice TFB, 10/19 Hennepin SLC, 11/3 Dakota JPM (median 10/18).

Winter Wren — Early south 9/19 Fillmore NBO, 9/21 Hennepin TAT (median 9/7). Late north 10/14 Beltrami JEB, 10/28 St. Louis SLF. Two November south reports: 11/13 Hennepin SLC, 11/19 Houston KTP.

Sedge Wren — Only one report each from the Northwest, Southwest, and Southeast, and none from the Northeast. Late north 9/23 Kanabec JMP, then none until 10/15 Aitkin PEJ (median 10/13). Late south 10/11 Cottonwood (2) BTS, Hennepin SLC, 10/17 Dakota ADS (median 10/12).

Marsh Wren — Only October reports north: 10/16 Lake PHS, 10/19 Otter Tail (median 10/12) JEB. Late south 10/7 Brown BTS, 10/19 Hennepin SLC, 11/1 Nicollet RMD (median 11/2).

Golden-crowned Kinglet — Found in 14 north and 21 south counties. Early south 9/23 Murray NED, 9/24 Hennepin SLC, 9/27 Chisago REH (median 9/16). Most north observations between 9/22 and 10/23, while frequent south reports into the first week of November.

Ruby-crowned Kinglet — Widespread and numerous, though both late dates preceded recent medians by 10 days. Early south 9/11 Anoka SWe, 9/14 Sherburne PLJ. Late north 10/22 Todd JSK, SID, 10/23 Lake PWP. Late south 11/3 Hennepin SLC, 11/11 Dakota JPM.

Blue-gray Gnatcatcher — Absent again from the North Shore of L. Superior, where this species had been a consistent late fall migrant 1999 through 2003. North reports 8/4 Wadena PLB, 8/8 Cass MRN, 9/8 Otter Tail JEB, DTT, SMT. Late south 9/23 Fillmore LBF, 9/24 Hennepin TAT, 10/7 Meeker DMF.

Eastern Bluebird — Reported from 19 north and 27 south counties. Late north 10/24 Kanabec BLA, 11/3 Otter Tail JEB. Late south 11/8 Rice (15) DAB, 11/12 Scott JEB. A male with a wide white wingbar on each wing was discovered 9/18 Anoka AXH.

Mountain Bluebird — One report: 10/29 Aitkin (south of Palisade) *fide* DRB.

Townsend's Solitaire — Ten individuals found during the season: 10/9 St. Louis (Minnesota Point., near airport) DJB, 10/15–18 St. Louis (Stoney Point.) BRL, DDM, BJM, 10/26-31 **Mille Lacs** (Cove) CRM *et al*., PHS, 10/31, 11/4 St. Louis (two different birds at H.R.B.O.) FJN *et al*., 11/4–6 **Clay** (Buffalo River S.P.) RBJ, DPJ, 11/7 Cook (Hovland) KRE, 11/7 Otter Tail (Battle Lake) DJo, 11/14+ Sherburne (2 birds at Ann Lake) KTP, ASc, m.ob.

Veery — August north reports from Carlton, Kanabec and Hubbard, then only 9/4 St. Louis ALE, 9/14 Lake JWL, St. Louis SLF. August south reports from Freeborn and Hennepin, then only 9/24 Ramsey NSp.

Gray-cheeked Thrush — Only 5 north and 11 south reports. All north sightings: 9/18 Lake JWL, 9/23 St. Louis MTA, 10/5 Otter Tail JEB, 10/9 Lake JMP, 10/16 Cook PHS. Early south reports from Hennepin beginning 8/29 (SLC), but not elsewhere until 9/14 Sherburne PLJ. Late south 9/24 Ramsey NSp, **10/21** (record-late south) Rock LBF.

Swainson's Thrush — Found in all regions. Peak number 23 on 9/10 in St. Louis SLF. Early south 8/28 Hennepin SLC, 9/4 Brown JSS. Late north 10/8 Todd JSK, SID, 10/17 Cook PHS (median 10/15). Late south 10/15 Fillmore NBO, 10/20 Lincoln LBF (median 10/19).

Hermit Thrush — Early south 9/20

Freeborn AEB, 9/27 Hennepin SLC and Sherburne PLJ. Late north 10/24 Lake TAT, 11/13 St. Louis JWL. Numerous south reports through the end of October, including highest reported count 10/23 Waseca (**15**) JPS. Late south 11/2 Brown JSS, Hennepin SLC.

Wood Thrush — All reports: 8/4 Todd JSK, SID, 8/21 Meeker DMF, 8/23 Houston FZL, 9/17 Hennepin WCM, 9/18 Nicollet RMD, 9/19 Hennepin SLC.

American Robin — Observed in almost every county in each region. Highest reported count 8/31 Crow Wing (500) MRN.

Varied Thrush — All reports: 10/26–11/1 Ramsey (Otis Ave.) LK, PHS, 10/30 Ramsey (near Dale St./Lincoln Ave.) CB *fide* AXH, 11/27–12/11 Cook (Gunflint Trail) SA.

Gray Catbird — No reports from Southwest, though well-represented in all other regions. Late north 9/23 Clay RHO and Pine JMP, 11/7 Cook JJS, KRE, MTA (median 10/23). Late south 10/11 Steele NFT, then no reports until 11/21–28 Hennepin (Mound Springs Park, Bloomington) SLC (median 11/12).

Northern Mockingbird — All reports: 10/2 McLeod (Hutchinson) PRH, 11/19 Murray *fide* AXH, 11/21 St. Louis (2) *fide* DRB.

Brown Thrasher — Found in 7 north and 12 south counties. Late north 10/3 Lake JWL, 11/11 St. Louis JRN. Late south 10/8 Brown JSS, 10/23 Hennepin TAT.

European Starling — Found statewide.

American Pipit — Found in every region of the state, including ten north and ten south counties. Early north 9/19 Lake EEO, 9/25 St. Louis SLF. Early south 9/18 Cottonwood HCT, 10/4 Hennepin, Mower and Sherburne. High count 113 in Clay 10/23 (BWF); also 50 each in Itasca (10/14, RBJ) and Cook (10/16, PHS). Late north 11/7 Cook MTA. Late south 11/10 Steele NFT.

SPRAGUE'S PIPIT — Third fall report in 12 years and one of the very few to be photographed in the state in recent decades; discovered at Red Rock Prairie 10/10 **Cottonwood** †RMD, †JGW *et al.* and refound 10/11 ph. †PHS.

Bohemian Waxwing — Only found in northern regions, including Marshall, Polk, Beltrami, Cass, St. Louis, Lake, and Cook. Highest reported counts 11/10 St. Louis (20) RBJ) and 10/30 Cook (17) BWF. Early north 10/17 Cook EEO, MTA and St. Louis SES (median 10/5).

Cedar Waxwing — Found statewide.

Blue-winged Warbler — No north reports. South reports in September: 9/2 Freeborn AEB, 9/8 Fillmore NBO, 9/11 Hennepin SLC, 9/18 Carver WCM (median 9/11).

Golden-winged Warbler — Early south **8/6** (second earliest south; migrant?) Sherburne PLJ, 8/21 Freeborn AEB, 8/23 Hennepin SLC, TAT. Late north 8/29 Lake JWL, 8/30 Todd JSK, SID, 9/3 Mille Lacs RBJ (median 9/8). Late south 9/13 Houston FZL, 9/18 Hennepin TAT, 9/24 Hennepin SLC (median 9/20). One "Brewster's Warbler" reported 9/8 Ramsey (Maplewood N.C.).

Tennessee Warbler — Please see summer report for early south migrants — this species' southbound movement typically begins late July (***The Loon*** 76:54–55). Probable migrant (away from known breeding locations) 8/10 Hubbard MAW. All October north reports were from the Northeast, with last reports 10/17 Cook EEO, MTA and St. Louis EEO (same as median). Late south 10/18 Houston FZL, 10/21 Dakota JPM, 10/22 Hennepin SLC (median 10/16).

Orange-crowned Warbler — Reported from 9 north and 20 south counties

in all regions. Early north 9/5 St. Louis ALE, 9/12 Wadena PLB. Early south 8/30 Hennepin †ChM, 9/2 Freeborn AEB, 9/3 Rice DAB. Late north 10/24 Cook JWL. Late south 10/26 Hennepin SWe. Both late dates three days after median departures. **Note**: undocumented August reports were excluded.

Nashville Warbler — Reported from all regions, though fewest sightings in the west. First of four early south reports from Hennepin 8/7 SLC, then 8/21 Meeker DMF. October north reports from St. Louis, Itasca and (late north) 10/19 Otter Tail JEB. Late south 10/20 Lincoln LBF, then three reports from Hennepin culminating in 10/26 DWK.

Northern Parula — Found in only four north and seven south counties. Early south 9/4 Meeker DMF, 9/5 Freeborn AEB. Late north 10/3 Lake SLF and St. Louis ALE. Late south 9/23 Fillmore LBF and Hennepin TAT.

Yellow Warbler — No reports from Southwest and only one from West-central. Late north 9/12 Wadena PLB, and then two later than recent median (9/20): 9/26 St. Louis SLF, 10/1 Lake JWL. Only two south reports after 9/3, even though late south median is 9/29: 9/27 Hennepin SLC, **10/31** (second latest south) Hennepin †SLC.

Chestnut-sided Warbler — Found in 17 north and 14 south counties. Early south 8/15 Stearns (adult with fledged juvenile) KRE, 8/19 Hennepin ChM. Late north 9/23 Clay RHO, 9/24 St. Louis LAW, 10/1 Lake JWL. Late south 9/25 Dakota SWe, 9/28 Anoka REH.

Magnolia Warbler — First south reports from Hennepin beginning 8/23 TAT, then 8/28 Freeborn, Ramsey and Rice. Late north 9/23 Clay and Pine, 9/24 Lake JWL, 9/27 St. Louis LAW (median 10/1). Late south 9/28 Hennepin SLC, 9/29 Dakota JPM, then none until 10/11 Goodhue BRL (median 10/6).

Cape May Warbler — Numerous reports from North-central, Northeast and East-central, but only one report from the Central region and none from the rest of the state. High counts by JWL in Lake included 9/14 (15), 9/23 (13), and record-high fall count 9/24 (**32**). Early south 8/23 Hennepin SLC, 9/15 Sherburne PLJ. Late north 10/31 Cook and Lake m.ob., 11/4 Carlton LAW. Late south 10/3 Anoka JLH, 10/18 Hennepin DWK, **11/23** (record-late south) Hennepin SJR.

Black-throated Blue Warbler — Only north report 8/22 Lake (male near Finland) AXH. All south reports 9/3 **Le Sueur** (Sakatah Lake S.P.) WCM, 9/10–11 Anoka (Linwood Lake) DWK, JJS, 9/13 Rice TFB, 9/19–20 Hennepin (male at Cedar Lake) SLC, 9/21 Hennepin (female at Cedar Lake) SLC.

Yellow-rumped Warbler — Early south 9/18 Cottonwood HCT, 9/24 Hennepin PEB (median is 8/21 — 28 days earlier!). High count 10/17 Fillmore (50) NBO. Late north 10/30 Cook JWL, 10/31 Lake JPM. Late south 10/23 Dakota, Dodge and Waseca, 10/28 Hennepin SLC, 11/6 Goodhue BRL.

Black-throated Green Warbler — Found in 7 north and 10 south counties. Early south 8/28 Hennepin ChM, SLC, 9/4 Meeker DMF. Late north 9/25 Lake JWL (median 9/29). Late south 9/24 Houston FZL, 10/1 Le Sueur WCM (median 10/2).

TOWNSEND'S WARBLER — Fifth state record 9/9–11 **Anoka** (Linwood L.) †CF; also documented †ADS, ph. †PHS.

Blackburnian Warbler — Absent from West-central and Southwest. Frequent south reports beginning 8/19 Hennepin ChM, 10 days after recent median arrival date. Late north 9/23 Pine JMP, 9/24 Cass MRN. Late south 9/12 Anoka PEB, 9/24 Hennepin SLC (median 9/26).

Pine Warbler — Away from the North-central and Northeast regions, only report-

ed from Pine, Anoka and Watonwan. Late north 9/25 Beltrami RBJ, 9/26 Clearwater SPM. Only south report away from Anoka, where breeds, 8/27 Watonwan DLB.

Palm Warbler — High counts by JWL in Lake were 28 on 9/23 and 52 on 9/25. First south reports not until 9/16 Hennepin TAT, 9/18 Nicollet RMD (median 8/25 — 22 days earlier!). Late north 10/17 Cook MTA and St. Louis SLF, 10/19 Otter Tail JEB. Late south 10/23 Dodge RBJ, 11/3 Hennepin SLC (median 10/18 — 16 days earlier!).

Bay-breasted Warbler — Found in six north and nine south counties. Peak number 9/11 Rice (15) DAB. Early south 8/28 Dakota TAT, Sherburne PLJ. Late north 9/28 Crow Wing JEB, 10/3 St. Louis ALE. Late south 9/24 Hennepin SLC, 10/9 Goodhue BRL.

Blackpoll Warbler — Reported from only three north and nine south counties. Early north 8/26 St. Louis DRB, 9/4 Marshall JMJ. Peak number 9/14 St. Louis (10) JWL. Late north 10/1 Lake JWL. Early south 8/28 Dakota TAT, 9/4 Meeker DMF. Late south 9/23 Fillmore LBF, 9/24 Hennepin SLC, TAT.

Cerulean Warbler — A male and female reported from Sakatah Lake S.P., 9/6 Le Sueur WCM was the first fall record since 1996.

Black-and-white Warbler — Found in all regions except the Southwest. Early south 8/13 Wright KTP, 8/17 Hennepin ChM. Late north 9/25 Lake JWL, then several reports from St. Louis culminating with 10/7 SLF (median 10/1). Late south 9/24 Brown, Houston and Ramsey, 9/25 Dakota SWe, 9/27 Hennepin SLC (median 10/4).

American Redstart — Reported from 18 north and 23 south counties, but no reports from the Southwest. Late north 10/1 Lake JWL, 10/2 Carlton LAW, 10/4 St. Louis SLF. Late south 9/25 Dakota SWe, 10/2 Hennepin SLC.

Prothonotary Warbler — No reports.

Ovenbird — Only two observations in the west. Late north 9/23 Pine, Polk and St. Louis, 9/26 Carlton LAW and Todd JSK, SID. Two October south reports: 10/2 Hennepin SLC, 10/23 Hennepin TAT (median 10/11).

Northern Waterthrush — Reported from all regions except the Southwest. Early south (away from known breeding locations) 8/13 Goodhue DFN, 8/14 Dakota DWK, 8/15 Stearns KRE. Only two September reports north: 9/5 Lake JWL, 9/23 Clay RHO (median 9/28). Late south 9/15 Brown JSS, 9/22 Stearns STW, 9/24 Hennepin SLC (median 10/3).

Louisiana Waterthrush — No reports.

Kentucky Warbler — No fall reports since 1987.

Connecticut Warbler — All reports: 8/22 Lac Qui Parle FAE, 9/11 Clay KCo, 9/23 St. Louis MTA.

Mourning Warbler — Reported from eight north and six south counties. Early south 8/18 Hennepin ChM. Late north 9/17 Lake JWL. South reports through 9/5, then 9/12 Meeker DMF, 9/25 Dakota SWe. High count 8/21 Hennepin (**5**) TAT.

Common Yellowthroat — Reported from all regions except Southwest. Only two north reports from October: 10/3 St. Louis ALE and 10/7 Cook JWL. Frequent south reports through 9/25, then four October reports from four counties, latest 10/10 Brown JSS. Both north and south departure dates well before medians.

Hooded Warbler — Fourth latest, 9/20 Nicollet (Seven Mile Creek C.P.) CRM.

Wilson's Warbler — Found in 7 north and 14 south counties in every region except Northwest. Only two early north

August reports: 8/27 St. Louis SLF and 8/29 Cook JWL (median 8/14). Early south 8/19 Hennepin ChM and Carver WCM, then frequent after 8/21. North reports through 9/9, then 9/16 St. Louis SLF and Otter Tail DTT, SMT. Late south 9/24 Hennepin SLC, Ramsey NSp, Mower LBF and Brown JSS.

Canada Warbler — Reported from 9 north and 13 south counties. Early south 8/14 Hennepin ChM, then frequent after 8/20. Scattered reports north through 9/8, then 9/23 St. Louis LAW, tying the fourth latest date. South reports through 9/24, then 10/3 Ramsey NSp, followed by an astonishing **11/1** Ramsey †BRL, beating the previous latest date by 19 days!

Yellow-breasted Chat — No reports.

Summer Tanager — No reports.

Scarlet Tanager — Found in 10 north counties, with scattered reports through 9/25, then third latest **11/8** St. Louis GCK, CMG. South reports through 9/18 in nine counties, then 9/28 Hennepin TAT, SLC.

Spotted Towhee — Only report: one at feeder 10/14–20 Hennepin (Excelsior) DDM, BJM, BWF †ADS.

Eastern Towhee — Only north reports 9/27 & 10/2 Hubbard MAW (same bird?). Reported from seven south counties, latest being 10/2 Dakota JJS and Houston FZL, 10/3 Anoka JLH.

American Tree Sparrow — Reported from all regions. Fourth earliest north 9/14 Pine JMP, followed by 9/21 Kanabec JMP, 9/24 Polk EEF, 9/30 Cook JWL. Early south 10/11 Hennepin SLC. 10/14 Hennepin DWK.

Chipping Sparrow — Reported from all regions. Late north 10/19 Otter Tail JEB and Lake JWL, well before recent median (11/5). Late south 10/23 Waseca JPS and Hennepin TAT, followed by 11/2 Rice TFB. High count 9/13 Mower (**46**) RCK, RDK.

Clay-colored Sparrow — Reported from all regions. Three October reports north: 10/12 Polk EEF, 10/16 Lake JWL, 10/19 Otter Tail JEB. South reports through 10/5, then 10/12 Cottonwood BRB, 10/14 Rice TFB. Highest fall count 8/16 Pine (**31**) JMP.

Field Sparrow — Reported from five north counties; latest 10/18 Cook †SLF, 10/19 Otter Tail JEB, 10/20 Clay JEB. Late south 10/20 Hennepin JLH, 10/27 Winona FZL. Highest reported counts 9/9 Pine (**7**) JMP, 10/9 Houston (5) FZL.

Vesper Sparrow — Reported from 10 north and 15 south counties in all regions. Only three late north October reports: 10/12 Clay PHS, 10/13 Polk PHS, 10/19 Otter Tail JEB. Late south 10/21 Nobles LBF, 10/23 Dodge RBJ, 10/24 Rice DAB.

Lark Sparrow — Record-late north **11/7 Cook** KRE, JJS. Only south report 8/3 Sherburne PLJ.

LARK BUNTING — Two reports of this Casual species, both from the Northeast: 9/6 St. Louis (basic-plumaged female at 40th Avenue West/Erie Pier in Duluth) †MTA, ph. MH, ph. †PHS, 10/4 Lake (Gooseberry Falls S.P.) †RPR.

Savannah Sparrow — Reported from all regions. Second highest fall count 9/16 Polk (**116**) EEF. Late north 10/20 Clay JEB, 10/24 Lake ADS, then, tying the record latest north date, **11/15** Cook LS. Late south 10/22 Cottonwood LBF, 10/23 Dodge RBJ.

Grasshopper Sparrow — North reports in August from Kanabec, Pine, and Douglas counties, then 9/4 Marshall JMJ, JJS, 9/5 Roseau JJS. Only south report: 8/1 Meeker DMF. Highest reported count 8/1 Pine (5) JMP.

Henslow's Sparrow — One report: 8/26 Sherburne (Sherburne N.W.R.) ASc.

Le Conte's Sparrow — Reported from

eight north and six south counties. Early south 9/24 Hennepin SLC and Dakota TAT, 9/25 Brown BTS. North reports through 9/26, then 10/2 Cook (2) JWL, 10/4 Otter Tail JEB. Late south 10/10 Rock WCM, 10/11 Hennepin SLC, 10/16 Meeker DMF.

Nelson's Sharp-tailed Sparrow — All north reports: 9/4 Marshall, 9/5 Roseau KRE *et al*., 10/2 **Cook** JWL, 10/7 Clay JGa, **10/13 Beltrami** DPJ (second latest). Latest south date on record **10/22 Cottonwood** LBF.

Fox Sparrow — Reported from all regions. Early north 9/23 St. Louis SLF, 9/25 Becker DFN and Lake JWL, 9/29 Pine JMP. Early south 9/26 Sherburne PLJ, 9/27 Hennepin SLC, 9/30 Dakota JPM. Frequent north reports through 10/26, then 11/26+ St. Louis JRN. Late south (also see winter report) through 11/8, then 11/13 Sherburne PLJ, 11/29 Hennepin TAT. Second highest fall count 10/14 Hennepin (**20**) DWK.

Song Sparrow — Seen in all regions. See winter report for late migrants and overwintering individuals.

Lincoln's Sparrow — Reported from 11 north and 18 south counties, in all regions. Early south 8/29 Hennepin SLC, 9/7 Hennepin TAT. Late north 10/9 Cook JWL and Beltrami DPJ, 10/12 Clay PHS. South reports through 10/22, then 11/8 Hennepin SLC.

Swamp Sparrow — Found in all regions. North reports through 10/16, then 10/19 Otter Tail JEB. Numerous south reports through 10/23, then 11/11 Redwood BRB, 11/28 Hennepin SLC; also see winter report.

White-throated Sparrow — Seen in all regions. Early south 9/8 Hennepin TAT, 9/11 Steele NFT. Late north (also see winter report) 11/13 Cook SLF, 11/28 St. Louis JRN. Five November reports from Twin Cities area, including Hennepin DCZ and Ramsey NSp through end of period.

Harris's Sparrow — Reported from 9 north and 20 south counties in all regions. Early north 9/25 Lake JWL, JJS and St. Louis PHS, SLF. Early south 9/20 Freeborn AEB, 9/25 Brown BTS. Late north (also see winter report) 10/30 Lake SLF, 10/31 Clay JGa, 11/1 Polk DLT.

White-crowned Sparrow — Reported from 10 north and 14 south counties. Record-early north **8/20** Cook KRE, a single adult at a feeder. Otherwise, 9/9 St. Louis NAJ. Early south (only September reports) 9/30 Sherburne PLJ and Dakota JPM. Late north (but see winter report) 10/24 Lake ADS, 10/31 Cook JWL. Late south (also see winter report) through 10/25, then only 11/3 Hennepin SLC.

Dark-eyed Junco — Early south 9/24 Meeker DMF, 9/26 Hennepin SLC, then frequent south reports beginning 9/28. Partial albino 10/25 Hennepin TAT.

Lapland Longspur — Found in 10 north and 10 south counties. Early north 9/16 Lake JWL, 9/17 St. Louis LAW, SLF. Early south 9/28 Nicollet RMD, 10/7 Meeker DMF, 10/9 Dakota ADS. Please see winter report for late migrants and overwintering birds; only November reports south from Waseca and Cottonwood.

Smith's Longspur — Two north reports: 10/9 Marshall (20) JMJ, 10/16 Lake (4 at Iona's Beach) †PHS. Remainder of reports from Southwest: 10/14 Cottonwood (1) †JPM, 10/16 Cottonwood (~10) BWF, 10/17 Cottonwood BRB, 10/20 Lac Qui Parle (7) †PHS. Cottonwood reports were all from Red Rock Prairie.

Chestnut-collared Longspur — One report: 9/11 Clay MM.

Snow Bunting — Reported from 23 of 33 north counties but only 8 south counties. Early north 10/9 Otter Tail DTT, SMT, 10/11 Crow Wing RBJ, then frequent arrivals beginning 10/14. Early south 10/26 Hennepin OLJ, 11/6 Meeker DMF and Brown BTS, 11/8 Cottonwood BRB.

Northern Cardinal — Reported from Marshall, Clay, Becker, Otter Tail, and Lyon in the western regions. No reports from Carlton or Fillmore in the east.

Rose-breasted Grosbeak — Seen in 14 north and 23 south counties in all regions. Highest reported count 9/15 Hennepin (**23**) TAT. Late north 9/23 Lake RHO, 9/24 Kanabec and 10/3 Pine JMP; also note injured bird through 11/19 Kanabec BLA. South reports through 9/28, then 10/9 Rice TFB, 10/14 Isanti DMP.

Blue Grosbeak — Pair reported at a gravel pit in Mulligan Twp. Brown County since 7/18 (see summer report) last seen 8/15 Brown BTS. All other reports: 8/1 Renville CRM, 8/6 Rock JuB, 8/19 Murray NED, 8/22 Brown (singing male, North Star Twp.) BTS.

Indigo Bunting — North reports through August, then 9/6 Wadena PJB, 9/24 Lake JWL. Only four September reports south, latest being 9/25 Rice TFB. Then, 10/2 Rice TFB, followed by four Hennepin sightings: 10/2 SLC, 10/3 PEB, 10/4 BRL, 10/23 TAT (fourth latest).

Dickcissel — Two reports: 8/20 Freeborn AEB, 9/16 Clay EEF.

Bobolink — Reported from 13 north counties; late north 9/23 St. Louis KRE, 10/1 Lake JWL. Reported from six south counties, latest being a high count of 150 on 9/4 Meeker DMF (three south reports were undated).

Red-winged Blackbird — Reported from all regions. Four November reports north: 11/4 Hubbard MAW and Otter Tail DTT, SMT, 11/6 Wadena PJB, 11/9 Beltrami RBJ, JEB. Also see winter report.

Eastern Meadowlark — Reported from only two north counties: 8/13 Kanabec (**33**, ties highest count) JMP, 9/9 (16), 10/12 (**29**) Pine JMP. Late south 9/12 Wantowan DLB, 9/18 Scott WCM, 10/6 Hennepin WCM, 10/9 Olmsted PWP.

Western Meadowlark — Found in five north and eight south counties. North reports through 10/24, then 10/31 St. Louis PHS and Polk EEF, 11/1 Polk DLT. South reports through August, but none in September; late south 10/14 Sherburne JMP, 10/20 Lac Qui Parle PHS.

***Sturnella*, sp?** — Four unidentified meadowlarks: 10/2 Olmstead PWP, 10/15 Cook KRE, 10/20 Lincoln LBF, 10/21 Nobles LBF.

Yellow-headed Blackbird — Five north reports: 8/7 Marshall JMJ, 8/9 Polk EEF, 8/11 Otter Tail DTT, SMT, 8/21 Wadena PJB, 9/28 Lake JWL. All south reports after August: 9/11 Lac Qui Parle JMJ, 9/18 Nicollet RMD, 10/20 Big Stone PHS.

Rusty Blackbird — Seen in 13 north and 11 south counties. Early north 9/22 Cook EEO, 9/30 St. Louis NAJ, 10/1 Lake JWL. Early south 9/28 Anoka REH, 10/4 Meeker DMF, 10/9 Hennepin OLJ, SLC. See winter report for late migrants.

Brewer's Blackbird — Seen in eight north and six south counties, in all regions except the Southeast. Record-high count 9/19 Clay (**1000**+) RBJ. North reports through 10/20, then 11/3 Wilkin (**425**) RBJ, 11/4 Clay JEB. Late south 10/20 Lac Qui Parle PHS, 11/2 Steele LBF.

Common Grackle — No significant counts. North reports through October, then 11/11 St. Louis SLF, 11/28 St. Louis JRN. See winter report for late migrants and overwintering birds.

Great-tailed Grackle — Three undocumented reports from Jackson where this species is now annual: 10/9 (5–7) RMD, KTP, 10/14 (10) DWK, 10/17 (4) m.ob.

Brown-headed Cowbird — North reports from Clay, Wadena, Hubbard and Todd, including (late north) 8/13 Wadena PJB. All October reports south: 10/19 Lyon, 10/20 Pipestone and 10/21 Nobles LBF, 10/29 Dakota (14) ADS.

Orchard Oriole — Three reports: 8/1 Big Stone PHS, 8/1–3 Renville CRM, 8/8 Brown (2) BTS.

Baltimore Oriole — Reported from 10 north and 18 south counties, and in all regions except Southwest. Highest reported counts 8/21 Pine (5) JMP, 8/25 Polk (4) EEF. Late north 9/8 Kanabec CAM, Otter Tail JEB and St. Louis SLF. South reports through 9/6, then 9/18 Scott WCM, 9/22 Olmstead LBF. Injured bird 11/23+ Ramsey NSp.

Pine Grosbeak — Reported from ten north counties. Early arrivals 10/31 Cook BWF, 11/2 St. Louis m.ob., 11/6 St. Louis JWL. Only report away from northern third of state: 11/20 Pine AXH. No south reports.

Purple Finch — Reported from 18 north and 15 south counties in all regions. North reports throughout the season. Early south 8/27 Dakota TAT, 8/28 Hennepin SLC, 9/5 Freeborn AEB.

House Finch — Reported statewide.

Red Crossbill — Seven reports from Northeast. High counts 10/17 St. Louis (11) FJN, 11/14 St. Louis (25) JWL. All other reports: 8/22 Crow Wing RBJ, JEB, 10/9 Otter Tail SPM, 11/1 Nicollet (only south report) RMD.

White-winged Crossbill — Six reports from the Northeast, including **8/6–12** St. Louis KRE, then none until 10/17. Only report away from Northeast: 11/18 Pine JMP.

Common Redpoll — Reported from 15 north counties. Earliest: 10/17 Cook PHS, 10/30–31 Cook JEB, JWL. Away from the North Shore of L. Superior, arrived 11/4 Clay RBJ, 11/7 Pennington JMJ. Three south reports: 11/18 Wright KTP, 11/24 Nicollet RMD, 11/27 Dakota DWK.

Hoary Redpoll — No reports (but see winter report for exceptional numbers).

Pine Siskin — Reported from 16 north and 16 south counties in all regions. Six August reports north. Early south 9/22 Nicollet RMD, 9/27 Hennepin SLC, 10/9 Jackson WCM.

American Goldfinch — Seen statewide.

Evening Grosbeak — Nineteen reports from the northern third of the state, scattered throughout the period. Highest reported count 10/31 St. Louis (11) FJN. Only south report: 11/24 Scott JEB.

House Sparrow — Statewide.

Observers

ADS	Andrew D. Smith
AEB	Al E. Batt
ALE	Audrey L. Evers
AR	Al Robertsen
ARo	Alma Ronningen
ARu	Ann Russ
ASc	Al Schirmacher
AXH	Anthony X. Hertzel
BAF	Bruce A. Fall
BBB	Bruce B. Baer
BCM	Chris Mansfield
BH	Becky Hylton
BJM	Barbara J. Martin
BJU	Bill J. Unzen
BKY	Ben K. Yokel
BLA	Betty L. Ammerman
BRB	Brad R. Bolduan
BRK	Byron R. Kinkade
BRL	Bill R. Litkey
BRN	Bill R. Nelson
BRT	Bill R. Tefft
BSc	Bill Schmoker
BSe	Blaine Seeliger
BTS	Brian T. Smith
BWF	Ben W. Fritchman
CAG	Charlie A. Greenman

CAK	Chuck A. Krulas
CAM	Craig A. Menze
CAP	Christine A. Petersen
CAS	Carol Schumacher
CB	Christine Baldwin
CBe	Chris Benson
CBr	Conny Brunell
CF	Cole Foster
CFa	Chris Fagyal
CFe	Cary Feldman
CH	Carrol Henderson
ChM	Chet A. Meyers
CHo	Chris Hockema
CJT	Carol & Jim Tveekrem
CLB	Cindy L. Butler
CLW	Chris L. Wood
CMG	Clare & Maurita Geerts
CMN	Connie M. Norheim
CRM	Craig R. Mandel
CSt	Cliff Steinhauer
DA	Dan Amerman
DAB	David A. Bartkey
DAC	Dave A. Cahlander
DAG	David A. Grosshuesch
DB	Doug Buri
DBz	Dedrick Benz
DCh	Doug Chapman
DCT	Dianne C. Tuff
DCZ	Dave C. Zumeta
DDM	Dennis D. Martin
DFN	David F. Neitzel
DJB	Dan J. Beran
DJo	Daryl Jorud
DKM	Diane K. Millard
DKn	Donna Knauber
DLB	Diane L. Brudelie
DLE	David L. Evans
DLT	Donna & Leon Thoreson
DMF	Dan M. Floren
DMP	Daphne & Meyers Peterson
DOK	Don O. Kienholz
DPJ	Douglas P. Johnson
DPS	David P. Sovereign
DRB	David R. Benson
DRM	Dennis R. Meyer
DSC	David S. Carman
DSo	Dave Soehren
DTT	Dan T. Thimgan
DWi	Dave Williams
DWK	Douglas W. Kieser
EEF	Eve E. Freeberg
EEO	Earl E. Orf
EJE	Eddy & Judy Edwards
ES	Erika Sitz
FAE	Fred A. Eckhardt
FJN	Frank J. Nicoletti
FVS	Forest V. Strnad
FZL	Fred Z. Lesher
GCK	Gary C. Kuyava
GEN	Gary E. Nielsen
GLS	Gary L. Simonson
GMM	Gretchen M. Mehmel
HCT	Howard C. Towle
HH	Heidi Hughes
HHD	Herb H. Dingmann
JCG	Janet C. Green
JEB	Jerry E. Bonkoski
JEc	Jason Eckstein
JEH	Jay E. Hamernick
JEP	Jim E. Pomplun
JEZ	James E. Zimmerman
JGa	Joe Gartner
JGW	Josh G. Watson
JJS	Jeff J. Stephenson
JLH	James L. Howitz
JLR	Janet L. Riegle
JLU	Janice & Larry Uden
JMF	June M. Foss
JMJ	Jeanie M. Joppru
JMP	Jackie M. Potts
JPE	John P. Ellis
JPM	James P. Mattsson
JPS	Julian P. Sellers
JR	Jim Ryan
JRN	Jeff R. Newman
JSB	Jo & Steve Blanich
JSK	John & Susan Kroll
JSS	Jack Sprenger
JuB	Judy Brandenburg
JWB	Jim W. Barrett
JWH	John W. Hockema
JWL	James W. Lind
KAK	Karla A. Kinstler
KAR	Kathryn A. Rivers
KCo	Keith Corliss
KJB	Karl J. Bardon
KKW	Kristine & Kyle Wicklund
KRE	Kim R. Eckert
KRS	Karen R. Sussman
KTP	Keith T. Pulles
KVH	Katie V. Haws
KWR	Kim W. Risen
LAW	Larry A. Weber
LBF	Linda B. Felker

LK	Leslie Kottke
LM	Leslie Marcus
LMC	Linda M. Cooper
LME	Laura M. Erickson
LS	Linda Sparling
LWF	Lawrence W. Filter
MAJ	Murdoch A. Johnson
MAW	Marlene A. Weber
MBr	Mary Broten
MH	Mike Hendrickson
MHK	Martin H. Kehoe
MJC	Mary Jo Christopherson
MJF	Merrill J. Frydendall
MM	Matt Mecklenburg
MME	Molly M. Evans
MO	Mark Otnes
MRN	Michael R. North
MSS	Mark Sparky Stensaas
MTA	Tom Auer
MWS	Mike W. Steffes
MWy	Mary Wyatt
MZ	Mick Zerr
NAJ	Nancy A. Jackson
NBO	Nancy B. Overcott
NED	Nelvina E. De Kam
NFT	Nels F. Thompson
NSp	Nancy Sparrow
OLJ	Oscar L. Johnson
OWB	Bill Bruins
PAH	Paul Hetland
PBD	Pat & Bob Dewenter
PCC	Philip C. Chu
PEB	Paul E. Budde
PEJ	Paul E. Jantscher
PHS	Peder H. Svingen
PJB	Paul J. Binek
PJR	Pat J. Rice
PLJ	Paul L. Johnson
PME	Paul M. Egeland
PR	Peg Robertsen
PRH	Pete Hoeger
PSP	Pamela S. Perry
PWP	Paul W. Pedersen
RA	Renner Anderson
RAE	Ron A. Erpelding
RBJ	Robert B. Janssen
RBW	Bob Williams
RCK	Rose C. Kneeskern
RCS	Rolf C. Smeby
RDK	Ron D. Kneeskern
REH	Robert E. Holtz
RHO	Robert H. O'Connor
RJ	Robbye Johnson
RJo	Roland Jordahl
RJS	Roger J. Schroeder
RMD	Robert M. Dunlap
RNS	Richard N. Smaby
RPR	Robert P. Russell, Jr.
RSF	Randy S. Frederickson
RWS	Robert W. Schroeder
SA	Sue Abrahamsen
SAS	Shelley A. Steva
SC	Shawn Conrad
SES	Steven E. Schon
SGu	Suzanne Gucciardo
SID	Sue Durrant
SJR	Steven J. Roman
SLC	Steve L. Carlson
SLF	Steven L. Falkowski
SLL	Sharon L. Lind
SMc	Sue McDonnell
SMo	Susan Morton
SMT	Sandy M. Thimgan
SP	Shaun Putz
SPM	Steven P. Millard
SPS	Steven P. Stucker
SR	Steve Robertsen
SSM	Sue & Steve Morton
STW	Sylvia T. Winkelman
SWe	Steve Weston
SWd	Stan Wood
TAN	Tom A. Nelson
TAT	Tom A. Tustison
TEB	Tom & Elizabeth Bell
TFB	Tom F. Boevers
TN	Travis Novitsky
TPW	Terry P. Wiens
TRS	Thomas R. Schultz
UK	Uwe Kausch
WCM	William C. Marengo
WEN	Warren E. Nelson
WLB	William L. Brown
WMS	William M. Stauffer

Abbreviations

C.P.	County Park
C.R.	County Road
D.N.R.	Dept. of Natural Resources
H.R.B.O.	Hawk Ridge Bird Observatory
L.	Lake
m.ob.	many observers
N.W.F.R.	National Wildlife & Fish Refuge
N.W.R.	National Wildlife Refuge
P.R.	Park Reserve

R.	River	W.M.A.	Wildlife Management Area
S.N.A.	Scientific & Natural Area	W.P.A.	Waterfowl Production Area
S.P.	State Park	W.T.P.	Wastewater Treatment Ponds

Hope and the Lord God Bird

Comments on the Rediscovery of the Ivory-billed Woodpecker

David E. Blockstein

On 28 April 2005, I sat in the auditorium in the US Department of Interior building in Washington DC, with a dozen television cameras behind me and two cabinet officers, distinguished scientists, and conservationists in front of me, listening to the announcement that few ever expected to hear — scientifically verified evidence that the Ivory-billed Woodpecker still survives in North America! Most had assumed that this species was extinct, as the last documented U.S. record was in 1944 (Eckelberry 1961). My graduate advisor, Harrison (Bud) Tordoff of the University of Minnesota, later told me, "The re-discovery is the biggest ornithological news of my long lifetime, by a big margin. Nothing else in my ornithological life comes even close to this."

Dr. John Fitzpatrick, eminent ornithologist, Director of the Cornell Lab of Ornithology, AOU Past-President, and birder extraordinaire delivered the announcement. It was an incredible moment. Tears were streaming down my cheeks before he even said a word. One of the other speakers on the stage later told me that about half the people he could see in the audience were tearing up. Not the usual Washington press conference! I wanted to shout and cheer as Fitzpatrick announced the findings from the 14-month search, published that day in a peer-reviewed article with the understated but explosive title, "Ivory-billed Woodpecker (*Campephilus principalis*) Persists in Continental North America," in the online version of the prestigious journal, *Science* (Fitzpatrick *et al.* 2005). But it was a press conference, so I suppressed my cheers and just cried.

Before long, the formality subsided and heartfelt applause greeted the human heroes: Gene Sparling, the kayaker who made the first sighting of a male Ivory-billed in the Big Woods of eastern Arkansas on 11 February 2004; Tim Gallagher, editor-in-chief of *Living Bird* magazine, and his friend, photographer, and art professor Bobby Harrison, whose long searches for the Ivory-billed were consummated on 27 February 2004 when the great bird nearly landed on their canoe (Gallagher 2005); professor David Luneau, whose four seconds of grainy videotape proved definitive; woodpecker expert Martjan Lammertink, who relocated from the Netherlands for this project; and others involved in locating the bird and providing rigorous scientific analysis, as well as a host of conservationists from The Nature Conservancy (TNC), and other organizations. I expect that even the credentialed press from the major media were cheering at least internally at this incredible great news story.

Of course, the real hero is *Campep-*

hilus principalis — known historically as the "Lord God bird" because of the reaction it evoked among people upon seeing this massive and strikingly beautiful woodpecker with its prominent black-and-white plumage. Somehow, despite all of the insults that *Homo technicus* has heaped on the bird and the land that sustained it, the logging of the extensive native forests of the South (both the river bottomland hardwoods in the southeast and the now extirpated upland pine forests of east Texas), and the hunting and trade in Ivory-billed skins that occurred in the 19th century and before (Jackson 2004), — this remarkable remnant of pre-colonial America had survived into the 21st century. The term miracle seems to be an understatement.

"Lord God" was only one of the exclamations uttered as the audience watched Luneau's videotape. People sitting near me were stunned by the size — a woodpecker much larger than a crow — apparent even in the 1.2 seconds of a fleeting black-and-white bird among the enormous trees of the flooded refuge. Even in this brief and blurry glimpse, the bird is unmistakable.

As Fitzpatrick stated, the rediscovery of the Ivory-billed Woodpecker provides a "second chance for us to show that we can protect this spectacular bird and the awesome forest in which it lives."

The rediscovery also shows us the complicated and multi-faceted nature of conservation science. To create a scientifically credible case that this apparition was real, Fitzpatrick not only had to mastermind a scientific venture, but also raise the millions of dollars necessary to sustain a cryptic research expedition involving dozens of people. Most impressively, he and everyone else involved in the project kept an incredible secret for 14 months!

What was said and what was not said at the press conference also illustrates the controversial and political nature of conservation practice. Secretary of the Interior Gale Norton emphasized conservation partnerships, which is her signature program. Saving the Ivory-billed and its habitat can become the showcase of this approach. Fitzpatrick's Cornell Lab, TNC, the U.S. Fish and Wildlife Service and others have formed the Big Woods Conservation Partnership to protect and restore the 220,000 ha (550,000 acres) of floodplain forest along the Mississippi River where the big woodpecker was found. Since 1982, the members of the partnership have already protected nearly 25% of this unique and remarkably intact hardwood forest ecosystem, called "America's Amazon" by TNC Arkansas Director Scott Simon. In addition to the Ivory-billed, six other endangered species, 108 species of native fish and 265 species of birds have been found here, according to TNC.

Secretary Norton announced a $10 million federal funding package for the Ivory-billed Woodpecker and its habitat — half of which will come from the Department of the Interior. Given that, at least initially, this package will be created without adding funds to an already declining Interior budget, one wonders what will be sacrificed to save this charismatic species.

Additionally, the Secretary's lack of reference to the federally-owned and managed National Wildlife Refuge system — essential to the woodpecker's survival to date and in the future — was striking. All of the observations of the Ivory-billed over the past year have made been in the Cache River National Wildlife Refuge, which, along with the adjoining White River Refuge, has been the heart of conservation efforts in eastern Arkansas for more than 30 years.

Unfortunately, the refuge system is too often ignored — 200 refuges have no staff at all, and a majority have so few workers that a backlog of more than $2 billion in maintenance projects has developed. Additionally, the system is facing cuts of 300 staff positions in the next year, according to the National Wildlife Refuge Association, and a U.S. House of Representatives appropriations subcommittee recently slashed funding for the Land and Water

Conservation Fund, including money that would have added property to the Cache River refuge.

Nearly half of the contiguous forest in eastern Arkansas is under conservation management by federal, state, and private programs. It was protected for its value as a rare example of an extensive bottomland ecosystem, not because people thought it would have Ivory-billed Woodpeckers. It was also protected as habitat for huntable waterfowl — ducks. Following an initial transfer of a mere 154 ha from The Nature Conservancy (McCormick 2005), more than three-quarters of the 22,300 ha (62,000 acre) Cache River National Wildlife Refuge was acquired through funds that have come through the Migratory Bird Hunting and Conservation Stamp that duck hunters purchase as part of their hunting licenses.

The effort to protect this region began when the Army Corps of Engineers proposed to channelize part of the Cache River but was stopped in court by the Environmental Defense Fund (EDF Froehlke, 473 F.2d 346, 8th Cir. 1972) and others using the National Environmental Policy Act. That led Ken Smith and others to start the first chapter of The Nature Conservancy in Arkansas and develop a Natural Heritage Program of data for the state.

In contrast to the Secretary, Senator Blanche Lincoln, Democrat from Arkansas (state motto: "The Natural State"), gave credit to her predecessor, Senator Dale Bumpers, as responsible for acquisitions of the lands in the two national wildlife refuges. She movingly recounted her childhood adventures observing nature at daybreak with her father in these woods, listening to his conviction that the Ivory-billed did still exist there, even as he pointed out the smaller species of woodpeckers that they encountered.

Norton's counterpart, Agriculture Secretary Mike Johanns also offered USDA's commitment to providing $5.2 million in payments for farmers and other private landowners to protect the bottomland hardwoods through its cooperative conservation programs — the Farm Bill's Conservation Reserve Program (including "rental programs to maintain the trees"), Wetland Reserve Program, and Wildlife Improvement Programs. The irony is that these programs themselves may be endangered, due to limited support from the Administration and the Congress in a nasty fiscal climate. Their fate will be determined when the Farm Bill is renewed, perhaps later this year. One wonders whether the Ivory-billed Woodpecker might not only help to save the Big Woods, but also the conservation titles of the Farm Bill. Like the Interior budget, the USDA contribution is likely to be a reallocation of existing funds, not an add-on, at least for the time being. Perhaps saving the "Lord God bird" will also be included under the Administration's faith-based initiatives.

Ironically, not one speaker at the press conference mentioned the big stick of the federal conservation forest — the Endangered Species Act. This law has been responsible for preventing the extinction of hundreds of species. Back in the early 1990s, there was serious discussion among ornithologists and conservationists about whether or not it would be wise to remove the Ivory-billed Woodpecker from the endangered species list on the grounds that it was extinct. Some thought that declaring the species extinct would serve as a wake-up call for the need to safeguard other endangered species. Fortunately, as the Ivory-billed might say, "the reports of my death were greatly exaggerated."

Now that the Ivory-billed has been rediscovered, it will be subject to the protections as well as the bureaucratic procedures of the ESA — a law that is perhaps nearly as endangered as this super-rare woodpecker.

The story of the rediscovery of the Ivory-billed Woodpecker is one of resilience and persistence. On one "wing" is the resilience and persistence of the scientists, conservationists, and birdwatchers who have never given up on the species

and contributed time, money, sweat, and blood (including no small amount to the mosquitoes of Arkansas). On the other "wing", there is incredible resilience and persistence of the woodpeckers themselves and the habitat that is now rapidly recovering from the excessive logging of the previous centuries.

Somehow the woodpeckers have persisted, unobserved by people, undocumented by science, and unaided by recovery plans and all the other tools of conservation biology, except saving the ecosystem where we now realize it lives. Their population must have been incredibly low for at least a century. The species requires a very large home range, estimated to be 16 sq km in the former Singer Tract of Louisiana (Tanner 1942). It needs enormous trees and in sufficient numbers for some to die, providing opportunities for nesting and for feeding on large bark beetles (the scientific name of the Ivory-billed means principal lover of grubs). Even now, Lammertink (pers comm.) estimates that the Big Woods in Arkansas can support at best 12–15 pairs. The good news is that this is probably twice what could be supported two decades ago before the growth of trees and other aspects of habitat recovery. The habitat is continuing to improve as the forest is restored and matures (Fitzpatrick *et al.* 2005).

Despite the efforts of hundreds of thousands of birders and ornithologists whose life dream would be fulfilled if they were to see an Ivory-billed, extensive tracts of the forebidding bottomland forests in the South remain largely unexplored. Maybe Ivory-bills still persist in other large river systems of the southeast. There have been tantalizing, but undocumented, "sightings" throughout recent decades. The number of these woodpeckers certainly does not exceed double-digits — most likely the low double digits, at best. The persistence of the Ivory-billed Woodpeckers is a testimony to the essential value of wildness — of the bird and of the habitat.

What now? Will the Ivory-billed Woodpecker be better off discovered than it was when it was thought to have been extinct? The fate of the Ivory-billed Woodpecker and its forest compatriots is clearly in our hands. We can only hope that we have learned something since a previous re-discovery of a pair in Louisiana in 1924. Shortly after that, a local taxidermist shot and killed both of them.

One of the challenges will be to the birding community, which includes some rather fanatic individuals, all of whom will want to see an Ivory-billed. Will we be able to restrain ourselves and resist the temptation to get on the first plane to Arkansas? Each speaker at the press conference addressed that concern in their own way. Secretary Norton requested time to set up means for viewing (although Interior has also reportedly offered tours to the media) and has put a large section of the refuge off limits to the public. One of the speakers from Arkansas invited people to come, "but not all at once." There is a real risk that overzealous birders armed with tape recorders and other instruments of mass disturbance will drive this bird (and others that might be there) out of their present location. That would be a disaster of the first magnitude.

Can the birding community recognize that there is value in having the Ivory-billed Woodpecker as part of our known avifauna, even if we don't personally see it? Can we be satisfied knowing that by showing restraint now and by providing our unflinching and increased financial support for conservation, we may allow future generations to see Ivory-billed Woodpeckers in perpetuity? It is up to us and so far the answer seems to be "yes."

The ball also is now clearly in the court of the Interior Department and other custodians of the nation's biodiversity. Will some combination of cooperative conservation and outright protection be sufficient to maintain Ivory-billed Woodpeckers into the next century and beyond? Will this spectacularly rare gift of a second chance to save a species that most had written off as extinct be enough to unite the various factions that take very different approach-

es to conservation and are often at each other's throats, politically?

Secretary Norton christened the effort "a Corridor of Hope: Cooperative Conservation Plan to Save the Ivory-billed Woodpecker." It is a well chosen and very apt name. In addition to bringing to mind a recent president of the opposite party who hailed from Hope, Arkansas, I immediately thought of the wonderful book by Chris Cokinos (2000) — "Hope is the Thing with Feathers: A Personal Chronicle of Vanished Birds," which takes its title from a line in an Emily Dickinson poem (ca. 1861). Cokinos traveled the country retracing the last known days of the six extinct birds of North America — including the Passenger Pigeon (my own area of expertise) and the Carolina Parakeet — both of which died out in captivity in 1914. Among the six "extinct" birds is the Ivory-billed Woodpecker.

Tracing the expeditions of previous Cornell ornithologists who studied the Ivory-billed in Louisiana in the 1930s, Cokinos wrote, "So the species is gone. Or is it?"

That was the question for many years on the minds of those of us with a passion for birds and nature. It has been answered in a positive way. Now it is up to all of those who care about wild creatures to ensure that the question is never asked again. If it must be asked, it must always be answered, "It is not gone."

Yes, "Hope is the thing with feathers." Sometimes Hope is named Peregrine Falcon. Sometimes Hope is named Bald Eagle. Sometimes it is named Whooping Crane. All of these species are coming back despite great odds, with scientific guidance and generous doses of public funds, federal protection and private partnership. Today, Hope is named *Campephilus principalis* — the Ivory-billed Woodpecker.

How much Hope can we place on the back of this big bird? Can it help to save the Big Woods of Arkansas? Other bottomland forests of the Southeast? Wild lands across America? The National Wildlife Refuge system? The conservation titles of the next Farm Bill? The endangered Endangered Species Act? Can it launch Cooperative Conservation in a big way? But most immediately and directly — how will we accept this gift of hope, this challenge of a second chance to bring a ghost back to life? Having survived this far on the scraps of forest land that we have left it –largely inadvertently, will the Ivory-billed Woodpecker survive our efforts to know it and help it?

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Birding by Hindsight

A Second Look at Swallows

Kim R. Eckert

It was over 20 years ago, but I still fondly remember when my old bird identification classes in Duluth were at their peak in popularity. There was even one fall with so many birders registered that I experimented with offering a so-called advanced class for those with more experience. The experiment didn't last long. The first field trip of the season was in mid-August, the swallows were on the move, and not one of my prized pupils was able to successfully sort through them. Indeed, their teacher found himself hesitating a time or two over the identity of some of the swallows flying around us at Park Point.

So, what was the problem? There are only six swallows Minnesota birders have to deal with, and even novice birders can tell a swallow when they see one. And a basic lesson in Bird Identification 101 is to first fit the bird in question into its family group, and then work from there down to the species level. Accordingly, as I often point out to beginners, if you just know it's a swallow, you've already accomplished a lot, narrowing down the ID possibilities from 300+ regular Minnesota species to just 6.

But successfully getting from six species to just one is often tough, partly because those things swooping around in front of you are hard to follow through your binoculars. One strategy is to put the binoculars down and watch with your naked eye: often swallows will eventually fly by close enough to identify without optics. Another method for learning swallows is to wait until you find some perched on wires, so they can then be scoped and studied at leisure.

Despite the difficulties many have with swallow ID, there have been surprisingly few articles on the subject. I could find nothing in *American Birds/North American Birds*, while *Birding* has had only two articles over the years, and these were limited to separating Bank, Northern Rough-winged, and juvenile Tree swallows (*Birding* 17:209–211 and 28:111–116). Thus, it's about time that "Hindsight" took a look at this deceptively difficult group of birds.

One thing I like about the six species of swallows regularly occurring here is how nicely they can be organized into three groups of two. The blue ones (Purple Martin and Tree Swallow) nest in bird houses (and in natural cavities); the two brown ones (Bank and Northern Rough-winged) nest in holes in the ground (e.g., in sand piles and river banks: the Bank is colonial and occurs more in flocks than the more solitary rough-winged); and the two with dark red throats (Barn and Cliff) construct mud nests under eaves, bridges, and other structures.

Another nice thing is how easy it is to find swallows for study, since all six species occur statewide, at least in migration.

Note, however, that Purple Martins are essentially non-existent as breeders north and northeast of Duluth. (Even in Duluth, there are only two neighborhoods I know of with occupied martin houses.) Also, birders often find the uncommon Northern Rough-winged Swallow missing from their lists at day's end, especially in northern and western Minnesota. And if there are no big sand piles around, one may not see any Bank Swallows. On the other hand, note how abundant Cliff Swallows are in northwestern Minnesota counties, where they swarm out from under many of the bridges you drive over.

At the same time, you can't use range/relative abundance much as an ID tool if all six swallows are mostly distributed statewide. Habitat clues usually don't help either, since swallows are seen well away from their nests, perching on wires or feeding over bodies of water (especially sewage ponds; especially on stormy days). Learning calls might help occasionally, but I've only found it useful when telling the brown ones apart: listen for the Northern Rough-winged's one- or two-syllabled "raspberry" call, different from the Bank's multi-syllabled buzzy chattering. Except for the relatively slower, deeper wing beats and longer glides of Purple Martins (and Northern Rough-wingeds, to some degree), differences in swallow behavior will figure little in most IDs. Nor will time of year tell you that much, with all six species mostly arriving in April and departing before the end of September. (An early swallow before the very end of March, though, will almost always be a Tree, while one lingering in October will almost never be a Bank Swallow or Purple Martin.)

So, we're basically left with considering visual features alone to make identifications. When seen well enough, of course, the field marks involved with swallow identification are pretty straightforward, and there is no need here to repeat the basics. But following are some comments on what to watch (and watch out) for with each species: i.e., notes on what the field guides may have overlooked. Included below are Violet-green Swallow, a species with two sight-only state records, and Cave Swallow, a rapidly expanding species which will eventually occur in Minnesota, given the multitude of records from the northeastern U.S. and eastern Great Lakes.

Purple Martin

As noted earlier, a Purple Martin's flight looks different from other swallows, enough so that this alone can serve to identify one, especially when its superior size is also noted. But because of its unswallow-like flight and size, I have occasionally seen birders mistake the silhouette of a distant martin for a Merlin. The plumage of adult male martins may be distinctive enough, but be sure to take a second look at females and young. With their browner overall plumage and dusky throats, these can certainly look enough like Northern Rough-winged Swallows to cause confusion.

Tree Swallow

More than once when looking for bluebirds along the road, I've backed up or turned around when a blue-backed Tree Swallow at a bird house caught the corner of my eye. But not all Tree Swallows are blue; females and young can look as brown as any Bank Swallow. While that may not be news to most birders, many are quite unaware that fall Tree Swallows, especially juveniles, show a Bank Swallow-like breast band. This is the source of what is probably the most frequent swallow misidentification of them all. So, before calling that breast-banded swallow a Bank, make sure it's not a Tree. Note that the Tree Swallow's band is more gray than brown, that it's more diffuse and less solid, especially in the center of the breast, and that it lacks the downward "spike" that characterizes the center of a Bank Swallow's band.

But not all Tree Swallows are blue or brown; some adults can look quite green above, especially in fall, or at any time when the angle of the sun is just right (or wrong). Now, be sure to note as well the

Tree Swallow's white underparts which curve up at the flanks towards the sides of the rump. While this feature is a good way to distinguish Tree from Bank swallow, it is curious that neither the *National Geographic* nor *Sibley* field guide adequately illustrates or mentions this important field mark. But at the same time, this little-known Tree Swallow feature also provides a way for someone to mistake one for a Violet-green. Yes, there may be more white on the sides of a Violet-green's rump, but the Tree Swallow shows almost as much white in this same area to possibly lead birders astray.

Violet-green Swallow

As mentioned in the introductory comments, there are only two accepted sight records for this swallow, which occurs regularly in South Dakota just 300 miles or so west of Minnesota. But before you claim the third record, be sure to read the caveats in the paragraph above to make sure you're not just seeing a Tree Swallow. If it really is a Violet-green, you'll need to see more than its rump: at all ages its most important field mark is the white area above the eye. And, if the swallow is perched, try to see its wing-tip extension beyond the tail (tail and wing tips closer to even on Tree Swallow).

Northern Rough-winged Swallow

Now that you've read this far and are aware of the similarity between this species and female/young Purple Martins, and know about the difference between the rough-winged's and Bank Swallow's calls, and can begin to look for its somewhat slower and deeper wing stroke, there is no need to confuse this swallow with any other. But if you're still looking for more on Northern Rough-winged Swallows, note that juveniles have broad cinnamon-colored wing bars, unlike any other species. In addition, when studying perched brown swallows, it may be helpful to know that rough-wingeds of all ages lack the white "comma" which both Bank and juvenile Tree swallows show curving up behind their ear coverts. And note that you won't see any white tertial tips on a perched rough-winged, while such tips are often visible on both juvenile Bank and fall Tree swallows.

Bank Swallow

And now that you've read this far, especially the part above about the breast band on some Tree Swallows, there's also no need to confuse this swallow with any other. But take note of two other Bank Swallow features, which will often help you sort through the swallow flocks. First, the Bank Swallow is smaller than all the others, and this feature is especially noticeable and useful when examining swallows perched on wires. Second, a Bank Swallow in flight often stands out from the others due to its paler lower back and rump, which contrast especially with its darker tail.

Cliff Swallow

As any field guide reader knows, the tail tip on this swallow is less notched and more squared-off than any other swallow. In addition, Cliffs in flight can fan out their tails to make them frequently look quite rounded; perhaps only the rough-winged's tail could approach or match this shape. Of course, the field guides also show the Cliff Swallow's dark throat and distinctive buff rump patch: what ID could be more straightforward? Up until the last 20 years or so, that would indeed have been enough for any birder in this part of the continent, but now you need to be aware that a Minnesota record of the rapidly expanding Cave Swallow seems inevitable.

Back to the field guides for a second look. While the Cave Swallow also has a buff-colored rump, note its buffy throat and dark red forehead, just the opposite of the Cliff Swallow's pattern. Sounds simple enough: while that inevitable first Minnesota Cave Swallow may not be easy to find, it should at least be easy to identify, right? Sorry. The serious catch here is that juvenile Cliff Swallows can have pale throats and/or dark foreheads, just like adult Cave Swallows.

Cave Swallow

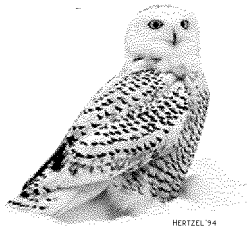
So, it will take a careful look and thorough documentation to make sure any possible Cave Swallow sighting does not actually refer to a juvenile Cliff Swallow. Juveniles, of course, would only be seen in summer and fall, and it is likely that any stray Cave Swallow would probably show up here in fall, most likely in November, when most of the other eastern Great Lakes and northeastern U.S. records have occurred. (And a footnote, which is probably purely academic: As both *Geographic* and *Sibley* show, the southwestern race of the Cliff Swallow *melanogaster* has a dark red forehead. But let's assume an individual of this race would never stray this far and get mistaken for a Cave Swallow.)

Barn Swallow

With its deeply forked and, well, swallow-like tail, at least the Barn Swallow shouldn't present any ID difficulties. And, indeed, the adults don't. But juvenile Barn Swallows do present some potential for confusion before their tails are fully grown. It seems these shorter-tailed young have buff forehead patches along with a dark throats, just like Cliff Swallows. Unless the birder is aware of this and takes a second look for other field marks, it's certainly possible that a Barn might be miscalled a Cliff.

As the swallows gather in flocks on wires this month, now is the perfect time to assimilate the tips in this article and work on your swallow identification skills. You may still face some difficult IDs, though, so be prepared to swallow your pride and admit you might make a few mistakes. (But at least identifying swallows is easier than some things — like making a ten-hour drive for a Brown Pelican that wasn't where it was supposed to be!)

1921 West Kent Road, Duluth, MN 55812.



BOOK REVIEWS

HANDBOOK OF THE BIRDS OF THE WORLD, VOL. 8: Broadbills to Tapaculos. J. del Hoyo, A. Elliott, and D. Christie, editors. 2003. Lynx Edicions. 845 pp. $185. Reviewed by Kevin Winker.

This volume and past volumes in the series are available from Lynx Edicions, c/o Mail Management Group, Inc., 81 North Forest Avenue, Rockville Centre, New York 11570, or through the internet (www.hbw.com); inquiries can be sent by email (lynx@hbw.com).

The first volume of the passerines in this landmark series represents yet another fine volume and one continuing to set a new standard for synthetic works on world ornithology. In this volume, 13 authors treat nine families of suboscines (Passeriformes, Eurylaimi and Fur-

narii): Eurylaimidae (broadbills), Philepittidae (asities), Pittidae (pittas), Furnariidae (ovenbirds), Dendrocolaptidae (woodcreepers), Thamnophilidae (antbirds), Formicariidae (ground-antbirds), Conopophagidae (gnateaters), and Rhinocryptidae (tapaculos). Physically it is on a par with previous volumes: large and heavy. It has 81 color plates (by nine artists), 477 photographs, 681 distribution maps, and about 4,000 references cited (38 pp. of the latter). Because I know most of the authors and have great respect for them in these, their areas of expertise, there is not much I can say other than "Bravo!"

The Foreword is a stand-alone treatise of 33 pages on "A Brief History of Classifying Birds," in which author Murray Bruce does an admirable job of providing an interesting overview of avian classification. Bruce's treatment of historical "waves" of progress in avian systematics ("classification") is a welcome division of the subject, and he treats three of these phases. His grasp of the historic literature is quite good, although I found the citation style to be awkward. One frequently looks in vain in the References Cited to see whether a particular work has been included. Even when many important works are discussed in the text they have been omitted from the references section (e.g., Aldrovandus, Brisson, Gesner, Willughby & Ray). In these cases, specific textual discussion of a work seems to negate citation. Very odd. Those who've seen my previous reviews will recognize my complaints about citations in this series, but this is the first time I have seen it done badly in the otherwise always authoritative Forewords.

In the treatment used here, there are five suboscine suborders and only a single oscine suborder (as opposed to the tradition of one of each, Tyranni and Passeres). In the suboscine suborder Eurylaimi there are three families, the Eurylaimidae, the Philepittidae, and the Pittidae. The Eurylaimidae (broadbills) is a small family of just 15 species; these species are from Africa and Southeast Asia. The Philepittidae (asities) is an even smaller family of just four species, from Madagascar. The Pittidae is the largest family in the suborder, with 30 species, and these species occur from Africa and India through southeast Asia, east to the Solomon Islands and eastern Australia and north to Japan and Korea. The majority of species in this suborder is from the Old World tropics.

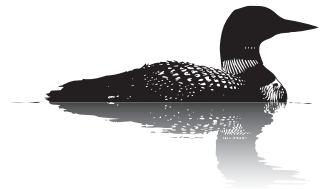
As with previous volumes, each family is introduced with a detailed overview that is well illustrated with color photographs followed by species accounts and color plates illustrating each species at least once.

The suborder Furnarii is a New World endemic, occurring from central Mexico south through all of South America. In it there are six families, the Furnariidae (ovenbirds; 236 species), Dendrocolaptidae (woodcreepers; 52 species), Thamnophilidae ("typical" antbirds; 209 spp.), Formicariidae (ground-antbirds; 63 spp.), Conopophagidae (gnateaters; 8 species), and Rhinocryptidae (tapaculos; 55 species). Some of these families are comparative hotbeds of new species descriptions (e.g., Formicariidae, Rhinocryptidae). J. Van Remsen's well illustrated 77-page treatment of the Furnariidae (followed by a 117 pp. species-level treatment), is striking for its length and excellence, as is the Zimmer and Isler Thamnophilidae (83 pp. of family account and 150 pp. of species accounts). All of the book and each of the authors' treatments is excellent, but I particularly enjoyed these families because their species are relatively poorly known, and these syntheses are top notch and much needed.

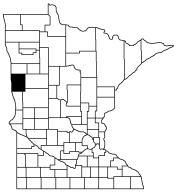
As with previous volumes, the plates and photographs are stunning. For example, a full-page image of a Scaled Antpitta (*Grallaria guatimalensis*, p. 695) bringing food to its nest — photographed using fill flash while gorgeously backlit by the sun — brings together natural history, ornithology, and art in a wonderful way.

University of Alaska Museum, 907 Yukon Drive, Fairbanks, AK 99775.

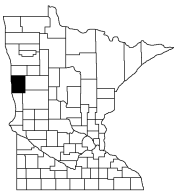
NOTES OF INTEREST



WHITE-EYED VIREO BANDED IN CLAY COUNTY — On 5 June 2004, volunteers at our MAPS banding station at Buffalo River State Park, Clay County, brought a bird that they did not recognize into the processing area in a cloth bag. When we removed the bird from the bag, I immediately saw its white iris and knew that it was a White-eyed Vireo. It seemed much smaller than the Red-eyed Vireos that we catch on a regular basis. The bright yellow spectacles contrasted with the pale throat and gray nape. The flanks were yellowish and the back bright olive. It had two white wing-bars and a rather short tail. An enlarged cloacal protuberance told us that it was a male. The bird was banded, photographed by Joe Gartner with a digital camera, and released. **Gary E. Nielsen, 237 Forest Ave., Fargo, ND 58102.**

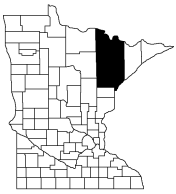


PAINTED BUNTING IN CLAY COUNTY — Early on the morning of 19 May 2004, I received a phone call from Rick Pemble regarding a Painted Bunting coming to his backyard feeder along Riverside Drive in Moorhead. I asked to check it out and started watching the feeder area at 8:15 A.M. The bird, a gorgeous male in full breeding plumage, appeared by 8:30 A.M. I could easily see its blue head, iridescent yellow-green back, and rose-red underparts as it fed on the ground a few feet from the house.



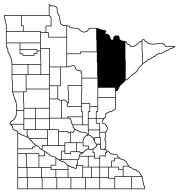
I last saw the bunting at about noon on the 20th and don't know if anyone saw it after that. Interestingly, this bird appeared about 24 hours after a male Painted Bunting disappeared from a feeder near Detroit Lakes. **Bob O'Connor, 1625 – 3rd St. South, Moorhead, MN 56560.**

SABINE'S GULL IN ST. LOUIS COUNTY — On the morning of 26 September 2004, Mike Hendrickson and I were at the tip of Wisconsin Point when I spotted a darkly patterned gull moving west towards Park Point, over Minnesota waters. When the bird banked and was fully lit by the bright morning sun, it was obvious that it was a juvenile Sabine's Gull (*Xema sabini*). I followed the bird as it coursed its way west and, eventually, north towards downtown Duluth, where I lost sight of the bird. Around 8:50 A.M., the Sabine's Gull was spotted again, this time quite close to the Minnesota breakwater, with a 1st-winter Little Gull! The two birds moved west again and began to ascend high into the air over Park Point. They circled up into the sky, close together, occasionally interacting. Eventually they moved too high and were lost. About 15 minutes later the Sabine's Gull was again spotted, this time moving east into Wisconsin waters, where it was lost in the sun.



Mike and I took field notes while viewing the bird the second time. The bird had the obvious "M" pattern of a juvenile Sabine's Gull, with a brown mantle, black primaries and a wedge of white secondaries between the two. Brown was seen extending from the mantle onto the nape. A black terminal tail band was also noted. We had a nice comparison of the size of the bird with the Little Gull. It was about 120% the size of the Little Gull, by my estimation. Seeing these two species together under beautiful conditions and light was just spectacular! **Tom Auer, 1728 E. 1st St. Apt.#6, Duluth, MN 55812.**

JUVENILE POMARINE JAEGER AT DULUTH — Between 5:45 and 6:05 P.M. on 7 September 2004, I watched a juvenile Pomarine Jaeger (*Stercorarius pomarinus*) on Lake Superior from a vantage point near the Recreation Area on Park Point in Duluth, St. Louis County. Many hundreds of Ring-billed Gulls (*Larus delawarensis*) were hawking insects over Park Point, and hundreds more Ring-billed Gulls and Herring Gulls (*L. argentatus*) were strewn across the lake between Park Point and Wisconsin Point. Jaeger migration at Duluth during Fall 2004 was better than usual.



I noticed a large, dark gull-like bird approaching from the northeast and realized that it was a jaeger as soon as it turned and flew parallel to the beach at an altitude of about 100 feet. The jaeger was as close as 150 yards when it passed by my position. *En route* to Wisconsin Point, the bird landed in the water and took off again several times. There were ample opportunities for size comparisons with Ring-billed Gulls — it appeared to be as large as, or slightly larger than, all nearby Ring-billeds. It also chased a juvenile Herring Gull for a minute or two; I estimated that its wingspan was about 20% less than that of the Herring Gull.

This powerful-looking jaeger was heavy in the body and "chesty" in profile with broad-based wings. Except when it harassed gulls, its flight was languid with several long glides. As it flew left to right past my position on the platform and while it was directly in front of me, I estimated that the width of its wing at the base was greater than the distance from the trailing edge of its wing to the tip of its tail. According to Sherony and Brock (1997), this ratio strongly suggests *pomarinus*.

Its bill was obviously bicolored — gray-blue with the distal third dark to the tip. Eye color could not be determined and the legs and feet were not visible. It was easy to see that the bill was bicolored even when the bird was several hundred yards away. According to Olsen and Larsson (1997), a bicolored bill gleaming in the distance against a dark face on a juvenile jaeger is characteristic of *pomarinus* — juvenile *parasiticus* may show a pale-based bill, but its bill usually cannot be detected at long range because it's thinner and contrasts poorly with Parasitic's paler face.

Except for its wing markings, pale rump, and barred belly and under-tail coverts, this jaeger's overall plumage was dark brown. On the upperwing surface, white shafts were visible on several primaries (not sure how many). On the underwing surface, an obvious whitish "flash" was visible at the base of the primaries. I looked for but was unable to detect a whitish flash on the greater underwing primary coverts. Though sometimes claimed to be diagnostic, both Kaufman (1990) and Olsen and Larsson (1997) note that some juvenile *pomarinus* lack a "double underwing flash."

As it passed in front of me, I noted that its belly and under-tail coverts were heavily barred. While the bird was wheeling about and chasing gulls at a distance, I could see that its rump and upper-tail coverts looked paler than the rest of its upperparts. There was no visible projection of its central pair of rectrices beyond the tail tip. Juvenile Parasitic and Long-tailed jaegers have longer and more conspicuous central rectrices, which are sharply pointed on *parasiticus* and either spiked or rounded on *longicaudus* (Kaufman 1990).

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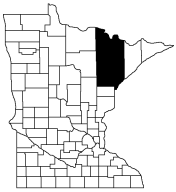
Peder Svingen, 2602 E. 4th St., Duluth, MN 55812.

MELANISTIC GREAT GRAY OWL IN ST. LOUIS COUNTY — I had the great fortune to see at close range — about 12 feet away — a melanistic Great Gray Owl in St. Louis County on 27 November 2004, about one mile north of the hamlet of Shaw along Munger-Shaw Road.



I saw the bird as we drove at 15 mph south on the road and alerted the driver, Steve Novatney, to stop the vehicle. We stopped 50 feet past the owl and slowly backed up to where it was perched in a spruce tree. I filmed it with my D-VD camera and got four seconds of video just as we got even with the bird. It was filmed in good light, not yet dusk, the sky was flat in quality, with overcast conditions, no snow. It was 30° F.

The black Great Gray was perched 15 feet up on the west side of the road in an area of mixed spruce and aspen. It appeared completely black with no white moustache, neck markings, or streaking. I saw its yellow eyes, but the video did not pick this up as the bird was looking to the side when perched. It appeared slightly smaller than the nine other Great Grays we had seen earlier in the day. I presumed it to be male.

Great Gray Owl, 15 December 2004, Shaw Township, St. Louis County. Photo by Jim Lind.

The bird flushed and flew into the woods. In flight over me I noted the following details: legs very dark, appearing blackish but showing streaking when extended in flight. The wing primaries showed streaking as the light showed through them from above, and the pattern and contrast to the overall black plumage was reminiscent of a dark-morph Rough-legged Hawk I had seen that very day. The tail also showed patterning when viewed from below, and the dark body gives a great image of how long the tail-body portion of a Great Gray really is, extending beaver-tail-like, deep into the tail feathers. The patterning on both the tail and wings was a consistent pattern with other Great Grays seen this day, but I got the impression it was the light showing through it that created the contrast, for when I saw the bird from above as it turned to go into the woods, the contrast or pattern was not visible. It was then I noticed an overall chestnut hue seeming to show through the blackness of the bird. It seemed to be the color and texture of a charred pine log, showing brown through black and very sooty in appearance. There were no light highlights, no whiteness, no grayness to the bird at all. Its facial disks were a uniformly flat sooty black.

Steve Novatney and Allen Nelson were with me and saw the bird as well, and Jim Lind was able to photograph it about two weeks later in the same general area. **Mark Alt, 3900 56th Avenue N., Brooklyn Center MN 55429.**

Yellow-crowned Night-Heron, 27 August 2004, Lily Lake, Dakota County. Photo by James P. Mattsson.

In This Issue

Purpose of the M.O.U.

The purpose of the MOU is the promotion of a broad program of conservation and natural history study, primarily in the field of ornithology.

To achieve this objective, the Union urges and promotes interest in field studies and observation of birds by individual members and affiliated bird clubs. We publish a quarterly journal, *The Loon*, and a newsletter, *Minnesota Birding*; we conduct field trips; we encourage and sponsor the preservation of natural areas; and we hold seminars where research reports, unusual observations, and conservation discussions are presented.

We are supported by dues from members, affiliated clubs, and special gifts. Any or all aspects of the MOU program could be expanded significantly with gifts, memorials, or bequests willed to the organization.

Suggestions to Authors

The Editor of ***The Loon*** welcomes submissions of articles, Notes of Interest, color slides, and photographs. All submissions should be typed, double-spaced, and single-sided. Notes of Interest should be less than two pages. Photographs should be no smaller than 5"x7". Whenever possible, please include a digital copy of your submission in any standard format on floppy disk, CD, or via e-mail. Digital documents may be e-mailed to the Editor of ***The Loon*** — see inside front cover for contact information.

Club information and other announcements of general interest should be sent to the Editor of our newsletter *Minnesota Birding* — see inside front cover for contact information. Bird sighting reports for each season should be sent to the Editor of "The Seasonal Report" — see "Key to The Seasonal Report" for contact information.

printed on recycled paper

The Loon

FALL 2005
VOLUME 77 — NUMBER 3

Journal of the Minnesota Ornithologists' Union

THE MINNESOTA ORNITHOLOGISTS' UNION
J. F. Bell Museum of Natural History
University of Minnesota
10 Church Street Southeast
Minneapolis, MN 55455–0104

The Loon, Minnesota's journal of birds, is published four times each year by the MOU, the statewide bird organization. All members receive this publication and also our newsletter, *Minnesota Birding.*

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Yearly donations to join the MOU: Single $25; Youth (through age 17) $15; Family $35; Supporting $75; Life $500. Canadian and foreign subscriptions $35. Also available are back issues of *The Loon* ($5 each) and checklists of Minnesota birds (minimum of 20 for $2).

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ISSN 0024–645X

The Winter 2004–2005 Influx of Northern Owls: An Overview

Kim R. Eckert

"Accurate data will likely be impaled on the barbs of uncertainty." — P. Svingen

Probably for the first time ever, the attention of birders throughout North America was focused on Minnesota during the winter of 2004–2005. Indeed, even the non-birding public nationwide became aware of the owl irruption here as a result of a network television broadcast on the NBC evening news, plus pieces in *Newsweek* magazine and in other popular media outlets. While for several years Minnesota has been a frequent destination for out-of-state birders, and the local media have long included occasional features on Minnesota birds, there had never been anything quite like the owl influx of last fall and winter, when hundreds — perhaps thousands — of out-of-state birders from throughout the U.S. eventually came here to observe owls.

There have, of course, been several previous winter irruptions of northern owls in Minnesota (see Table 1), but the numbers of individuals counted for three owl species this season were clearly unprecedented. Both Northern Hawk Owl (*Surnia ulula*) and Boreal Owl (*Aegolius funereus*) occurred in numbers more than double their previous record totals. The incredible number of Great Gray Owls (*Strix nebulosa*) was not just unprecedented, but overwhelming: at last count, the season total stood at well over 4,500 individuals, more than ten times the previous record for this species! The only northern owl not fully participating in this event was the Snowy Owl (*Bubo scandiacus*), although its numbers were also well above average.

There were so many owls, in fact, that reports from last winter are still coming in and being compiled at the time of this writing (late October 2005). Also, while previous winter owl irruptions could be documented by just one or two articles in this journal, the same coverage could not adequately describe the scope of this event. Accordingly, it is important to note this present article will be no more than a general and somewhat preliminary overview of the season, with more detailed information to be included in other articles in this and future issues of ***The Loon***. Note as well, those articles will update and correct some of the data given here.

The tentative publishing schedule in this journal to document the irruption is for one article on Northern Hawk Owls (the overall irruption) elsewhere in this Fall issue, four articles on Great Grays (the irruption; banding data; behavior and diet; plumages) and one on Northern Hawk Owls (banding data) in the Winter 2005–2006 issue, and two articles on Boreal Owls (the irruption; banding) in the Spring 2006 issue.

Northern Hawk Owl Distribution

From early October 2004 until June 2005, a record total of approximately 475 individual hawk owls was counted in Minnesota. The highest total documented for any previous season was 190 individuals in 2000–01 (***The Loon*** 73:135–143). The earliest individual was seen in the Sax-Zim Bog on 3 October, and from later that month through March new individuals were steadily reported. By April, there were still some late-lingering owls being seen; even later were the ones found in Lake of the Woods County 11 May and

in Koochiching County 9 June. However, despite these late dates and a few sightings in March of hawk owls behaving as if preparing to nest, there were no known breeding records in 2005. For the most part, Northern Hawk Owls were limited to the northern half of Minnesota, with only four individuals reported farther south (Chippewa, Isanti, Wright, and Chisago counties).

Boreal Owl Distribution

At present, the extent of the Boreal Owl influx is more difficult to describe than for Northern Hawk Owl. For one thing, mortality of this owl was much higher (approximately 150 found dead), and many dead Borealss are still in the process of being reported and sorted with respect to locations, dates, and potential duplicates. Another difficulty is trying to put this winter's numbers in context, when most of the Borealss were banded individuals: these would not have been detected in former winter irruptions when banding was limited to non-existent.

In all, the season total will probably be determined to be around 600 individual Boreal Owls, with approximately 380 of these banded. While 600 certainly represents a record winter influx by a wide margin compared to the previous high of 263 Borealss in 1996–97 (***The Loon*** 69:125–129), there were probably about 220 non-banded individuals last winter. By comparison, there were 260 non-banded Borealss in 1996–97, 228 non-banded birds in 2000–01 (31 banded out of 259 total; ***The Loon*** 73:143–151), and 211 non-banded individuals in 1995–96 (3 banded out of 214 total; ***The Loon*** 68:228–231).

The earliest individual of the season was found dead on 11 October in Beltrami County, and until mid-December all but five of the individuals reported were birds banded in northeastern Minnesota. The last Boreal Owl was on 9 March in Aitkin County; this was one of only nine owls seen for more than one day during the season. Like Northern Hawk Owls, few Borealss turned up outside of northern Minnesota; these were in three central counties: Kanabec, Pine, and Stearns.

Great Gray Owl Distribution

Certainly, the most noteworthy owl of the irruption was the Great Gray. So many were seen that keeping track of them all was indeed daunting, as was the challenge of trying to determine when a report represented a new individual or a duplicate sighting. In addition, like the Boreal Owl, mortality was high (apparently around 800 found dead), and the final Great Gray count is still a work in progress. However, at this time the amazing season total appears to be at least 4,900 separate individuals. To say that the unique and unprecedented magnitude of this owl's presence may never again be duplicated is no exaggeration: consider that the previous record was in the winter of 2000–01 when "only" 394 Great Grays were counted (***The Loon*** 73:135–143).

Although actual Great Gray breeding records are infrequent, the species is widely and consistently seen in small numbers in summer in the northern third of the state. Accordingly, unlike the other three northern owls, it is often difficult to determine when to include an early fall or late spring Great Gray sighting as part of a winter influx or as a locally breeding individual. Taking this into account, the first report included in this influx was in Marshall County on 17 August, followed by three other August–September sightings. By October, Great Grays were being seen at many locations; from November through March the influx was widespread, and significant numbers were still being reported consistently into early April. After then, the pace was slower, but in late April, May, and early June (Kittson and Lake of the Woods counties) some were reported within the species' breeding range, and remarkably, one first reported in March in Hennepin County remained there well into summer 2005.

As might be expected, many more Great Grays than Northern Hawk or Boreal owls turned up in southern Minnesota. However, with one notable exception in

Year	Great Gray	Northern Hawk	Boreal	Snowy	Comments	Reference(s)
2001–02	31	35	–	134	no owls in S Minn except Snowy	74:146
2000–01	394	190	259	111	46 N Saw-whets, 10 Gyrs, 171 dead Boreals; 2 Great Grays in S Minn	73:135–143 73:143–151
1996–97	168	100	263	153	202 dead Boreals; 26 Boreals, 5 N Hawk & 41 Great Grays in S Minn; N Saw-whet influx	69:114–124 69:125–129
1995–96	342	47	214	51	Great Grays: >50 in S Minn, 1 in IA, 40+ in WI, 62 dead; Boreals: 9 in S Minn,178 dead	68:221–228 68:228–231
1993–94	–	–	–	351	many dead Snowys early in season	66:160–165
1991–92	218	159	8	121	15 Gyrs, many N Shrikes; 2 Great Grays & 2 N Hawk in S Minn; influx in many other locations	64:189–195
1990–91	134	16	–	?	14 Gyrs, many Barreds & N Shrikes; Great Gray influx in Manitoba, Ontario, & Quebec; N Hawk in PA	63:163–167
1988–89	115	–	194	–	many Barreds; 1 Great Gray in S Minn, 1st Great Gray influx in WI; 5 Boreals in S Minn,165 dead	61:115–117
1983–84	122	–	–	–	many Barreds; 4 Great Grays in S Minn, 5 dead; influx in Ontario (~600 = record), & Quebec	56:143–147
1981–82	–	–	39	–	25 dead Boreals	54:176–177
1977–78	58	9	66	–	many Barreds; many Boreals active midday; 200 out-of-state birders from 21 states	50:63–68
1968–69	~68	–	11	–	33 Great Grays & 7 Boreals in S Minn; Great Gray influx in Manitoba	41:36–39
1966–67	–	–	–	92	345 Snowys in north-central states	40:90–92
1965–66	37	–	15	–	7 dead Boreals; influx in Ontario	38:44–45
1962–63	-	47–125?	9	–	3 N Hawk in S Minn; N Hawk article counts 125 owls, but *Seasonal Report* suggests 47	35:70–71 35:77–78
1926–27	?	+	–	+	estimated ~5000 Snowys killed in Canada & US, 68 dead in Roseau Co.	Roberts: Vol 1 p 612, 616
1922–23	?	–	+	–	most Boreals in Roseau Co., many dead (from starvation?); Boreal influx in New England	Roberts: Vol 1 p 632

Table 1: Previous winter owl irruptions in Minnesota. Numbers indicate season totals of separate individuals; "?" indicates probable influx; + indicates influx involving unknown numbers; – indicates no significant or known influx. Volume and page references since 1965–66 are from *The Loon*; from *The Flicker* (former name of *The Loon*) in 1962–63; and in 1926–27 and 1922–23 from *The Birds of Minnesota* by Thomas S. Roberts (University of Minnesota Press, Minneapolis, 1932).

Winona County during March, the southern extent of these sightings was similar to the other two owls, with records in Kandiyohi, Meeker, Stearns, Benton, Sherburne, and all the Twin Cities metro counties.

Concentrations and Peak Numbers

There was relatively little information on peak concentrations or significant movements of Northern Hawk and Boreal owls within this season's influx. There were, however, no fewer than 42 Northern Hawk Owls counted on the 20 December Sax-Zim Bog Christmas Bird Count (CBC) in St. Louis County, which must certainly represent the largest CBC total in history for any location.

As for Boreal Owls, all the significant concentrations involved banded individuals in Duluth and the North Shore in October–November. The Hawk Ridge Banding Station in Duluth netted 43 individuals, far more than their previous season high of 8. Near Tofte in Cook County, Bill Lane banded 56 individuals between 17 October and 23 November, with 20 October and 4 November the peak nights. More impressive were the 268 Boreal Owls banded by Frank Nicoletti in Duluth and vicinity from 17 October to 28 November: the peak flight nights here were 17 October, 5 November, 7 November, and 11 November, when between 20 and 31 individuals were banded per night.

On the other hand, there were several reports of noteworthy — even spectacular — peaks and movements of Great Gray Owls. In addition to the 42 hawk owls, the Sax-Zim Bog CBC recorded 70 individual Great Grays, which undoubtedly represents another all-time CBC record. Later in the season, it was not unusual to hear of birders seeing 100 or more Great Grays in a single day, and eventually some birders even reported being able to find over 200 separate individuals in a single day! The highest one-day count was apparently 256 Great Grays counted by one birding group on 20 February over a route of 100+ miles through Pine, Carlton, and Aitkin counties.

Temporal Movements

Several fluctuations in local populations of Great Grays were reported, presumably caused by an abundance or scarcity of small mammal numbers (or by severe weather making prey more difficult to find). In and around Koochiching County, the numerous Great Grays being seen by one observer reportedly disappeared by 10 January, possibly as the result of an ice and snow storm. About the same time, there was an increase in owls farther south in Carlton and Aitkin counties. By late January, however, Gray Gray numbers were noticeably down in Carlton County, but, in turn, there were more owls reported in adjacent Pine County during late January and February. Similarly, several observers noted Great Gray numbers dropping off around 15 January in Duluth and vicinity and in the Sax-Zim Bog.

But without actual banding data demonstrating that individual owls banded in one county were relocated in another, as suggested above, it would be difficult to state with certainty there was an actual county-to-county movement of owls. However, there were actual and extraordinary eyewitness accounts of Great Grays presumably in the act of migration. As reported by Jim Lind, "on January 3, at least 16 Great Grays were seen flying down the shore (southwest) over Lighthouse Point and Agate Bay [in Two Harbors, Lake County], with many more birds seen in subsequent days flying over the treetops in and near Duluth, all headed southwest."

Then, amazingly enough, a movement in the opposite direction was witnessed by several North Shore observers less than two weeks later. On the evening of 14 January, a group of birders counted 21 Great Grays flying northeast across Agate Bay, the main harbor in Two Harbors, following a recent cold snap and a 10-inch snowfall. On the following day, 15 January, Lind counted 27 more Great Grays heading across Agate Bay and up the shore between 5:00 and 6:00 P.M.. About the same time on the same day, other

observers also saw owls heading northeast along the North Shore: nine individuals between Stoney Point and Lakewood Road in St. Louis County, and two owls near Silver Bay in Lake County.

Farther northeast, at three Cook County locations on the following day, 16 January, the same phenomenon of Great Gray Owls all flying in a northeast direction around dusk was observed: nine individuals in Schroeder between 5:00 and 5:30 P.M.; 13 owls about the same time three miles southwest of Grand Marais; and between 4:00 and 5:00 P.M. a minimum of five Great Grays near Five Mile Rock, just northeast of Grand Marais.

Small Mammals and Other Prey

Both scientific and anecdotal evidence have long shown that the presence, absence, movements, and survival of owls, primarily Great Grays and Borealss, depends on the populations of small mammals, the primary prey of these species. (While Northern Hawk and Snowy owls also prey on small mammals, their diet tends to be more varied.) Certainly, it would appear that the presence of so many owls during this influx was due to a relative scarcity of such prey in Canada, the presumed origin of most of these owls. Jim Duncan, an owl researcher in Manitoba, reported a lack of Great Gray Owl nesting success in 2004 in that province and in adjacent Roseau County due to a scarcity of small mammals. Indeed, Duncan reported small mammal populations in Roseau County in Fall 2004 to be the lowest since 1992. According to the account of the winter season in the journal *North American Birds* (vol. 59, no. 2), low numbers of small mammals (and large owl numbers) were also the situation in Alberta and Ontario.

While here in Minnesota during the season, the owls apparently found varying and inconsistent prey populations. On the one hand, good numbers of small mammals were suggested by: the relatively low starvation mortality of Great Gray and Northern Hawk owls; the healthy conditions and adequate weights of most of the banded owls; and the large number of owls, especially Great Grays, present for long periods of time in some locations. On the other hand, low prey availability was suggested by: the documented movements of Great Grays described above; a high mortality of Boreal Owls, mostly from starvation (all the healthy banded Borealss were early in the season); the large number of Great Grays killed by collisions with vehicles (owls often hunt more along roadsides where some species of small mammals may be easier to find); and the number of presumably weak/starving Great Gray and Boreal owls seen to be uncharacteristically tame in their behavior, active and out in the open at midday, or hunting in residential areas.

Additional reports were received of Great Gray Owls apparently attacking unusual prey, further evidence of low small mammal populations at times: e.g., rabbits, squirrels, and small dogs (two anecdotal accounts). There was also an account of a ski mask attacked by a Great Gray, and a credible report of another knocking a hat with tassel off someone's head and tearing away at it on the ground. A Great Gray was observed flying a distance of about a mile to attack another Great Gray: was it merely driving it from its hunting territory, or possibly considering it as prey? One Great Gray was seen feeding on another, but was it only scavenging or had it killed the other owl? Most interesting was a documented account of a Great Gray killing and carrying off an unsuspecting Northern Hawk Owl!

Mortality

As mentioned earlier in this overview, Northern Hawk Owl mortality was low: in all, only 15 were found injured or dead, mostly as the result of collisions with vehicles. Boreal Owl mortality was much higher (again, approximately 150 counted so far), and most of these were the result of starvation. Far more Great Gray Owls turned up dead, with a preliminary count of around 800 individuals, about one-sixth of this species' overall season total. Much of this Great Gray mortality is still

in the process of being compiled, but one preliminary count shows that around 65% of those analyzed resulted from collisions with vehicles, around 15–20% from starvation, and the rest from unknown or other causes. These other causes unfortunately included illegal shootings, and one Great Gray was hit by a small private airplane in Duluth.

Weather and Habitat Notes

Since birds and other animals generally need to feed more to survive severe cold, prolonged periods of such weather can affect owl numbers, movements, and survival, especially when coupled with small mammal populations. The coldest temperatures last winter arrived about 13 January, with readings dropping to -50 degrees and even lower in northeastern Minnesota on 17 January: note there was a significant movement of Great Grays at this time, as described above. Deep snows probably have a greater effect on owls than cold temperatures, since prey becomes more difficult to find, but last winter's snowfalls were generally moderate. An icy crust on the snow cover, resulting from an ice storm or late winter's alternating thawing and freezing temperatures, tends to make prey availability especially difficult, especially on Boreal Owls (Great Grays are said to have the ability to dive through crusts capable of supporting the weight of a 175-pound person).

There were anecdotal reports of Great Gray Owls tending to be more difficult to find on windy days; if true, the assumption is that high winds make prey harder for an owl to hear and thus locate. Some observers thought that Great Grays were at times curiously and generally scarce to absent in many lowland coniferous areas; such habitat is normally considered typical habitat for this species. Whether or not these observations are valid might be confirmed by examining the weather and habitat data included in a winter owl survey organized by Dave Grosshuesch. This survey, which will be the subject of a future article in this journal, consisted of 70 defined roadside routes run by volunteers on the same weekends at four-week intervals from December to March. The cumulative totals of all routes varied between 255 and 512 individual owls per month: the peak of 512 on January's survey included 448 Great Grays and 54 Northern Hawk Owls.

Banding

During this season's irruption, the species totals included an unprecedented number of banded owls: nearly 150 Northern Hawk Owls, about 500 Great Gray Owls, and, as previously indicated, approximately 380 Boreal Owls. Because owl banding was either far more limited in scope, or even non-existent, during previous winter irruptions, various kinds of data were available for the first time during this influx. These included information on the ages, sexes, and the weights and health of many individuals. If a banded owl were found later in a new area, this might help shed some light on the owl movements during the season. Banding was also helpful in determining the overall species numbers: e.g., normally when owls are reported at a certain location on different dates they are considered to be the same individual; however, banding often showed that a different individual would be present later at the same location. Especially significant was the effect of banding on the season's total of Boreal Owls: without banding, this would have been closer to 200 individuals, rather than 600.

Atypical Plumages

As will be the subject of a future article, several Great Gray Owls exhibiting unusual plumage characteristics were observed or banded. Most of these were partial albinos with white feathers on the wings or tail. More interesting and especially atypical were two and possibly three melanistic or unusually dark-plumaged individuals (see ***The Loon*** 77:118), and a leucistic (i.e., unusually pale overall plumage; also known as dilute-plumaged) Great Gray individual first observed in the Sax-Zim Bog in May 2004.

Counting Methodology

Questions naturally come to mind during all of these owl irruptions regarding the accuracy of the numbers. How is it possible to determine if owls at or near a location on different days are duplicate or different individuals? Are comparisons of owl numbers from different irruption winters valid or affected by inconsistent coverage and counting methods? Does it matter if some owls were missed or counted twice, or if some were summer residents and not really part of the influx? Or, as primary owl compiler Peder Svingen mused on the subject of Northern Shrike numbers (it must have been a long night of entering data!), has accurate data been impaled on the barbs of uncertainty?

Certainly, many subjective counting judgments are made during each influx, but generally the methods used by compilers have been similar since the 1977–78 irruption, so that variables are minimized and comparisons valid. These methods have been previously described in the three most recent articles on owl irruptions in this journal (***The Loon*** 68:221–228, 69:114–124, and 73:135–151).

Note that counting accuracy was enhanced this year by several factors; these include: the strategy of continuous compilations of fresh data during the winter (rather than waiting until the influx had ended); the use of banding data to distinguish duplicate from new individuals at some locations; and the roadside surveys initiated and compiled by Grosshuesch (see above). On the other hand, with a few thousand Great Grays present, rather than just a few hundred, accurately compiling the overwhelming numbers of this owl was certainly far more difficult than ever before.

Another factor has to be considered when comparing this influx with those previously: i.e., more observers = more owls. In other words, for example, if the levels of publicity, communication, and observer coverage in 1926–27 had been the same as they are today, who knows how many Snowy Owls would have been counted that winter? Or take the much more recent example of Boreal Owl irruptions: as previously discussed, if fall banding activity in 2000, 1997, or 1995 had been similar to 2004, it is entirely possible that 600 individuals or more would have been recorded in those years as well. Consider also that publicity and communication were at unprecedented levels last winter, with so many reports in the various media, and with more birders every year on the internet hearing about, finding, and reporting owls and other birds. As a result, more birders than ever before came to Minnesota, the general public also became involved, and the resulting coverage was certainly higher than in any previous irruption.

Other Owls and Raptors

As is often the case during northern owl irruptions, increased numbers of other owl and raptor species will also appear, presumably affected by small mammal numbers and other factors relevant to northern owls:

Snowy Owl (Bubo scandiacus) — As shown in Table 1, this northern species often participates in owl irruptions, including the six most recent events, with a record 351 documented individuals in 1993–94 (***The Loon*** 66:160–165). During last winter, a total of 43 individuals was counted, which arguably might well be considered part of the season's influx. Five early individuals arrived in late October, the first of these on 18 October in Marshall County. Except for one later-than-normal Snowy on 30 April in Roseau County, the last of the others was reported on 24 March. There were reports from 23 counties, south as far as Lyon, Cottonwood, Nicollet, and Dodge counties. Interestingly, only one Snowy was observed on just one day (17 December) in the Duluth-Superior harbor, usually a consistent area for wintering Snowys. Three injured or dead individuals were found, and only four Snowys all season were seen for more than a single day. (Note that this species nests on the tundra, farther north than the other northern owls, consequent-

ly preying on different species of small mammals, and therefore not necessarily wandering south in numbers during the same years as the other three.)

Barred Owl (Strix varia) — High numbers of this species, a permanent resident of forested regions throughout Minnesota, are often noted during northern owl irruptions, although numbers and other data are not usually compiled for this species. This winter an above-average total of about 50 Barred Owls was reported from November to March in northern Minnesota, the part of the state where the bulk of the season's owl influx occurred. At least 15–20 individuals were reported dead or injured.

Northern Saw-whet Owl (Aegolius acadicus) — There were more than 800 saw-whets banded in northeastern Minnesota during fall 2004; however, such numbers are part of a normal migration of this species, rather than any true component of a winter's influx. Otherwise, about 20 individuals were seen from 20 October to 19 March, most of these fall migrants or birds wintering in southern counties, which is nothing particularly noteworthy. Only six saw-whets were reported in northern Minnesota from December through February, when this owl is not normally found in that part of the state. Accordingly, there was no significant irruption of this species, as there has been during some Boreal Owl winters. The largest documented winter influx of saw-whets in Minnesota was in 2000–01 when 46 individuals were recorded in northern counties (***The Loon*** 73:143–151).

"Arctic" Great Horned Owl (Bubo virginianus subarcticus) — There were reports of at least eight individuals of this pale northern subspecies, probably more than usual. However, records of this race have never been closely monitored or documented, and some paler horned owls are often incorrectly assigned to *subarcticus*.

Gyrfalcon (Falco rusticolus) — This Arctic-nesting raptor was reported more often than usual last season, although documentation was inadequate or lacking for most of the sightings. A minimum total of 14 was reported, although only 6 of these were adequately described or seen by experienced raptor observers. All were reported as gray-morph individuals, four adults and two unknown:

- 3 October 2004, Hawk Ridge, Duluth, St. Louis County
- 9 January 2005, Two Harbors, Lake County
- 3 February – 10 April 2005, Nininger Twp., Dakota County
- 4 February 2005, Duluth harbor, St. Louis County
- 6–21 February 2005, north of Palisade, Aitkin County (possibly two individuals)
- 21 March 2005, Virginia, St. Louis County

The other possible sightings came from Pennington, Lake of the Woods, St. Louis (2), Lake (2), and Hennepin (2) counties. (Note that even experienced birders often mistake Northern Goshawks for Gyrfalcons.) Had all these reports been documented and accepted, this would have been a near-record winter for this species. The highest previous season totals were also associated with owl irruptions: 14 Gyrs in 1990–91 (***The Loon*** 63:163–167), and 15 individuals in 1991–92 (***The Loon*** 64:189–195).

Northern Shrike (Lanius excubitor) — As in some previous owl irruptions, there seemed to be more reports than usual last winter of increased numbers of this predator of small mammals and birds. However, as in past seasons, shrike numbers were not closely monitored, except for 53 individuals found during the Grosshuesch owl surveys mentioned earlier.

Irruptions in Other States and Provinces

As might be expected, northern owls were also reported to be more common than usual in other states and Canadian provinces last fall and winter; it is atypical for an owl influx to be limited to Minnesota. The best source for this information appears in two issues of the journal

North American Birds (a publication of the American Birding Association, Colorado Springs, CO): Volume 59, Numbers 1 and 2. Following is a list of other locations with their reported northern owl situations during the season; note that not all areas experienced an influx:

- Alberta – influx of Great Gray and N. Hawk
- Saskatchewan – influx of Great Gray, N. Hawk, and Snowy
- Manitoba – influx of Great Gray and N. Hawk
- Ontario – influx of Great Gray and N. Hawk; average Boreals (5), few Snowys
- Quebec – influx of Great Gray (record number ~600) and Boreal; above average N. Hawk (25)
- Maritime provinces – only 1 Great Gray (New Brunswick); also ~10 N. Hawks (New Brunswick)
- New England – only 1 Great Gray (Maine); average Snowys
- New York – Boreal Owl (5); few Snowys
- Michigan – Great Gray (25); only 3 N. Hawks and 1 Boreal, average Snowys
- Wisconsin – Great Gray (~50), N. Hawk (10), Boreal (3); average Snowys
- Iowa – Great Gray (3), N. Hawk (2nd state record), Boreal (1st state record); also 4 Snowys
- North Dakota – Great Gray (2; 1st records since 1966), N. Hawk (2), Boreal (1)
- Oregon – N. Hawk (1; 3rd state record)

Previous Minnesota Owl Irruptions

To put this present owl influx in perspective, Table 1 on page 125 shows previously documented winter owl irruptions. Note that brief and often random comments are included with each season on mortality, southern Minnesota records, presence of other raptors, or owl numbers in other states/provinces. As previously discussed, it is often necessary to consider the number of observers and the compiling methods when comparing one year to another. These variables are especially important when looking at irruptions in earlier years: e.g., it is likely that the previous Northern Hawk Owl record total was not the 190 in 2000–01 — there were probably many more in 1962–63.

Some Concluding Questions

In conclusion, several questions come to mind:

• Why has so much been written about owls and their irruptions over the years? Other kinds of birds also appear in significant numbers from time to time, but relatively little is ever written about them.

• Did all those owls come here from farther north in Canada? Is it possible that many — perhaps most — of the owls you saw last winter spent the previous summer back in the woods just a few miles away and merely came out from cover to search for prey in your yard or along a nearby road?

• When lots of owls are present during an irruption year, why do so many birders describe it as a good winter for owls? With hundreds of owls dying from collisions with vehicles or starvation, this can hardly be described as a positive experience for them.

• With so many owls present last winter, why was there no resulting increase in the number staying to nest last summer?

• And, finally, will there be another influx this coming winter? At the time of this writing in late October, there have already been sightings in Minnesota of six early Northern Hawk Owls (plus others north of Thunder Bay, Ontario), some Great Grays, at least five banded Boreal Owls, and three Snowy Owls (some in emaciated condition). While there have been only three occasions on record when irruptions came in consecutive winters, all three of them have involved the seven most recent irruptions.

Acknowledgments

It is important to acknowledge the considerable amount of work which was necessary to compile the data on this owl irruption. Much of this daunting task fell to Peder Svingen, who must have spent hundreds of hours sorting through the literally thousands of owl reports. Jim Lind and Steve Wilson also did considerable work organizing and compiling reports, while Dave Grosshuesch and Frank Nicoletti contributed most of the data on banded owls. They will also be the chief authors of the other articles to appear in this journal about this irruption. It is no exaggeration to say that my contribution

in all this has been negligible compared to all the time and effort contributed by these five individuals.

I also thank the hundreds of individuals who found and reported owl sightings. Unfortunately, it would be impossible to fairly recognize those who contributed the most observations. Valuable data were also contributed by The Raptor Center in St. Paul, Dave Willard of the Field Museum of Natural History in Chicago, Manitoba owl researcher Jim Duncan, and the Minnesota Department of Natural Resources. Finally, Anthony Hertzel is to be commended for his patience with procrastinating authors and his skill in transforming our flawed efforts into the polished articles you see in this journal.

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The 2004–2005 Influx of Northern Owls
Part I: Northern Hawk Owl

Peder H. Svingen[1] and Frank J. Nicoletti[2]

For the fifth time within fifteen years, extraordinary numbers of "northern" owls were found in Minnesota; please see the overview article by Kim Eckert (2005) elsewhere in this issue. In this article, we discuss the occurrence and distribution of the record-high number of Northern Hawk Owls (*Surnia ulula*) in Minnesota during the Fall and Winter of 2004–2005. Unique to this event was the high number of hawk owls banded — the most ever in Minnesota and among the most banded anywhere during a single irruption. Banding data, measurements, and owl recaptures and recoveries will be discussed in the next issue of ***The Loon***.

Periodic irruptions of the Northern Hawk Owl in North America including the northern Great Plains have occurred since at least Winter 1869–1870 (Bent 1938, Duncan and Duncan 1998). Hawk owls most recently invaded Minnesota in 1990–1991 (16 birds, Eckert 1991), 1991–1992 (159 birds, Eckert 1992), 1995–1996 (47 birds, Eckert 1996), 1996–1997 (100 birds, Svingen 1997), 2000–2001 (190

Northern Hawk Owl, 17 October 2004, Stoney Point, St. Louis County. Photo by Earl Orf.

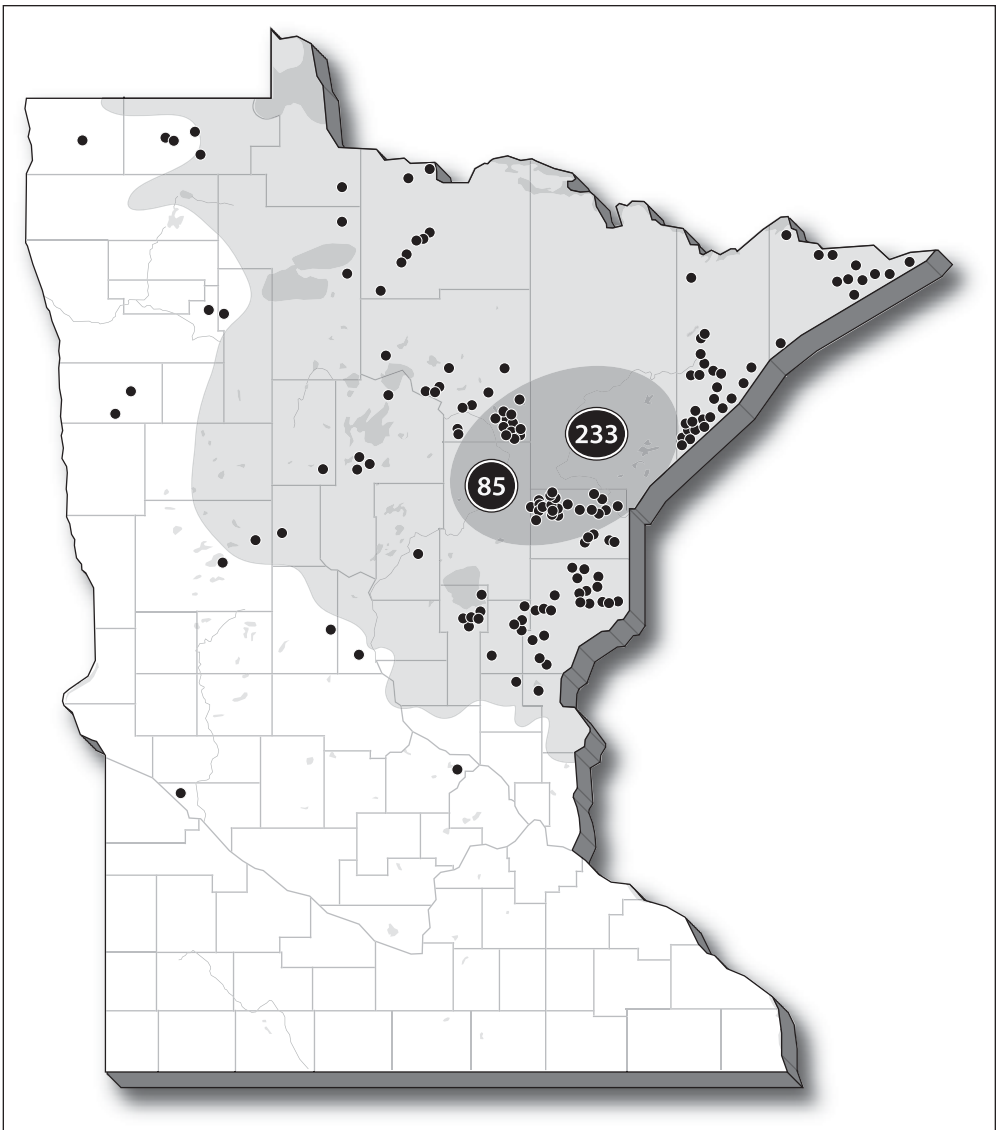

Figure 1. Locations of Northern Hawk Owls in Minnesota during the 2004–2005 invasion (n=475). Each black dot represents one individual; numbered circles depict multiple individuals. The lightly shaded area shows the coniferous forest zone according to the Minnesota DNR. The darker ellipse highlights the area of highest hawk owl density (see text). Map created by Anthony X. Hertzel.

birds, Svingen *et al.* 2001), and 2001–2002 (35 birds, including 5 not included in Bardon 2002; Grosshuesch 2003). As pointed out by Duncan and Duncan (1998), Northern Hawk Owl irruptions may last longer than one winter. Irruptive flights are thought to correlate with fluctuations in populations of voles (*Microtus* and *Clethrionomys* spp.) at three to five-year intervals; factors such as the influence of

snow cover on availability of prey need further study (Mikkola 1983, Nybo and Sonerud 1990, Rohner *et al.* 1995, Cheveau *et al.* 2004).

Method

The total number of Northern Hawk Owls was determined through a process similar to that used in previous articles; please see Eckert (2005) for details. For the first time during an owl irruption in Minnesota, contemporaneous banding data were incorporated into decisions about whether or not an individual bird was "new" to a specific location. Also for the first time, randomized surveys using volunteers were conducted at monthly intervals to assess prevalence; these efforts increased our confidence in the data presented here. A few owls may have been counted more than once, but there were undoubtedly many more that remained unreported by local residents or undetected in remote areas.

Results

Between 3 October 2004 and 11 May 2005, a record-high total of 475 Northern Hawk Owls was reported in Minnesota (Figure 1). This is 2½ times the previous record of 190 in 2000–2001 (Svingen *et al.* 2001) and represents about the fourth documented invasion of 100 or more hawk owls in the state (Table 1 in Eckert 2005).

The first Northern Hawk Owl was found along St. Louis County Road 319 (Stone Lake Road) in the Sax-Zim Bog area on 3 October 2004, about 2½ weeks earlier than this species' 18-year median arrival date in Minnesota of 20 October (Budde 2005). It was followed by at least 30 more individuals by the end of month. Additional hawk owls were found at new locations almost daily in November and December.

A remarkable total of 42 Northern Hawk Owls was found during the Sax-Zim Christmas Bird Count (CBC) on 20 December 2004 — a North American CBC record-high count. Hawk owls continued to arrive throughout the winter month;

Month	2000–2001	2004–2005
October	13	31
November	23	115
December	47	154
January	43	90
February	46	56
March	16	29
undated	2	–
Total	**190**	**475**

Figure 2. Northern Hawk Owl arrivals sorted by month of initial discovery for 2000–2001 and 2004–2005.

banding data, including more than two dozen recaptures, multiple reports from popular birding areas in Aitkin County and the Sax-Zim Bog area, and re-sightings of owls along well-traveled roads such as U.S. highways 2 and 53, suggest that many, if not most, had established winter territories by the end of December.

Though some reports in March may represent northbound migrants, arrival data sorted by month of discovery can be compared to their more gradual influx in 2000–2001 (Figure 2), and contrasted with an earlier crescendo in 1991–1992, when about half of the final total of 159 had arrived by the end of November (Eckert 1992). Differences in chronicity may be partly explained by the much higher prevalence of hawk owls in the relatively remote "Big Bog" (Beltrami, Lake of the Woods, and Koochiching counties) during 2000–2001, with fewer observers checking that area and many more out of state observers visiting northern Aitkin County and the Sax-Zim Bog area in 2004–2005.

Unlike the invasion of Fall–Winter 2000–2001, when Northern Hawk Owls essentially stayed within the coniferous forest zone, individuals strayed southeastward to Chisago, Isanti and Wright counties, southwestward to Chippewa County, and westward to Kittson, Norman, Otter Tail and Polk counties during Fall–Winter 2004–2005 (Figure 1). The total of four hawk owls reaching southern Minnesota recapitulated the invasions of 1962–1963 (Green 1963), 1991–1992 (Eckert 1992), and 1996–1997 (Svingen 1997), which re-

sulted in three (plus one at Mud Lake, Traverse County), two, and five birds south, respectively. There were no documented hawk owls farther south than northern Pine County in 1990–1991 (Eckert 1991), 1995–1996 (Eckert 1996), or 2000–2001 (Svingen *et al.* 2001).

Similar to previous invasions including 2000–2001, high numbers of hawk owls were found in Aitkin County (85) and St. Louis (233) counties. County totals of 27 or 28 in Carlton, 23 in Itasca, and 20 in Pine were also noteworthy. The greatest concentrations occurred within an area of extensive spruce and tamarack bogs encompassing most of Aitkin County, western and northern Carlton County, southeastern Itasca County, and southern St. Louis County west of and including U.S. highway 53 (Figure 1).

Relatively few hawk owls were found in Cook (12) and Lake (26) counties in the Northeast region. Lake County hosted a significantly smaller percentage (26 of 475, 5.5%) of the statewide total compared to 2000–2001 (38 of 190, 20%). Apart from Aitkin and Itasca counties, owl numbers were also lower than expected in the North-central region. A total of only 11 hawk owls was found in the "Big Bog". Roadside surveys by Svingen and others showed that two successfully overwintered along U.S. highway 71 in Koochiching County and one was reported through mid-January along state highway 72 in Beltrami County, but the other eight were only seen once.

An increase in hawk owl vocalizations was noted beginning in mid-February. While banding owls in March, Nicoletti observed a pair of hawk owls approach the trap together and bow towards one another; bowing and touching foreheads is one of several pair-bonding behaviors described in Duncan and Duncan (1998). Pairs were observed into April 2005 in St. Louis County near Floodwood, at Melrude, and at two locations in the Sax-Zim Bog; singles were reported as late as 11 May along state highway 11 at the Koochiching/Lake of the Woods county line with possibly the same bird three miles east of there in early June.

Regrettably, Northern Hawk Owl nesting could not be confirmed in Minnesota this year. Most of the state's 13 confirmed breeding records followed winter invasions (Roberts 1932, Strnad 1963, Lane and Duncan 1987, Wilson 1993, Wiens 2002, Grosshuesch 2003, Wiens 2003); at least three nestings occurred in non-invasion years (Green 1981, Kehoe 1982, Wiens 1989). Since 1970, breeding has been documented in Roseau, Lake of the Woods, Koochiching, Aitkin, St. Louis, Lake, and Cook counties (updated version of Hertzel and Janssen 1998).

Discussion

The 2004–2005 Northern Hawk Owl irruption was relatively widespread across the Prairie Provinces and Ontario, but less apparent farther east. Southward movement was detected at Hearst in northern Ontario by early October (Bain 2005) and at least 10 were found south of their usual haunts during the winter (Currie 2005). A total of 25 in Québec through the end of February 2005 was noteworthy, though far below the record-high total of 200 in that province during Winter 2000–2001 (Bannon *et al.* 2005). The only report from the maritime provinces published in *North American Birds* referred to about 10 birds in New Brunswick (Dalzell 2005). Of interest was the scarcity of hawk owls in northern Canada — Yukon, Northwest Territories, and Nunavut. In contrast, more than 150 hawk owls had been banded in Alberta by the end of January (G. Court *fide* M. Alt) and a total of 87 was banded in central Saskatchewan during February (Koes and Taylor 2005).

Closer to home, a Northern Hawk Owl in Ozaukee County, southeastern Wisconsin, drew about 1000 observers during its eight-week stay; however, only three were found in Michigan (Granlund 2005) and none were mentioned in *North American Birds* for states farther east. North Dakota had single hawk owls in Cass County, 13 November 2004 (Martin 2005a) and Grand Forks County, 19 December 2004 (Martin 2005b). Providing Iowa's second

Date Found	Location	County	Cause of death / injury if known
29 October 2004	unknown	unknown	injured; TRC #04-068 (released)
2 November 2004	near Hackensack	Cass	injured; TRC #04-616 (died)
7 December 2004	MN 61 by Hovland	Cook	found dead; not picked up?
7 December 2004	Hibbing	St. Louis	found dead; specimen to CFM
20 December 2004	US 53, N of Cotton	St. Louis	roadkill; specimen to CFM
23 December 2004	MN 61 by Crow Ck.	Lake	killed by Great Gray Owl
28 December 2004	US 53 in Cotton	St. Louis	roadkill; banded bird nearby
31 December 2004	CR 50, N of MN 61	St. Louis	found dead; possibly HBV
17 January 2005	unknown	unknown	found dead; specimen to CFM
27 January 2005	MN 65/MN 200	Aitikin	found dead; appparently HBV
30 January 2005	CR 5/CR 18	Aitkin	found dead; was banded by FJN
9 February 2005	MN 70, W of I-35	Pine	HBV; turned in to Cambridge DNR
14 February 2005	MN 78 by CR 5	Otter Tail	found dead; appparently HBV
9 March 2005	CR 52, E of CR 203	St Louis	killed by Northern Goshawk
14 March 2005	US 169/MN 210	Aitkin	roadkill; banded near Rossburg by FJN

Figure 3. Dates found, locations, and causes of death or injury for 15 Northern Hawk Owls in Minnesota. Abbreviations: CFM (Chicago Field Museum), FJN (Frank J. Nicoletti), HBV (Hit by Vehicle), TRC (The Raptor Center).

record was one at Manly, Worth County, 12 February–15 March 2005 (IOU 2005); this location is roughly 10 miles south of the Minnesota border.

Farther west, a southward movement of Northern Hawk Owls was detected in British Columbia beginning 24 October 2004 (Cecile 2005). Washington state's 19th hawk owl arrived early at Salmo Mountain in Pend Oreille County, 1–17 October 2004 (Mlodinow *et al.* 2005a). One near Bend established Oregon's third record beginning 3 February 2005 and was the first in that state since 1983 (Mlodinow *et al.* 2005b).

Movements

Fall dispersal and winter movements of hawk owls are poorly understood in North America, but there are some data suggesting northwest to southeast movement in central North America over the course of an irruption (Duncan and Duncan 1998). Adult males may be less prone to early fall and winter dispersal over long distances compared to females and juveniles (Duncan and Duncan 1998). Note, however, that banders in Alberta caught a higher than usual proportion of adult and subadult hawk owls during the 2004–2005 irruption (G. Court *fide* M. Alt), and that nearly two-thirds of those banded in Minnesota by Nicoletti were adults.

There are few data on winter age/sex dispersal and winter site fidelity of hawk owls in Minnesota, but much was learned from owl banding during this irruption. According to Duncan and Duncan (1998), a total of 504 hawk owls was banded in North America between 1956 and 1992; thus, the total of 148 banded in Minnesota during the 2004–2005 irruption represents a significant advance in our knowledge.

Morbidity and Mortality

A total of 15 Northern Hawk Owls was found injured or dead during Fall and Winter 2004–2005 (Figure 3). One of the two injured birds was rehabilitated and released in the Nickerson Bog, Pine County, 8 May 2005. In most cases, the exact cause of death or injury was not known, but most were found on or near roads where the primary cause of death or injury was assumed to be collision with motor vehicles. The mortality rate of about 3% (15 of 475) was up slightly compared to previous invasions, but still quite low compared to Great Gray (*Strix nebulosa*) and Boreal (*Aegolius funereus*) owls.

Intraspecific Interactions

On 27 December 2004, Mike Lanzone and Frank Nicoletti captured a Northern

Northern Hawk Owl, 25 October 2004, Sax-Zim Bog, St. Louis County. Photo by Bill Schmoker.

Hawk Owl and drove about 100 meters to where they could safely pull off the road. The bird was banded and processed, and released. As it flew back into the bog, Lanzone and Nicoletti noticed another hawk owl flying fast and directly towards it. The released bird landed on a dead snag, only to be knocked off of its perch a few seconds later by the aggressor. Both birds spiraled down to the ground together and out of sight, either with talons locked or with the released owl in the talons of the aggressor. Similar agonistic behavior between two hawk owls was observed in Minnesota 5 February 1993 (L. Ronning *in* Duncan and Duncan 1998).

Lanzone quickly ran towards the two hawk owls and observed the aggressor mantling the released owl. It completely ignored him and continued to attack the released owl. Suddenly, the released owl was able to escape the grip of the aggressor and jumped up onto its feet. After a quick chase on the ground, both owls took flight and the aggressor continued to chase the released owl. The pursuit continued until both birds neared the original location (before trapping). The aggressor then veered off, as if recognizing a territory boundary between the two birds, and returned to a perch close to where the original attack occurred.

Interspecific Interactions

On 23 December 2004, along state highway 61 near Crow Creek in Lake County, Jim Lind observed a Great Gray Owl attack and carry off a Northern Hawk Owl in its talons. Great Horned Owl (*Bubo virginianus*) and Northern Goshawk (*Accipiter gentilis*) are known predators of hawk owls in North America, and the Eagle Owl (*B. bubo*) is its pri-

mary predator in Fennoscandia (Mikkola 1976, Duncan and Duncan 1998). This apparently represents the first documented attack on a Northern Hawk Owl by a Great Gray. Details and a photograph of this dramatic event are published elsewhere in this issue (Lind 2005).

On 9 March 2005 at 3:10 P.M., while Frank Nicoletti was getting ready to trap a Northern Hawk Owl along St. Louis County Road 52 (Arkola Road), approximately 0.5 mile east of county road 203 (Owl Avenue) in the Sax-Zim Bog area, an adult Northern Goshawk flew quickly out of the spruce woods and surprised the hawk owl from behind. Nicoletti observed the goshawk as it captured the hawk owl and retreated into the woods.

On eight occasions during Winter 2004–2005, Nicoletti observed Northern Hawk Owls either defending a territory or harassing other raptors. Interspecific behavior was similar in all eight cases — seven Great Gray Owls and one Rough-legged Hawk (*Buteo lagopus*). The hawk owl approached the other species by making short dives (but was never observed striking the other bird) while delivering an alarm call. Generally, three to eight passes were made before the hawk owl landed on a nearby perch. After landing on a perch, the hawk owl often continued to vocalize, but no subsequent harassment of the other raptor was witnessed. The victims often seemed unconcerned by the hawk owl's presence. Interestingly, six of the seven hawk owl interactions with Great Gray Owls occurred shortly after the Great Grays emerged from the woods and started actively hunting during the later part of the day.

Summary

Fall and Winter 2004–2005 ushered a record-high 475 Northern Hawk Owls into Minnesota. A total of 148 was banded and an amazing 42 was tallied on the Sax-Zim Christmas Bird Count. Four reached southern Minnesota in Chippewa, Chisago, Isanti, and Wright counties, and six strayed west to Kittson, Norman, Otter Tail, and Polk counties, but fewer than expected were found in the North-central region's "Big Bog" and in portions of the Northeast. Fifteen were found injured or dead, but the vast majority appeared healthy and found adequate food. Only one was known to linger into June and breeding was not confirmed in 2005.

Acknowledgments

We thank Dave Grosshuesch and Jim Lind for coordinating owl surveys and reviewing this paper; we also thank them and Denny Meyer for submitting banding data. Kudos to Steve Wilson and the Minnesota Department of Natural Resources for assisting with owls turned in to their field offices, and to the University of Minnesota's Raptor Center for accepting owls for rehabilitation. We are grateful to Dave Willard for compiling and sending data on Minnesota owl specimens sent to the Chicago Field Museum. Mark Alt authored periodic summaries of the irruption and helped coordinate efforts among various agencies and individuals.

We are especially grateful to hundreds of observers — literally too numerous to mention — and the many volunteers who conducted monthly owl surveys and helped transport injured or dead owls. We thank Jim Lind for yeoman's work compiling records. Roger Schroeder provided CBC records, and Dave Benson, Anthony Hertzel, and Jeanie Joppru tracked reports called in to rare bird alert hotlines. Lastly, we thank Anthony Hertzel for creating the maps featured in this series of articles.

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The Winter Season
1 December 2004 through 28 February 2005

James P. Mattsson[1] and Peder H. Svingen[2]

Reports of the recently split **Cackling Goose** included birds lingering as late as 1 January in Dakota and Washington counties, and possibly overwintering in Hennepin at the Coon Rapids Dam. Unfortunately, none were documented. Observers are encouraged to document this "new" species to help provide a clearer picture of its migration and distribution in the state. A single, possibly overwintering **Snow Goose** in Dakota (Black Dog Lake) was one of very few migrant geese lingering into January. **Trumpeter Swan** counts in Otter Tail County reflected the continuing expansion of this species in northern Minnesota.

Lingering ducks of note in St. Louis County included a **Gadwall** in January and a record-late **Northern Shoveler** 12/21 in Virginia. Dakota County hosted **Green-winged Teal** and **Canvasback** into late December. A fall record of 3000 **Greater Scaup** was established 12/11 in Houston County. Two immature **Harlequin Ducks** overwintered in Two Harbors where many enjoyed witnessing the progression of their molt. **Long-tailed Ducks** away from Lake Superior were found in Dakota (2) and Scott (1) counties in mid to late December. An adult male **Barrow's Goldeneye** in Dakota County remained long enough to be counted on the Hastings-Etter CBC.

Despite increasing numbers of Greater **Prairie-Chickens** in the Northwest, few were reported there. Several reports of **Wild Turkeys,** including a high count of 105 in Douglas County, were submitted from western Minnesota where they are now well established due to introductions by the Minnesota DNR and possibly supplemented by individuals wandering from eastern North and South Dakota.

The only reports of **Common Loon**

were of individuals in Wabasha (Lake Pepin), Washington, and Kandiyohi counties. The state's 6th **Yellow-billed Loon** made frustratingly sporadic appearances in early January in Two Harbors. As many as nine **American White Pelicans** overwintered at Black Dog L. in Dakota County. Surprising was a record-late **Green Heron** found on the Excelsior CBC in Scott County that lingered through at least 20 December.

An adult gray-morph **Gyrfalcon** provided Dakota County's 4th record while remaining for 2½ months beginning in early February. Birders had spectacular opportunities to witness the hunting prowess of this predator as it powered through erupting flocks of field-feeding Mallards. In contrast, sightings of Gyrs in Lake and Aitkin counties were relatively brief. A **Sandhill Crane** in Chisago County in mid-January broke the record-late date by 23 days.

Thayer's Gulls and **Glaucous Gulls** were again present in good number in the Twin Cities, especially at Black Dog L.. Other highlights included a first-winter **Iceland Gull** in Cook (Grand Marais) and an overwintering first-winter **Great Black-backed Gull** seen throughout most of the period in Hennepin, Dakota and Washington counties (presumably the same individual based on plumage).

The highlight of the season was the irruption of **Great Gray**, **Northern Hawk** and **Boreal owls**, eclipsing all previous irruptions and attracting hundreds of out-of-state birders. Sadly, hundreds of Great Grays died, many from collisions as they hunted along roadsides. Others apparently starved and several were found shot. Boreal Owls also suffered high mortality.

Only ten **Black-backed Woodpeckers** were reported following several years of higher than average numbers (e.g., over 40 individuals in 2002–2004). Reports of "south" birds north include a **Tufted Titmouse** briefly visiting a Dakota County feeder in February and **Carolina Wrens** overwintering in Hennepin (Old Cedar Avenue) and Washington (also recorded on the St. Paul Northeast Suburban CBC).

Townsend's Solitaires made a good showing this season, including individuals reported from unusual locations in Chippewa and Kandiyohi counties. **Varied Thrush** numbers also were up and overwintering was recorded in St. Louis, Kandiyohi, and Hennepin counties. It was a good winter for **Bohemian Waxwings** with reports from 23 counties including southerly locations in Rice and Kandiyohi.

Surprise lingering sparrows included a **Chipping Sparrow** (1/2) in Mower County and an even more surprising record-late **Lincoln's Sparrow** (1/15) in Otter Tail County. **Northern Cardinals** continued to live up to their name as overwintering individuals were found in Lake and Hubbard. An apparently injured male **Baltimore Oriole** survived at a Ramsey County feeder until the record-late date of 1/16 when it was found dead.

A **Gray-crowned Rosy Finch** frequented a feeder in Pine County beginning late December, thus providing the state's 12th record for this western montane species. Deferring to the wishes of the homeowner, the presence of the bird was not made public. "Winter finch" numbers were again moderate to low, with notable increases in the south for **Common Redpolls,** which were reported in flocks of 100+ in several locations, and to a lesser extent, **Pine Siskins**.

Weather Summary: The warm trend that characterized much of 2004 continued into the winter period. Extending a period of autumn warmth that began in September, December monthly mean temperatures exceeded historical averages by three to six degrees in most locations throughout the state. The temperature extremes for December ranged from 59° F at Lamberton (Redwood County) on the 30th, to -45° F at Embarrass (St. Louis County) on the 24th. Temperatures on the 30th were record-warm in some areas. The first taste of winter came in the form of a powerful Alberta Clipper on the 12th. Snow fell over northeast Minnesota while the rest of the state had very gusty winds, peaking at 71 mph near Welch in Goodhue County. December precipitation totals fell short of the historical average by approximately ½

inch in the southern two-thirds of Minnesota. December precipitation in the northern third exceeded the norm by up to one inch.

January 2005 mean temperatures were slightly below average in the northern third of Minnesota, and somewhat above average in the southern two-thirds. The temperature extremes for January ranged from 49° F at Lamberton and Worthington on the 25th, to -54° F at Embarrass on the 17th. Cold minimum temperatures on January 16 and 17 were record-breaking in some northern Minnesota communities. January precipitation totals were near to above historical averages in most Minnesota communities. Duluth reported its second snowiest January on record (45.7 inches), and many northeastern Minnesota locations received more than 40 inches of snow for the month. In contrast, snowfall at the Twin Cities International Airport finally exceeded one inch on 21 January, making this the latest occurrence of the first one inch snowfall in the modern record.

Temperatures during February were quite warm throughout Minnesota, finishing three to seven degrees F above the historical average. Many southern communities did not report a below-zero temperature in February. In fact, many high temperature records were set on 3, 4, 5, and 12 February across Minnesota. Precipitation totals were near to somewhat below average across the northern two-thirds of the state, whereas many communities in the southern one-third reported above average February precipitation.

Undocumented reports: **Cooper's Hawk** 1/31, 2/6 Norman; **Gyrfalcon** 1/19 Duluth (airport), 2/4 Duluth (High Bridge), 2/5 Lake of the Woods, mid-February Pennington; **Brewer's Blackbird** (2) 1/13 Mower (previous late date 12/19).

Acknowledgments: This report (and the authors!) is the first to benefit from observer data submitted electronically via the MOU's new on-line seasonal report form. Kudos to Dave Cahlander and all who helped develop this system. About 40 percent of reports received this season were electronic. We thank Paul Budde who provided a summary of all electronic reports as well as a database of early and late fall records. Thanks again to Roger Schroeder for coordinating and compiling the CBCs. Anthony Hertzel, Jim Lind, and Jeanie Joppru provided transcripts from the state's three rare bird reports. A special thank you to all who contributed reports for the 2004–2005 winter season.

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Key to the Seasonal Report

1. Upper case (**LEAST TERN**) indicates a Casual or Accidental species in the state.
2. Dates listed in bold (**10/9**) indicate an occurrence either earlier, later, or within the three earliest or latest dates on file.
3. Counties listed in bold (**Aitkin**) indicate an unusual occurrence for that county.
4. Counties with an underline (**Becker**) indicate a first county record.
5. Counties listed in italics (*Crow Wing*) indicate a first county breeding record.
6. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.
7. Counts listed in bold (**150**) indicate a total within or exceeding the top three high counts for that species.
8. Dagger "†" preceding observer's initials denotes documentation was submitted.
9. Species documented with a photograph are denoted with "ph".
10. Species documented with digital or video tape are denoted with "v.t."

The *Seasonal Report* is a compilation of seasonal bird sightings from throughout Minnesota. We particularly invite reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor, contact the Editor of the *Seasonal Report*, Peder H. Svingen, 2602 East 4th St., Duluth, MN 55812–1533, or via e-mail at psvingen@d.umn.edu.

Greater White-fronted Goose — All reports: Late migrant 12/8 McLeod (one juvenile, Hutchinson) BTS. Early migrants 2/26 Jackson (113), Nobles (188), Cottonwood (25) PEJ.

Snow Goose — Only north report 12/19 Otter Tail SPM. Reported from four south counties. Late south 12/3 Olmsted PWP, 12/22 Chippewa HHD. Report of single bird 1/16 in Dakota (Black Dog L.) PEJ suggests overwintering. Early migrants 2/26 Nobles (4) PEJ.

Ross's Goose — One white-morph adult in mixed flock of Canada and Cackling geese on Sleepy Eye L. 12/5–11 Brown ph. †BTS.

Snow Goose x Ross's Goose — One probable hybrid seen 12/27 Carver RBJ.

Cackling Goose — Fargo-Moorhead CBC tallied 134 on 12/18 Clay *fide* RHO. Reported from 13 south counties including 12/18 Rochester and Faribault CBCs *fide* RJS; overwintered Hennepin (Coon Rapids Dam) OLJ. None of these had details. Spring arrival dates unknown. Highest reported counts 2/26 Jackson (**520**), Nobles (**525**), Cottonwood (312) PEJ.

Canada Goose — Reported from 15 north and 27 south counties. Highest reported count 1/6 Dakota (12000+) (Black Dog L.) JPM. Interesting was the report of a 20-year old banded bird from Illinois 1/18 Lake MTA.

Mute Swan — All reports: 12/3, 12/18 Olmsted (Rochester CBC) †PWP, 1/1 Rice FVS (also recorded on Faribault CBC), 1/1 Afton CBC *fide* RJS, 1/9 Washington (Pt. Douglas, same as Afton CBC?) DWK.

Trumpeter Swan — Reported from 9 north and 11 south counties ranging from Hubbard and Cass in the north to Houston and Freeborn in the south. Cumulative CBC total of 1699 birds with high counts of **1140** at Northern Wright County (Monticello) and 468 at Battle Lake. Continued expansion also reflected by count of 300 on 12/20 Otter Tail (East Lost L.) DST. Additional reports 12/3 Sherburne (56 at Big L.) PLJ, 1/4 Washington (Pt. Douglas, 4 adults and 12 juveniles) JPM, 2/19–28 Scott (15) PEJ.

Tundra Swan — All reports away from Southeast: 12/4, 12/11 Scott (Fisher L.) DWK, 2/26 Dakota ChH. Good numbers still present 12/5 (11000), 12/11 (8000) Houston (Pool 8, U.M.R.N.W.F.R.) PEJ. Total of 921 on Winona CBC *fide* WC.

Wood Duck — Reported from five south counties with overwintering in Hennepin (Old Cedar Avenue and Bass Ponds) SLC. Late south 12/17 Benton HHD, 12/18 Scott (2) RCA, 1/1 Dakota (Hastings, possibly overwintering at L. Rebecca) JPM. Early migrants 2/26 Jackson (2) PEJ.

Gadwall — Reported from four north and eight south counties. Late north **1/8** St. Louis JJS. Overwintered in Dakota and Scott. Early migrant 2/26 Nobles PEJ. Highest reported count Excelsior CBC (39) *fide* HCT.

American Wigeon — All reports: 12/11 Houston (30), **1/8** Dakota, **1/19** Stearns JEB, RBJ, 2/26 Nobles (2) PEJ.

American Wigeon x Gadwall — Apparent hybrid 12/28 Dakota (Black Dog L., no details) PEJ.

American Black Duck — Reported from 21 eastern counties plus 2/26 Jackson (2) PEJ. Late north 12/18 Cook (Grand Marais CBC), (count week) Bemidji CBC; overwintered St. Louis (Duluth) PHS. Overwintering south in Dakota (Black Dog L.) JPM and Scott (Shakopee Mill Pond) DWK, PEJ. Highest reported count 12/18 Duluth CBC (21) *fide* JWL.

Mallard — Reported from 35 counties statewide. Migrants reported 2/28 Mower (76) RCK, RDK. Highest reported count 12/26 St. Paul (NE Suburban) CBC (8000) *fide* RW.

Northern Shoveler — All reports: 12/11 Clay (2) RHO, record-late north 12/1–**12/21** St. Louis (female at Silver L., Virginia) SLF, 12/11 Rice FVS (also recorded 12/18 on Faribault CBC).

Northern Pintail — All reports: Single individuals late north 12/18 Clay (Fargo-Moorhead CBC) BWF, 1/2 Otter Tail (Battle Lake CBC) SPM, †EJE. Only other CBC report from Winona *fide* WC. Mid-winter report 1/25 Olmsted PWP. Early migrants 2/26 Jackson and Nobles (71) PEJ.

Green-winged Teal — Only reports: Overwintered Dakota (16 at Black Dog L.) PEJ, 12/21 Dakota (21) ADS. Unusual was the lack of CBC records.

Canvasback — Reported from eight counties. Only north report 12/18 Clay (one on Fargo-Moorhead CBC) *fide* RHO. Peak count 12/5 (35000) Houston (Pool 8, U.M.R.N.W.F.R.) PEJ. Late migrants 12/18 Scott (4) RCA, 12/23 Dakota PEB, 12/28 Dakota PEJ; also recorded on the Winona CBC (4) *fide* WC. Early migrants 2/26 Nobles (41) PEJ.

Redhead — Reported from nine counties statewide. Late north 12/10 Todd JSK. Late south 12/11 Houston (Pool 8, U.M.R.N.W.F.R.) PEJ, 12/18 Hennepin (Excelsior CBC) †BJM. Early migrants south 2/19 Washington (6 at Pt. Douglas) JPM, DWK, 2/21 Washington (6) PEJ, 2/26 Jackson, Nobles, Cottonwood (5) PEJ, 2/27 Dakota DFN.

Ring-necked Duck — Only north report: Grand Rapids CBC *fide* KZ. Only reported from four south counties. Overwintered Scott (7 at Blue L., Shakopee) PEJ. Late south 12/18 Olmsted PWP. Early south 2/12 Scott (Shakopee Mill Pond, same as overwintering birds at Blue Lake?) DWK. Peak of 8000 present 12/11 Houston (Pool 8, U.M.R.N.W.F.R.) PEJ.

Greater Scaup — All reports: Late north 12/17–18 St. Louis (10 at Duluth) PHS. Late south 12/3 Sherburne PLJ, 12/11 Houston (**3000** at Pool 8, U.M.R.N.W.F.R.) PEJ. **Overwintered** Scott (Blue L., Shakopee) PEJ.

Lesser Scaup — Late north (only report) 12/17–18 St. Louis (Duluth) PHS. Reported from nine south counties. Still 5000 present 12/11 Houston (Pool 8, U.M.R.N.W.F.R.) PEJ. Late south (overwintering birds?) 1/1 Dakota (8 near Hastings) JPM, 1/7 Washington JJS. Overwintered Washington (1), Scott (6 at Shakopee) PEJ. Early migrants 2/13 Hennepin (Bass Ponds — 5 males) SLC, 2/28 Olmsted PWP.

Harlequin Duck — Immature male and female overwintered 12/29 through March in Lake (Agate Bay, Two Harbors) JWL, m.ob.

Surf Scoter — All reports: 12/5 Houston (one at Pool 8, U.M.R.N.W.F.R.) PEJ, **12/8** Houston (2 at L. Pepin) FZL, **12/12** Meeker (one at L. Ripley, record-late south date) DMF.

White-winged Scoter — Two reports from Houston (Pool 8, U.M.R.N.W.F.R.): 12/2 FZL, 12/5 (1) PEJ.

Long-tailed Duck — All north reports: 12/11 Cook (Paradise Beach and Hovland) JWL, 12/18 St. Louis (Duluth CBC) PHS, 12/18 Cook (only one bird on Grand Marais CBC) *fide* RJS, 1/23 Lake PHS, 1/29 Lake (2 at Two Harbors) TAT, 2/6 Cook (Grand Marais) MTA, 2/19 Lake PEB. All south reports: 12/6–7 Dakota (imm. at Black Dog L.) JPM, ADS, 12/11 Scott (Fisher L.) DWK, 12/27–30 Dakota (adult male seen from Freedom Park, Prescott, WI) JPM, LS, DWK, 2/27 Goodhue JJS.

Bufflehead — Maximum of five overwintered 12/19–2/6 Lake (Agate Bay, Two Harbors) JWL, m.ob. Late north (away from L. Superior) 12/19 Otter Tail SPM. Overwintered south in Hennepin (one at Bass Ponds) SLC, PEJ. Highest reported count 12/11 Houston (200 at Pool 8, U.M.R.N.W.F.R.) PEJ. Additional south reports 1/1 Dakota (2) JPM, 1/1 Washington

LS, 1/1 Scott REH.

Common Goldeneye — Reported from 8 north and 15 south counties statewide. Maximum of 55 overwintered in Lake (Two Harbors) JWL. Recorded on Grand Forks-East Grand Forks CBC 12/18 Polk *fide* JMJ. Highest reported count 12/11 Houston (4000 at Pool 8, U.M.R.N.W.F.R., Pool 8) PEJ. Apparent early migrants 2/26 Hennepin (25 at Coon Rapids Dam) OLJ.

BARROW'S GOLDENEYE — Adult male 12/27–1/11 Dakota (seen in both MN and WI from Freedom Park, Prescott, WI) ph. †JPM, †CMB, †PEB, †PHS; also recorded on the Hastings-Etter CBC. Another report of two males on the Afton CBC will be reviewed by MOURC.

Hooded Merganser — Reported from five north and eight south counties. No west reports except 12/18 Otter Tail (Fergus Falls CBC) *fide* SPM. Overwintered again at Silver L. in Virginia, St. Louis County NAJ, ALE; late north migrant 1/2 Beltrami (2) DPJ. Overwintered south in Dakota (Black Dog L.) and Hennepin SLC. High count 1/22 Dakota (10) PEB. Also recorded on Duluth CBC 12/18 St. Louis PHS.

Common Merganser — Reported from 3 north and 14 south counties. Late north 12/11 Mille Lacs SPS, 1/9 Lake JWL. Early north 2/19 Lake PEB. Many reports south (especially Twin Cities counties) throughout January and February indicated overwintering.

Red-breasted Merganser — Reported 1/7 Lake (L. Superior) JWL, 1/29 St. Louis (French River) DWK, 2/1 St. Louis JJS, 2/6 Cook (Five Mile Rock) MTA. Late south 12/13 Olmsted PWP, 12/30 Dakota (2 males viewed from Prescott, WI) JPM, 1/16 Ramsey PEJ, 1/30 Wabasha JLU.

Gray Partridge — All reports: 1/25 Freeborn AEB, 1/29 Red Lake JMJ, 2/6 Pennington JMJ, (no date) Cottonwood BRB, plus the Henderson (8) and New Ulm (15) CBCs.

Ring-necked Pheasant — Reported from 30 counties statewide, including 1/29 Red Lake JMJ and 2/25 Polk BWF in the north.

Ruffed Grouse — Reported from 20 counties statewide. Only reports south: 12/10 Stearns DST, MAJ, 12/17 Fillmore (drumming) NBO.

Spruce Grouse — All reports: three locations in Lake including 12/26 (Ely CBC) JWL, 12/29 Lake of the Woods (Beltrami Island CBC) *fide* MHK, 1/8 Koochiching JMJ, ph. PHS, 2/5 St. Louis (CR 16 and US 53) JWL.

Sharp-tailed Grouse — Reported from 12 counties in range. Highest reported count 2/21 Aitkin (25) CLB, KWR.

Greater Prairie-Chicken — All reports: 12/8 Clay *fide* JMJ, 1/19 Norman JEB, 1/29 Polk JMJ, 2/05 Wilkin JPE, 2/13 Norman (6) PHS, plus the Crookston (6) and Fergus Falls (1) CBCs.

Wild Turkey — Reported from 29 counties statewide as far northwest as Clay and as far southwest as Yellow Medicine. Highest reported count (non-CBC) 2/5 Douglas (105) JPE; total of 284 tallied 12/18 St. Paul (North) CBC *fide* JPS.

Common Loon — All reports: 12/8 Wabasha (L. Pepin) FZL, 12/12 Washington (1) DPS.

YELLOW-BILLED LOON — Sixth state record 1/4 Lake (Two Harbors) †TW, AC, DL; refound 1/8,10,11 †RMD, †KRE *et al.*, ph. JWL.

Pied-billed Grebe — No reports.

Horned Grebe — Only report: 12/10 Houston (Pool 8, U.M.R.N.W.F.R.) FZL.

Red-necked Grebe — Only report: 12/18 St. Louis (Duluth CBC) *fide* JWL.

Spruce Grouse, 5 January 2005, Lake County. Photo by Sparky Stensaas.

American White Pelican — As many as nine individuals overwintered through 2/13 Dakota (Black Dog L.) PEJ, m.ob. Also reported 12/18 Freeborn AEB, 2/26 Goodhue (2 at Red Wing) DAB.

Double-crested Cormorant — Up to 17 reported 12/18 Dakota (Black Dog L.) PEB, where at least 7 attempted overwintering through 1/25 PEJ, m.ob. Also, 12/10 Houston (U.M.R.N.W.F.R., Pool 8) FZL.

Great Blue Heron — Reported from five counties statewide. Only north report 12/17 Otter Tail SPM. Latest report 1/2 Dakota (Black Dog L.) PEJ; also lingered 12/17 Rice DAB, 12/20 Hennepin DWK. A total of 14 reported on the St. Paul (NE Suburban) CBC *fide* RW. Early south **2/19** Hennepin (Bass Ponds, record-early if not overwintering) DWK.

Green Heron — Second winter record on Excelsior CBC **12/18** Scott (Shakopee) †RCA, AA, DWK, refound **12/20** RBJ. Previous late date 12/1/90 (***The Loon*** 63: 172).

Bald Eagle — Reported throughout the period from 50 counties statewide.

Northern Harrier — Found in 8 north and 13 south counties. Late north 12/12 Carlton EEO, 12/15 Otter Tail DST. Late south 12/18 Freeborn AEB and Sherburne (10, Sherburne N.W.R. CBC) *fide* RJS, 12/19 Anoka (4, first record for Cedar Creek CBC) SWe. No reports of overwintering; lack of January records suggests most birds left the state by mid-winter. Probable early south migrants 2/3 Brown BTS, 2/12 Dakota PWP. Early north 2/13 Norman (male) PHS.

Sharp-shinned Hawk — Reported throughout season from 11 north and 11 south counties, including late January reports as far north as Koochiching, Lake (1/29, †DWK), and Pennington.

Cooper's Hawk — Reported from 4 north and 12 south counties. Late north 12/18 St. Louis (Duluth CBC) *fide* JWL, **12/23** (no details) Crow Wing MRN, **1/5** (record-late north date) Carlton DAG, †JWL and Mille Lacs SPS. Like the preceding species, the winter status of Cooper's Hawk in northern Minnesota has apparently changed over the last few decades, but very few have ever been adequately documented after mid-December. South reports spanned the season. Overwintered 1/1–2/28 Ramsey AXH.

Northern Goshawk — Located in 19 north and 6 south counties including 1/12 Nicollet RMD, 2/12 Rice PEJ. Immature photographed 12/4 Dakota JPM.

Red-shouldered Hawk — Only north reports: 1/1 Morrison (Pillager CBC) *fide* MRN, 1/23 Aitkin SPM, 1/12 and 2/1 Pine (1) JMP. Most south reports from Hennepin: 1/4 (Bass Ponds) TAT, 1/8 RBW, 1/15 PEB, 1/1 (Coleman L.) SLC, (no date) LSi. Also reported 1/3 Sherburne PLJ, 1/22 Sherburne ABi, 1/14 Rice TFB.

Red-tailed Hawk — Reported from 13 north and 29 south counties as far north as Polk and St. Louis (Sax-Zim Bog area). Dark morphs reported 1/22 Dakota (Black Dog L.) PEB, 1/27 Scott (Blakely) JEB.

Rough-legged Hawk — Reported from only 30 counties (15 north, 15 south) compared to 57 last winter. Southernmost reports 12/18 Freeborn AEB, 1/30 Redwood RBW, 2/27 Fillmore RCA. Peak count 1/1 Philbrook CBC (25).

Golden Eagle — Approximately fifteen individuals reported from seven north and six south counties. North reports all from Northwest region except 12/18 Duluth CBC *fide* JWL, 1/1 Morrison (3, Pillager CBC) *fide* MRN, 2/10 St. Louis (Arkola Road) MTA. South reports on the Rochester (count week), Wabasha, and Winona CBCs, plus 1/23 Houston JJS and Rice LM, GBa, 2/28 Dakota (Mendota Bridge) RPR.

American Kestrel — Reported from 8 north and 16 south counties (35 last win-

Glaucous Gull (center), 1 December 2004, Black Dog Lake, Dakota County. Photo by James P. Mattsson.

ter) as far north as Norman and as far east as Pine. Present throughout period south.

Merlin — Only 11 individuals reported from 4 north and 4 south counties statewide. Male "Richardson's" 2/23 Dakota (Rosemount) ph. JPM.

GYRFALCON — Four accepted records; also see undocumented reports. Single adult gray morphs 1/9 Lake (Two Harbors) †BWF, 2/3–4/10 Dakota (Nininger Twp.) CCB, ph. †JPM, †PEB, m.ob., 2/21 Aitkin (CR 5, north of Palisade) †RJS. An unaged gray morph 2/6 Aitkin (CR 18, junction CR 5) †WCM *et al.* may have been the same individual as 2/21.

Peregrine Falcon — Reported from usual sites in St. Louis, Dakota, Hennepin and Ramsey, plus 12/1 Benton HHD, 2/26 Goodhue JEB.

Prairie Falcon — One report: 12/27 Meeker †DMF.

American Coot — Only north report: 12/18 Otter Tail (6, Fergus Falls CBC) *fide* SPM. Reported from seven south counties and six south CBCs. Overwintered Scott (9) PEJ and Washington (6) PEJ.

Sandhill Crane — Record-late **1/13** Chisago (1) †JMP. Also unusual was a lingering individual **12/17–18** Rice (Faribault CBC) m.ob., †DAB *fide* RJS. Record-early south **2/24** Houston (Pool Slough, MN/IA border) FZL.

Killdeer — One report: 2/24 Houston FZL.

Wilson's Snipe — Possibly overwintered through 2/13 St. Louis JRN. Additional reports: 12/4, 12/18 Hennepin (Excelsior CBC), 1/1, 2/12 Scott (Fisher L.) DWK, 1/10, 1/29 Hennepin (Old Cedar Avenue bridge) SLC. Also recorded on the Bloomington and St. Paul (North) CBCs.

American Woodcock — Reported **12/20** (second-latest date) Fillmore NBO.

Ring-billed Gull — Found in two north and ten south counties. Late north 12/25 Wadena PJB. Late south **1/22** Dakota (4) PEB. Early migrant 2/26 Nobles PEJ.

Herring Gull — Overwintered Lake and St. Louis; late north away from L. Superior

12/11 Mille Lacs SPS. Apparent influx of migrants 2/12 Lake (150 at Knife Island) JWL. Reported from six south counties thru 1/22 Dakota (6) PEB. Total of 361 still present 1/8 Dakota PEB.

Thayer's Gull — Only north reports 12/18 St. Louis (adult, Duluth CBC) PHS, 12/19 Lake (Two Harbors CBC) *fide* FJN. Highest reported count 12/18 Dakota (2 adults, 3 first-winter birds at Black Dog L. on Bloomington CBC) PEB. Additional reports of individual adults in Dakota 1/1 JPM, 1/2, 1/16 PEB.

Iceland Gull — One report of first-winter individual 12/4 Cook (Grand Marais) †PHS.

Lesser Black-backed Gull — Two birds (adult and second-winter) reported 12/3 Hennepin (L. Calhoun) BAF.

Glaucous Gull — Adult 12/18 St. Louis (Duluth CBC) PHS. Three adults 1/13 St. Louis (Scenic Highway 61) JWL. At least one adult, one first-winter, and one third-winter bird reported on several dates between 12/1 and 1/8 Dakota JPM, PEB, DWK. Also reported 12/4 Hennepin (adult at L. Calhoun) *fide* AXH, 1/16 Washington (Pt. Douglas) DWK.

Great Black-backed Gull — First-winter individual found 12/4 Hennepin (L. Calhoun) †BAF, †PEB. Presumably this same bird was seen on multiple occasions 12/23–1/6 Dakota (Black Dog L.) JPM, PEB, m.ob. and 2/8 Washington (Pt. Douglas) ph. JPM.

Thayer's Gull x Iceland Gull — Apparent intergrade 12/12 Hennepin (adult at L. Calhoun) †PEB.

Rock Pigeon — Reported from 44 counties throughout the state.

Eurasian Collared-Dove — Only report north: 1/20 Grant (4 at Herman) SPM. South reports also from known locations: 12/15–26 Swift BWF, LS, 1/2–2/11+ Dakota (max. 6 at Farmington) DWK, JPM, m.ob., 2/26 Houston (Caledonia) SPM.

Mourning Dove — Reported from 31 counties throughout state.

Eastern Screech-Owl — Reported from two north and seven south counties. Unusual location 12/19 Polk (Grand Forks-East Grand Forks CBC) *fide* DOL.

Great Horned Owl — Reported from 28 counties statewide.

Snowy Owl — At least 20 individuals reported from 10 north and 5 south counties. Immature male admitted to Raptor Center after being picked up 12/11 Nicollet (St. Peter) *fide* AXH. One died after being hit by vehicle 12/21 Yellow Medicine (US 75, north of Canby) *fide* PHS. All other south reports: 12/18 Ramsey (St. Paul NE Suburban CBC), 1/31–2/2 Lyon JT, 2/2 Dakota ADS.

Northern Hawk Owl — Largest documented invasion in state history; full details presented elsewhere in ***The Loon***. Two in **Norman** (1/8–2/24 along state highway 32 south of Gary GAO *et al.* and 2/24 along CR 39, 4.0 miles west of Syre MEB) may have been the first in the county in >100 years. Total of 15 injured or dead *fide* PHS, including one taken by a Northern Goshawk and one killed by a Great Gray Owl. Noteworthy south reports through 12/22 **Chippewa** (near Milan, present since early November) DT *fide* JSc, BWF, RJS, 12/25 **Wright** (St. Michael) *fide* ML, 1/21–28 **Isanti** (Dalbo W.M.A.) TM, 1/28–2/1 **Chisago** (Nessel Twp.) DP, TAN, SPS *et al.* Astounding was the record-high count of **42** hawk owls on the Sax-Zim CBC 12/20 St. Louis *fide* MSS.

Barred Owl — Reported from 14 north and 14 south counties. Rare leucistic individual banded and photographed in St. Louis (Duluth) *fide* PHS.

Great Gray Owl — Largest irruption

Great Gray Owl, 6 February 2005, Carlton County. Photo by Anthony X. Hertzel.

ever documented in Minnesota with reports from 26 north counties plus **Anoka, Benton, Carver, Chisago, Dakota, Hennepin, Kandiyohi, Meeker, Ramsey, Scott, Sherburne, Stearns, Washington** and **Winona** in the south. Hundreds were found dead. An amazing and unprecedented **256** were counted by a single party 2/20 Pine/Aitkin/Kanabec *fide* JWL. Single-day counts in Aitkin peaked 1/19 (**174**) CLB, KWR and 1/29 (**187**) CLW *et al*. First county records 1/24–3/27 **Red Lake** (Huot, also found in two more locations) RAE *et al*., 1/29 **Benton** (2.5 miles east of Rice) HHD. Many reports of unusual plumaged birds, including a melanistic bird photographed 12/15 St. Louis (CR 15) ph. MCA, ph. JWL. Complete details and data analyses will be published in ***The Loon***.

Long-eared Owl — All reports: 12/11 and 2/20 Meeker DMF, 12/22 Chippewa HHD, 1/1 Dakota (3 on Hastings-Etter CBC) AXH, 1/7 Olmsted JJS, 1/9 Ramsey AXH, 1/16 Wilkin SPM, 1/31 Rice TFB, 2/19 Dakota (Spring Lake Park) JPM. Singles also recorded on the Lamberton and Rochester CBCs.

Short-eared Owl — Statewide total of 18 individuals reported from six north and two south counties. North reports mostly from Clay and Marshall; reports after mid-January 1/23 Aitkin (2 near Tamarack) WEN, 2/5 Wilkin (2 at Rothsay W.M.A.) JPE, 2/6 Pennington (CR 3 and CR 25) JMJ. Only south reports: 1/22 Dakota *fide* AXH, 2/8 Yellow Medicine RAE.

Boreal Owl — Record-high irruption with lower mortality rate compared to recent such events; complete details will be published in a future issue of ***The Loon***. Unusual locations 1/15–16 Pennington (near Thief River Falls) SBr, ph. JMJ, 1/23 Stearns (St. John's Abbey) BLW *fide* PCC.

Northern Saw-whet Owl — Single birds overwintered 11/27–1/25 Hennepin (Bass Ponds) DWK, SLC *et al*., 12/1–3/4 Washington (Forest Lake; JW hosted >150 visitors), 12/14–2/26 Anoka REH *et al*. Additional south reports from Hennepin and Meeker in January. North reports 12/3 Kittson *fide* JMJ, 1/16–17, 1/29 Lake SLL, m.ob., 1/17 St. Louis (Sax-Zim Bog) JR, 1/29 St. Louis (West Duluth) JRN, 1/31 Becker (near Audubon) *fide* JMJ.

***SELASPHOROUS*, sp.** — Adult female Rufous/Allen's Hummingbird lingered through 12/3 St. Louis (Duluth) ph. LME, m.ob. Also see fall report.

Belted Kingfisher — Reported from only 12 counties in range. Overwintered Otter Tail (same bird seen on Fergus Falls CBC) DST, SPM. Unusual late-winter report 2/6 Polk JMJ. CBC total of 38 individuals on 18 counts.

Red-headed Woodpecker — All north reports: 12/11 & 2/19 Mille Lacs SPS, RCA, 12/31 Kanabec HHD. Overwintered Anoka (Cedar Creek, including 11 recorded on the Cedar Creek Bog CBC) JLH; additional south reports 12/7 Sherburne

Black-backed Woodpecker, 20 December 2004, Sax-Zim Bog, St. Louis County. Photo by Sparky Stensaas.

(Sherburne N.W.R.) PLJ, 1/29 Benton HHD, plus the Lamberton, Owatonna (2), and Sherburne N.W.R. CBCs.

Red-bellied Woodpecker — Reported from 39 counties statewide except none in Southwest. Unusual location in January (no date) **Koochiching** (pair at feeder in Loman) *fide* F. Swendsen, L. Grimm.

Yellow-bellied Sapsucker — All reports: juvenile documented at feeder 11/23–1/2 Mower (including Austin CBC) *fide* RJS, 12/18 Olmsted (male at feeder, Rochester CBC) PWP, 12/20 Hennepin (juvenile) TAT. Three additional CBC reports lacked details.

Downy Woodpecker — Reported from 49 counties statewide and all regions.

Hairy Woodpecker — Reported from 48 counties and all regions.

American Three-toed Woodpecker — All reports: 12/29 Beltrami (male and female on Beltrami Island CBC) *fide* MHK, 1/22–2/12 St. Louis (McDavitt Rd, Sax-Zim Bog) m.ob.

Black-backed Woodpecker — About 10 individuals reported in 6 north counties. First county record 1/29 **Otter Tail** SPM.

Northern Flicker — Reported from 17 counties statewide, including north reports 12/19 Polk (Grand Forks-East Grand Forks CBC) *fide* DOL, 12/20 Otter Tail (Fergus Falls CBC) *fide* SPM.

Pileated Woodpecker — Reported from 19 north and 22 south counties in all regions including the Cottonwood, Mountain Lake-Windom, and Marshall CBCs in the Southwest.

Northern Shrike — Found in 30 north and 24 south counties in all regions of the state.

Gray Jay — Reported from nine counties in range.

Blue Jay — Reported from 54 counties throughout the state.

Black-billed Magpie — Found in 10 counties in range.

American Crow — Reported from 54 counties throughout the state.

Common Raven — Reported from 21 counties in range.

Horned Lark — Reported from 18 north and 17 south counties. Potential early north migrants 1/15 Lake of the Woods *fide* JMJ, 1/18 Marshall JEB, 1/23 Douglas JPE. Present south in small numbers throughout period. Reported as common 1/21 through end of period (not absent at any point during winter) Brown BRB. Reported "everywhere" 2/21 in southern Washington LS, a day after a five inch snowfall. Highest reported count 2/25 (100) Olmsted PWP.

Black-capped Chickadee — Reported from 53 counties statewide.

Boreal Chickadee — Reported from five counties in range.

Tufted Titmouse — Reported within usual range in Fillmore, Houston, Olmsted, Winona. Also present at feeder 2/12–13 **Dakota** ADS, ph. JPM.

Red-breasted Nuthatch — Reported from 20 north and 18 south counties statewide except in Southwest.

White-breasted Nuthatch — Reported from 51 counties statewide.

Brown Creeper — Reported from five north and fourteen south counties statewide. CBC total of 141 on 35 counts.

Carolina Wren — Overwintered through at least 2/15 Hennepin (Old Cedar Avenue) JPM, m.ob. Present in Washington (Lake Elmo) during St. Paul (NE Suburban) CBC. (**Note:** Same bird present since

10/03) *fide* RJS.

Winter Wren — All Hennepin reports: 12/6 & 1/8 (Minnehaha Creek) JPS, 12/18 Excelsior CBC *fide* HCT, 1/3 (location?) TAT, 1/3–2/28 (stream near Old Cedar Avenue) SLC.

Golden-crowned Kinglet — Reported from five north and four south counties. All north reports: 12/19 Lake (3, Two Harbors CBC) *fide* FJN, 1/1 Todd (3, Long Prairie CBC) JSK, 2/5 Koochiching JMJ, 2/5 St. Louis (McDavitt Rd, Sax-Zim Bog) MTA, 2/6 Aitkin (2) WEN. All south reports: 12/4, 12/11, 1/9 Scott (Wilkie Unit, M.V.N.W.R.) DWK, plus the Excelsior, Lac Qui Parle, and Marshall CBCs.

Eastern Bluebird — All reports: St. Paul (North) and Winona CBCs, 1/19 Houston (town of Houston) KAK.

Townsend's Solitaire — As many as 16 individuals reported from four north and three south counties. North reports from Becker (Tamarac N.W.R.), Cook (4 birds, 3 locations), Lake, St. Louis (3 birds, 2 locations). All south reports: overwintered 11/14 through 3/28 Sherburne (L. Ann, Sand Dune State Forest) m.ob., 12/11 **Meeker** (section 19, Dassel Twp.) DMF, 12/22–27 **Chippewa** HHD, 2/4 Ramsey (U of MN, St. Paul Campus) PJ, 2/25 **Kandiyohi** (Sibley State Park) RSF.

Hermit Thrush — All reports: 1/2 Mower (Austin CBC) *fide* TD, 1/8 Dakota (Resurrection Cemetery) TAT, 1/24, 1/25, 1/30 Rice TFB, 1/25 Hennepin (2 at Wirth Park) TAT.

American Robin — Found in 25 counties statewide. Overwintered in Lake (Two Harbors) and Hennepin (Minneapolis) PEB. High counts 1/26 Dakota (50 in apple tree) JPM, 1/10 & 1/29 Hennepin (100+ in Bloomington) SLC.

Varied Thrush — Up to 30 individuals reported in 8 north and 10 south counties. Overwintered St. Louis (Normanna Twp.) *fide* JWL, Crow Wing JSB, Kandiyohi (male) RSF, Hennepin (male in Bloomington) ph. JPM, m.ob. All other north reports: 11/27–12/11 Cook (Gunflint Trail) SA, 12/10–20 Pennington (near Goodridge) LR, JMJ, PHS, 12/10–1/13 Hubbard (LaPorte) RCS, 12/12–20 Becker (including Tamarac N.W.R. CBC) ph. WB, 12/18 Itasca (2) HL, 12/18 Cook (Grand Marais CBC), 12/20 Otter Tail (Fergus Falls CBC), 12/26 Becker (Ponsford) RB, late Dec–2/6 Crow Wing (Breezy Point) DM, most of January in Hubbard (Nevis) MAW, 1/3 Cook (Devils Track L.) *fide* AXH, 1/11 Itasca (Itasca Community College, Grand Rapids) *fide* AXH. All other south reports: 12/2–1/31 Ramsey (male in Falcon Heights) MEO, about two weeks through 12/17 Anoka (Coon Rapids, possibly refound late January) *fide* AXH, 12/13 Ramsey (Vadnais Heights) *fide* AXH, 12/19 Ramsey (Roseville) RSc, 1/5–19 Anoka (Ramsey, killed by cat last date) MJ, mid-Jan–1/28 **Waseca** (near Waseca) VMK, 1/19–21 Olmsted (Rochester) PWP, 1/30 Stearns HHD, late January in Washington (Bald Eagle L.) JL, 2/9 **Fillmore** (near Lanesboro) *fide* AEB, 2/10 Dakota (2 in Lakeville) LL.

Gray Catbird — Three CBC reports, including singles north 12/18 St. Louis (Duluth) *fide* JWL and 12/19 Lake (Two Harbors) *fide* FJN.

Brown Thrasher — All reports: 12/12 Roseau *fide* JMJ, 12/18 Clay *fide* JMJ, 12/20 & 12/25 Anoka (Fridley) RCS.

European Starling — Reported in 42 counties statewide.

Bohemian Waxwing — Reported from 20 north counties plus the following 3 south counties: 12/5–7 Rice (2) TFB, 1/15 Kandiyohi (10) RSF, 1/30 Benton HHD,

Cedar Waxwing — Reported from 8 north and 16 south counties throughout state. High count 1/2 Dakota (100) JPM.

American Tree Sparrow — Reported

Varied Thrush, 31 December 2004, Bloomington, Hennepin County. Photo by Joel Johnson.

from 8 north and 26 south counties statewide, including 12/19 Polk (Grand Forks-East Grand Forks CBC) *fide* DOL.

Chipping Sparrow — Record-late south **1/2** Mower (adult at feeder, Austin CBC) †JEM. Also reported **12/13** Cottonwood †BRB.

Fox Sparrow — All reports: singles 12/26 on Mankato and St. Paul (NE Suburban) CBCs, plus 2/27 Carver WCM.

Song Sparrow — Total of seven birds on five CBCs, including 12/18 Duluth (1) *fide* JWL. Also reported 1/14 Hennepin RBJ, 1/29 Hennepin TAT, 1/27 Scott JEB, 2/20 Hennepin (Wood L.) DWK.

Lincoln's Sparrow — Only report **1/15** Otter Tail SPM.

Swamp Sparrow — All reports: 12/4, 12/25, 1/4, 1/23 (2), 1/30, 2/5 Hennepin (Bloomington) SLC, 1/9 Scott (Wilkie Unit, M.V.N.W.R.) DWK, 1/20 Hennepin TAT.

White-throated Sparrow — Reported

from four north and seven south counties statewide. Overwintered Kandiyohi RSF. Also, reported west 12/2 Douglas *fide* JMJ, 12/18 Otter Tail SPM and McLeod (NW McLeod CBC) RWS, 2/12 Clay RHO.

Harris's Sparrow — All reports: one on Lamberton (12/16) and two on Albert Lea (12/18) CBCs.

White-crowned Sparrow — All reports: **1/2** Lake *fide* JWL, (no date) Fillmore NBO.

Dark-eyed Junco — Found in 12 north and 26 south counties throughout.

Lapland Longspur — Reported from four north and five south counties statewide. Relatively low numbers overall but common in Southwest from 1/21 through end of period BRB; also note 779 on Mountain Lake-Windom CBC.

Snow Bunting — Reported from 22 north and 13 south counties and all regions statewide. Maxima 2/5 Polk (600) EEF, 1/26 Dakota (300+ near Emery Ave/180th St) JPM.

Northern Cardinal — Reported from 11 north and 25 south counties in all regions except the Southwest. Overwintered north in Hubbard (Akeley) MAW and Lake (at least 2 individuals, Two Harbors) JWL.

Red-winged Blackbird — Except for a total of 1669 on 17 CBCs, reported from only four north and nine south counties. High count of 566 on the Willmar CBC.

meadowlark, sp. — Two reports of non-vocalizing "Western" Meadowlarks, but documentation insufficient to rule out Eastern: 1/28 Rice DAB, 2/24 Rice FVS.

Rusty Blackbird — All reports: 12/20 Grant EJE, **1/2** Otter Tail (2 on Battle Lake CBC) †EJE, 1/4 Hennepin (Bloomington, male) SLC. Also found on Lamberton (9), Sherburne N.W.R. (67) and Tamarack N.W.R. (1) CBCs.

Gray-crowned Rosy-Finch, 31 December 2004, Arlone Township, Pine County. Photo by Anthony X. Hertzel.

Common Grackle — Reported from nine north and four south counties. Only January report north 1/24 Morrison RBJ. Overwintered Hennepin (Old Cedar Avenue bridge; max. of 4 on 1/30) SLC.

Brown-headed Cowbird — Only report: 1/1 Dakota (one on Hastings-Etter CBC) ADS.

Baltimore Oriole — Injured adult male 11/23–**1/16** Ramsey NSp. It survived subzero temperatures by feeding on jam and sunflowers but was found dead 1/18.

GRAY-CROWNED ROSY-FINCH — Interior form at rural residence near Hinckley 12/30 – early March in Pine ph. AXH, ph. †PHS (***The Loon*** 77:182–183). (**Note:** access restricted by homeowner). Twelfth state record and third in last five years.

Pine Grosbeak — Reported from 14 north counties in range. Highest reported count 278 on the Ely CBC.

Purple Finch — Reported from 16 counties statewide.

House Finch — Reported from 8 north

and 24 south counties in all regions.

Red Crossbill — Reported from 10 north counties. Maximum count 1/16 St. Louis (30 at Sax-Zim) KRE, plus 25 on the Beltrami Island CBC.

White-winged Crossbill — Reported from seven north counties. Numbers generally down. Maximum count 24 on the Carlton-Cloquet CBC.

Common Redpoll — Found in 44 counties throughout the state. Cumulative CBC total of 11,817 birds with high counts of 868 on Long Prairie and 796 on Battle Lake CBCs. Maximum count south 300 overwintered at feeder in Kandiyohi RSF.

Hoary Redpoll — A total of 15 individuals reported from 12 north and 2 south counties. Details provided only for the following: 12/22 Aitkin †CLB, KWR, 1/23 Douglas †JPE, 1/29 Lake †JWL, 1/31 Otter Tail (2) †DST.

Pine Siskin — Reported from 21 north and 17 south counties in small to moderate numbers throughout period. Maxima north 675 on Duluth CBC and south 266 on St. Paul (North) CBC.

American Goldfinch — Reported from 13 north and 26 south counties throughout the period.

Evening Grosbeak — Reported in low numbers from 11 north counties. Highest reported non-CBC count 2/7 Aitkin (40) CLB, KWR. Total of 572 recorded on 18 CBCs, including 92 at International Falls.

House Sparrow — Reported from 40 counties statewide except the Southwest.

Observers

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AC	Agnes Chwae
ADS	Andrew D. Smith
AEB	Al E. Batt
AJM	AJ Morales
ALE	Audrey L. Evers
AXH	Anthony X. Hertzel
BJM	Barbara J. Martin
BLA	Betty L. Ammerman
BLW	Bruce L. Wollmering
BRB	Brad R. Bolduan
BRK	Byron R. Kinkade
BTS	Brian Smith
BWF	Ben W. Fritchman
CCB	Chris Benson
ChH	Chad Heins
CLB	Cindy L. Butler
CLW	Chris L. Wood
CSt	Cliff Steinhauer
DAB	David A. Bartkey
DAC	Dave Cahlander
DCT	Dianne C. Tuff
DCZ	Dave C. Zumeta
DFN	David F. Neitzel
DL	Darcy Love
DLB	Diane L. Brudelie
DM	Darrell Mortenson
DMF	Dan M. Floren
DOL	David O. Lambeth
DP	Dave Pauly
DPJ	Douglas P. Johnson
DPS	David P. Sovereign
DST	Dan & Sandy Thimgan
DT	Dave Trauba
DWK	Douglas W. Kieser
EEF	Eve E. Freeberg
EEO	Earl E. Orf
EJE	Eddy & Judy Edwards
FAE	Fred A. Eckhardt
FVS	Forest V. Strnad
FZL	Fred Z. Lesher
GAO	Gary A. Otnes
GBa	Gene Bauer
GLS	Gary L. Simonson
HCT	Howard C. Towle
HHD	Herb H. Dingmann
HL	Helen Larson
JEB	Jerry E. Bonkoski
JEM	John E. Morrison
JEZ	James E. Zimmerman
JJS	Jeff Stephenson
JL	Janette Leete
JLH	James L. Howitz
JLU	Janice & Larry Uden
JMJ	Jeanie M. Joppru

JMP	Jackie M. Potts
JPE	John P. Ellis
JPM	James P. Mattsson
JPS	Julian Sellers
JQ	John Quinn III
JR	Jennifer Reidy
JRN	Jeff R. Newman
JSB	Jo & Steve Blanich
JSc	John Schladweiler
JSK	John & Susan Kroll
JSS	Jack Sprenger
JT	Janet Timmerman
JW	John Wallner
JWL	James W. Lind
KAK	Karla A. Kinstler
KAR	Kathryn A. Rivers
KRE	Kim R. Eckert
KTP	Keith T. Pulles
KWR	Kim W. Risen
KZ	Kenneth Zimmer
LL	Lyle Lessond
LM	Lyle Myers
LME	Laura M. Erickson
LR	Loren Race
LS	Linda Sparling
LSi	Leenardia Simpson
MAJ	Murdoch A. Johnson
MaM	Maggie Mau
MAW	Marlene A. Weber
MCA	Mark C. Alt
MEB	Mel & Elaine Bennefeld
MEO	Manley E. Olson
MHK	Martin H. Kehoe
MJ	Mark Junghans
MJC	Mary Jo Christopherson
ML	Madeleine Linck
MRN	Michael R. North
MSS	Mark “Sparky” Stensaas
MTA	Tom Auer
NAJ	Nancy A. Jackson
NFT	Nels F. Thompson
NBO	Nancy B. Overcott
NSp	Nancy Sparrow
OLJ	Oscar L. Johnson
PEB	Paul Budde
PEJ	Paul E. Jantscher
PHS	Peder H. Svingen
PJ	Per Johansson
PJB	Paul J. Binek
PLJ	Paul L. Johnson
PWP	Paul Pedersen
RAE	Ron A. Erpelding
RB	Ruth Berquist
RBJ	Robert B. Janssen
RBW	Bob Williams
RCA	Renner C. Anderson
RCK	Rose C. Kneeskern
RCS	Rolf C. Smeby
RDK	Ron D. Kneeskern
REH	Robert E. Holtz
RHO	Robert H. O’Connor
RWS	Robert W. Schroeder
RJS	Roger J. Schroeder
RMD	Robert M. Dunlap
RPR	Robert P. Russell, Jr.
RSc	Rick Schlosser
RSF	Randy S. Frederickson
RW	Richard Wachtler
SA	Sue Abrahamsen
SAS	Shelley A. Steva
SBr	Sue Braastad
SCa	Sally Cagle
SES	Steven E. Schon
SID	Sue I. Durrant
SLC	Steve L. Carlson
SLF	Steve L. Falkowski
SLL	Sharon L. Lind
SMc	Sue McDonnell
SPM	Steve P. Millard
SPS	Steve St ucker
STW	Sylvia T. Winkelman
SWe	Steve Weston
TAN	Tom A. Nelson
TAT	Tom Tustison
TD	Terry Dorsey
TFB	Tom F. Boevers
TM	Tim Marion
TW	Tim Walsh
VMK	Viola & Merlin Krassin
WB	Wayne Brininger
WC	Walt Carroll
WCM	William C. Marengo
WEN	Warren E. Nelson
FWLB	William L. Brown

Abbreviations

C.P. County Park

D.N.R Department of Natural Resources

U.M.R.N.W.F.R. Upper Mississippi River National Wildlife & Fish Refuge

M.V.N.W.R. Minnesota Valley National Wildlife Refuge

Minnesota 2004–2005 Christmas Bird Count Summary

Roger Schroeder

Another exceptional performance from the Minnesota CBC crew! The total of 336,368 individual birds is well above the 15-year average, and ranks as the fifth highest census total in Minnesota CBC history. (Not coincidentally, the 125,559 Canada Geese tallied is the sixth highest CBC total in Minnesota.) A record 65 Minnesota CBC areas tallied a total of 133 species on Count Day; which equals the fourth highest on record. At the time of this writing no results had yet been received from the Minnesota portion of the LaCrosse-LaCrescent CBC.

A new count from Virginia — thanks to the initiative of Deb and Steve Buria-Falkowski — launched its inaugural CBC in grand style with 30 species including Boreal Chickadee and Hoary Redpoll. Welcome Virginia! In addition, results were received for the first time from three counts that have been active for several years. The Spruce Grouse observed on the Ely CBC (coordinated by Bill Tefft) was one of only three birds seen last season. Arthur Straub, compiler of the CBC done in the Henderson Area submitted results from the past seven years, and the Whitewater Valley (coordinated by Julie McCormick, and Andy & Joyce Buggs) included Golden Eagle on its tally. Thanks to all CBC coordinators and compilers for another excellent year of reporting results.

The Minnesota winter of 2004–05 will most likely be remembered for the astounding invasion of Great Gray and Northern Hawk owls. Anecdotally, Jo Blanich — who has coordinated the Crosby CBC since its inception in 1967 — commented that she has "never seen any Great Gray Owl invasion like this one." Although the immensity of this invasion was not fully realized until after CBC time, a total of 60 Northern Hawk Owls was reported from 8 CBCs, and 204 Great Gray Owls from 18 CBCs were tallied. Furthermore, the 70 Great Grays and 42 hawk owls on the Sax-Zim CBC represent the highest official Audubon CBC tally in the nation for each species ever! Great Gray Owls were observed for the first time on the following CBCs: Cook Area, Ely, Pillager, Pine County, St. Paul (North), and Virginia, while first occurrences of Northern Hawk Owl were reported from Ely, Pine County, Rice Lake, Two Harbors, and most unexpectedly from Lac Qui Parle (though in Chippewa County) — about 150 miles farther southwest than the expected winter range.

One former subspecies of Canada Goose has cackled long enough to get split from *Branta canadensis*. Cackling Goose (*Branta hutchinsii*) was added to Minnesota's composite CBC list in its first year as a new species. This goose by another name was counted on nine CBCs totaling 222 individuals, and has several compilers wondering which split off the old block awaits them next year.

Minnesota CBC participants observed two (or was it three?) new species for the composite CBC list. Although it was anticipated that Cackling Goose would turn up on at least one CBC this season, the Green Heron observed on the Excelsior count was entirely unexpected. Those two species bump the Minnesota composite list to 199 Count Day species! We came dangerously close to reaching 200 with the observation of a *Pheuticus* sp. on the St. Paul (north) CBC. First reported as first-year male Black-headed Grosbeak, circumstances dictated that the St. Paul (north) compiler make the cautious but unpopular decision to report this individ-

Great Gray Owl, 25 February 2005, Aitkin County. Photo by Dave Cahlander.

ual at the genus level.

Trumpeter Swan numbers continue their upward trend as wintering populations of this bird gain strength in Minnesota. Considered un-established until 1997–98, Trumpeter Swan CBC totals have increased sharply since — primarily due to the establishment of the Northern Wright County CBC in 2001–02. Even so, this year's tally of 1,697 is nearly double the tally of 2001–02, making this an interesting statistic to watch. Regarding raptors, both Bald Eagle and Cooper's Hawk continue their annual upward trend, while Common Goldeneye (3,670 birds tallied), Common Merganser (6,422), and Common Raven (1,668) were all… well… common… and were also observed in record high numbers.

After a three-year absence from Minnesota CBCs, the American Three-toed Woodpecker was observed on the Beltrami Island count, while a total of three Barrow's Goldeneyes was reported for the first time in seven years from both Afton and Hasting-Etter. The Sandhill Crane observed on the Faribault is only the third ever of this species in Minnesota. Three individual Snow Geese, Northern Pintail, Spruce Grouse, Merlin, Varied Thrush, and Gray Catbird round out our list of triples.

Several additional observations of interest include 17 American White Pelican reported from four CBCs, 4 Wilson's Snipe (from Bloomington, Excelsior, and St. Paul-Northeast), and 10 Greater Scaup from Duluth. Also worthy of mention were the Red-necked Grebe (Duluth), Mute Swan (Afton, Faribault, and Rochester), Carolina Wren (Austin, St. Paul Northeast), Townsend's Solitaire (Lac Qui Parle), Boreal Chickadee (Aurora, Beltrami Island, and 12 at Isabella), Tufted Titmouse (Rochester, and 12 at Winona), Chipping Sparrow (Austin), Fox Sparrow (St. Paul North), and Brown-headed Cowbird (Hastings-Etter).

215 Rainbow Drive, Marshall, MN 56258.

Species	Afton	Albert	Aurora	Austin	Battle	Baudet	Bemidj	Bloomi	Beltra	Cedar	Cook A	Cotton	Carlto	Crooks	Crosby	Detroi
Snow Goose	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cackling Goose	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Canada Goose	7,943	2,147	–	1,015	1,271	–	5	5,731	–	323	–	40	–	–	–	–
Mute Swan	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Trumpeter Swan	10	3	–	–	468	–	–	4	–	–	–	–	–	–	–	–
Tundra Swan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wood Duck	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–
Gadwall	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
American Black Duck	7	–	–	–	–	–	0	6	–	–	–	–	–	–	–	–
Mallard	438	219	–	805	18	–	11	4,108	–	–	–	–	–	–	–	4
Northern Shoveler	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Pintail	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Canvasback	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–
Redhead	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ring-necked Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greater Scaup	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lesser Scaup	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Harlequin Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Long-tailed Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bufflehead	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Common Goldeneye	1,510	–	–	–	23	–	2	5	–	–	–	–	–	–	–	–
Barrow's Goldeneye	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hooded Merganser	–	–	–	0	–	–	4	7	–	–	–	–	–	–	–	–
Common Merganser	1,550	–	–	–	–	–	–	1,156	–	–	–	–	–	–	–	–
Red-breasted Merganser	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ruddy Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gray Partridge	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ring-necked Pheasant	–	19	–	12	–	–	–	2	–	–	–	62	–	–	–	–
Ruffed Grouse	–	–	–	–	6	1	5	–	–	–	5	–	7	–	4	–
Spruce Grouse	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Sharp-tailed Grouse	–	–	–	–	–	4	–	–	–	–	–	–	–	15	–	–
Greater Prairie-chicken	–	–	–	–	–	–	–	–	–	–	–	–	–	6	–	–
Wild Turkey	21	36	–	40	68	–	–	44	–	1	–	13	6	–	–	–
Red-necked Grebe	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American White Pelican	–	1	–	–	–	–	–	11	–	–	–	–	–	–	–	–
Double-crested Cormorant	–	–	–	–	–	–	–	17	–	–	–	–	–	–	–	–
Great Blue Heron	–	–	–	1	–	–	–	2	–	–	–	1	–	–	–	–
Green Heron	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkey Vulture	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Osprey	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bald Eagle	54	4	3	5	2	4	7	18	–	6	7	1	3	–	5	1
Northern Harrier	–	2	–	1	–	–	–	–	–	4	–	–	–	–	–	–
Sharp-shinned Hawk	–	–	–	0	1	–	1	4	–	1	–	–	1	1	2	1
Cooper's Hawk	–	2	–	1	–	–	–	4	–	–	–	2	–	–	–	–
Northern Goshawk	–	–	–	–	–	–	–	2	1	–	–	–	–	–	–	–
Red-shouldered Hawk	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–
Red-tailed Hawk	7	22	–	14	–	–	–	47	–	15	–	5	1	–	1	–
Rough-legged Hawk	–	2	–	1	1	–	–	–	–	9	–	–	4	–	–	–
Golden Eagle	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Kestrel	–	1	–	1	–	–	–	2	–	1	–	7	–	–	–	–
Merlin	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Peregrine Falcon	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
American Coot	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Sandhill Crane	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wilson's Snipe	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Ring-billed Gull	3	–	–	–	–	–	–	267	–	–	–	–	–	–	–	–
Herring Gull	–	–	–	–	–	–	–	401	–	–	–	–	–	–	–	–
Thayer's Gull	–	–	–	–	–	–	–	5	–	–	–	–	–	–	–	–
Glaucous Gull	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–
Rock Pigeon	12	54	19	492	153	24	173	461	–	–	58	–	227	270	61	68
Eurasian Collared-Dove	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mourning Dove	21	19	3	61	4	1	2	50	–	9	–	1	1	–	–	–
Eastern Screech-Owl	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Great Horned Owl	–	4	–	3	1	–	–	8	–	–	–	2	1	–	–	1
Snowy Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Hawk Owl	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Barred Owl	–	2	0	5	2	1	–	3	2	–	–	–	0	–	–	–
Great Gray Owl	–	–	1	–	–	6	1	–	–	–	5	–	2	–	–	–
Long-eared Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Saw-whet Owl	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Belted Kingfisher	–	1	–	4	–	–	–	1	–	3	–	–	–	–	–	–
Red-headed Woodpecker	–	–	–	–	–	–	–	–	–	11	–	–	–	–	–	–
Red-bellied Woodpecker	7	13	–	24	20	–	–	27	–	17	–	3	2	1	13	3
Yellow-bellied Sapsucker	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1
Downy Woodpecker	9	37	6	76	68	4	14	128	2	24	15	22	19	10	27	15
Hairy Woodpecker	4	16	14	19	24	7	14	51	6	11	18	20	20	6	12	12
American Three-toed Woodpecker	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–

Table 1. Total number of species for each location of the 2004–05 Minnesota CBC.

Species	Afton	Albert	Aurora	Austin	Battle	Baudet	Bemidj	Bloomi	Beltra	Cedar	Cook A	Cotton	Carlto	Crooks	Crosby	Detroi
Black-backed Woodpecker	–	–	–	–	–	2	–	–	5	–	1	–	1	–	–	–
Northern Flicker	2	1	–	–	–	–	–	1	–	3	–	–	–	–	–	–
Pileated Woodpecker	1	4	–	4	16	1	9	10	1	6	2	1	4	2	7	6
Northern Shrike	–	–	–	1	2	1	2	4	–	4	1	–	7	–	6	–
Gray Jay	–	–	4	–	–	8	–	–	16	–	13	–	6	–	–	–
Blue Jay	16	109	27	107	91	8	94	65	3	164	41	28	59	14	95	16
Black-billed Magpie	–	–	–	–	–	20	–	–	4	–	–	–	–	3	–	–
American Crow	170	887	11	1,294	119	6	82	1,453	–	233	5	66	39	17	95	38
Common Raven	–	–	157	–	–	128	18	–	87	4	71	–	41	–	3	–
Horned Lark	–	41	–	12	–	–	–	–	–	–	–	4	–	–	–	–
Black-capped Chickadee	98	74	321	229	387	65	258	677	73	269	369	38	331	48	393	91
Boreal Chickadee	–	–	1	–	–	–	–	–	4	–	–	–	–	–	–	–
Tufted Titmouse	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Red-breasted Nuthatch	9	2	16	3	12	5	27	8	15	3	43	2	21	3	13	3
White-breasted Nuthatch	11	46	5	108	114	7	33	141	3	39	19	21	7	20	50	37
Brown Creeper	–	–	–	2	6	–	–	2	–	1	1	8	1	–	–	–
Carolina Wren	–	–	–	0	–	–	–	–	–	–	–	–	–	–	–	–
Winter Wren	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Golden-crowned Kinglet	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Eastern Bluebird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Townsend's Solitaire	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hermit Thrush	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
American Robin	214	6	–	–	3	–	8	177	–	44	–	1	11	3	–	1
Varied Thrush	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gray Catbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brown Thrasher	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
European Starling	2	407	32	628	268	15	67	691	–	60	11	–	182	263	91	30
Bohemian Waxwing	–	–	–	–	21	150	640	–	–	–	9	–	9	–	183	3
Cedar Waxwing	67	15	–	32	36	–	13	45	–	1	–	21	–	–	27	24
American Tree Sparrow	–	32	–	42	16	–	–	134	–	153	–	44	–	–	–	–
Chipping Sparrow	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Vesper Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fox Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Song Sparrow	–	2	–	–	–	–	–	2	–	–	–	–	–	–	–	–
White-throated Sparrow	–	1	–	1	–	–	–	2	–	–	–	–	–	–	–	–
Harris's Sparrow	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dark-eyed Junco	74	132	1	371	29	–	–	264	–	139	31	51	2	16	4	19
Lapland Longspur	–	35	–	–	1	–	–	–	–	–	–	59	–	–	–	–
Snow Bunting	–	–	–	4	31	–	105	–	1	–	–	–	9	–	–	38
Northern Cardinal	30	26	–	60	17	–	–	221	–	44	–	6	2	–	5	1
Red-winged Blackbird	25	1	–	–	–	–	–	2	–	–	–	249	–	–	–	1
Rusty Blackbird	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–
Brewer's Blackbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Common Grackle	–	6	–	–	1	–	–	2	–	–	–	1	–	–	–	–
Brown-headed Cowbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pine Grosbeak	–	–	100	–	–	59	17	–	31	–	210	–	45	–	–	–
Purple Finch	2	2	–	–	4	–	–	–	–	12	17	4	–	–	2	22
House Finch	6	77	–	85	13	–	6	217	–	3	–	6	–	3	1	13
Red Crossbill	–	–	–	–	–	2	–	–	25	–	–	–	6	–	–	–
White-winged Crossbill	–	–	–	–	–	–	5	–	–	–	–	–	24	–	–	–
Common Redpoll	–	–	272	1	796	412	331	2	310	75	468	9	356	308	181	105
Hoary Redpoll	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–
Pine Siskin	20	10	124	29	34	–	341	9	1	41	168	12	217	54	89	26
American Goldfinch	16	90	17	119	119	–	9	260	–	120	113	18	80	41	119	61
Evening Grosbeak	–	–	15	–	–	91	–	–	–	–	59	–	3	–	–	–
House Sparrow	8	348	24	917	241	178	97	773	–	46	44	341	147	925	122	106
Count Week	–	–	1	3	–	–	1	–	–	–	–	–	1	–	–	–
Count Day	36	46	22	44	42	27	34	63	21	36	27	35	40	22	27	29
Sum	12,371	4,961	1,173	6,633	4,510	1,210	2,403	17,748	593	1,899	1,804	1,169	1,906	2,029	1,611	747
goose sp.	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
scaup sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
scoter sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
grouse sp.	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	
accipiter sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
buteo sp.	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
hawk sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
gull sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
owl sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
waxwing sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
pheucticus sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
sparrow sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
crossbill sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
finch sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
bird sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Sum	3	–	–	–	–	–	–	–	1	–	–	–	–	–	–	

Table 1, continued.

Species	Duluth	Ely	Excels	Fariba	Fergus	Fargo-Moorhead	Fairmo	Grand Forks	Grand Marais	Grand Rapids	Hastin	Hernde	Hibbin	Intern	Isabel	Itasca
Snow Goose	–	–	–	–	0	–	–	–	–	–	1	1	–	–	–	–
Cackling Goose	–	–	–	4	–	134	–	–	–	–	2	–	–	–	–	–
Canada Goose	339	–	3,013	5,301	7,769	3,913	4,456	–	–	12	6,449	1,200	–	–	–	–
Mute Swan	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Trumpeter Swan	–	–	6	–	16	1	–	–	–	–	8	–	–	–	–	–
Tundra Swan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wood Duck	–	–	2	–	–	–	–	–	–	–	1	–	–	–	–	–
Gadwall	–	–	39	–	–	–	–	–	–	–	–	–	–	–	–	–
American Black Duck	21	–	5	1	–	–	–	–	16	–	2	–	–	–	–	–
Mallard	644	–	2,957	1,363	1,500	532	263	–	208	–	1,757	–	–	64	–	–
Northern Shoveler	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Northern Pintail	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Canvasback	–	–	4	–	–	1	–	–	–	–	–	–	–	–	–	–
Redhead	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Ring-necked Duck	–	–	6	–	–	–	–	–	–	1	–	–	–	–	–	–
Greater Scaup	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lesser Scaup	1	–	4	–	–	–	–	–	–	–	4	–	–	–	–	–
Harlequin Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Long-tailed Duck	1	–	–	–	–	–	–	–	1	–	0	–	–	–	–	–
Bufflehead	2	–	–	–	0	–	–	–	–	–	1	–	–	–	–	–
Common Goldeneye	375	35	328	–	298	3	–	–	36	10	739	–	–	28	–	–
Barrow's Goldeneye	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Hooded Merganser	1	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–
Common Merganser	14	–	3,454	–	2	–	–	–	–	2	39	–	–	3	–	–
Red-breasted Merganser	12	–	–	–	–	–	–	–	16	–	–	–	–	–	–	–
Ruddy Duck	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Gray Partridge	–	–	–	–	–	–	–	–	–	–	–	8	–	–	–	–
Ring-necked Pheasant	–	–	10	13	7	–	9	–	–	–	1	8	–	0	–	–
Ruffed Grouse	22	5	–	–	–	–	–	–	0	–	1	–	1	–	3	5
Spruce Grouse	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–
Sharp-tailed Grouse	–	–	–	–	–	–	–	–	–	–	–	–	–	28	–	–
Greater Prairie-chicken	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Wild Turkey	–	–	56	–	25	35	21	–	–	–	–	152	–	–	–	–
Red-necked Grebe	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American White Pelican	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Double-crested Cormorant	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Great Blue Heron	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Green Heron	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkey Vulture	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Osprey	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bald Eagle	18	3	51	5	10	3	0	–	15	6	44	14	8	6	–	–
Northern Harrier	–	–	–	–	1	–	–	–	–	–	2	–	–	–	–	–
Sharp-shinned Hawk	3	–	1	2	1	–	–	–	–	–	2	5	–	–	–	–
Cooper's Hawk	1	–	4	2	–	–	0	–	–	–	–	1	–	–	–	–
Northern Goshawk	8	–	–	–	1	–	–	–	0	–	–	–	–	–	–	–
Red-shouldered Hawk	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Red-tailed Hawk	3	–	37	20	–	–	2	0	–	–	20	7	–	–	–	–
Rough-legged Hawk	–	–	–	–	–	–	–	–	–	–	–	4	–	–	–	0
Golden Eagle	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Kestrel	–	–	–	–	–	–	1	–	–	–	1	4	–	–	–	–
Merlin	1	–	0	–	–	–	0	–	–	–	–	–	–	–	–	–
Peregrine Falcon	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Coot	–	–	24	–	6	–	–	–	–	–	–	–	–	–	–	–
Sandhill Crane	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Wilson's Snipe	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Ring-billed Gull	–	–	49	–	–	–	–	–	–	–	–	–	–	–	–	–
Herring Gull	227	–	75	–	–	–	–	–	26	–	57	–	–	–	–	–
Thayer's Gull	1	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Glaucous Gull	1	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Rock Pigeon	1,790	52	364	375	174	122	215	27	25	55	313	113	29	11	–	–
Eurasian Collared-Dove	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mourning Dove	29	–	90	12	2	–	4	–	–	2	39	30	–	28	–	–
Eastern Screech-Owl	–	–	0	–	–	1	2	1	–	–	–	–	–	–	–	–
Great Horned Owl	2	–	4	1	3	–	2	2	–	–	1	1	0	–	–	–
Snowy Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Hawk Owl	1	0	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Barred Owl	4	0	3	3	1	–	1	–	1	–	2	4	–	–	–	–
Great Gray Owl	20	6	–	–	–	–	–	–	2	9	–	–	4	0	1	–
Long-eared Owl	–	–	–	–	–	–	–	–	–	–	3	–	–	–	–	–
Northern Saw-whet Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Belted Kingfisher	–	–	1	2	2	–	–	–	–	–	–	1	–	–	–	–
Red-headed Woodpecker	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Red-bellied Woodpecker	2	–	35	21	12	2	6	1	–	–	29	32	–	–	–	–
Yellow-bellied Sapsucker	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Downy Woodpecker	83	17	106	81	61	14	12	12	27	7	68	74	15	11	32	6
Hairy Woodpecker	42	25	61	30	25	12	14	1	10	6	22	42	11	12	13	8
American Three-toed Woodpecker	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 1, continued.

Species	Duluth	Ely	Excels	Fariba	Fergus	Fargo-Moorhead	Fairmo	Grand Forks	Grand Marais	Grand Rapids	Hastin	Hernde	Hibbin	Intern	Isabel	Itasca
Black-backed Woodpecker	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	2
Northern Flicker	–	–	5	2	1	1	1	1	–	–	2	3	–	–	–	–
Pileated Woodpecker	20	5	10	6	6	3	–	0	0	4	3	5	2	4	5	2
Northern Shrike	20	2	9	3	3	–	–	0	4	3	2	1	–	1	1	–
Gray Jay	2	46	–	–	–	–	–	–	6	–	–	–	5	3	17	6
Blue Jay	51	51	99	90	58	2	16	–	50	42	91	83	27	46	29	95
Black-billed Magpie	–	–	–	–	–	–	–	–	–	–	–	–	–	13	–	1
American Crow	585	1	479	651	51	103	457	60	12	61	319	55	12	13	–	45
Common Raven	39	261	–	–	–	–	–	–	204	42	–	–	13	190	61	48
Horned Lark	–	–	1	–	58	0	–	–	–	–	–	–	–	–	–	–
Black-capped Chickadee	2,079	655	677	243	303	31	24	104	364	238	325	112	208	152	158	148
Boreal Chickadee	–	10	–	–	–	–	–	–	–	–	–	–	–	–	12	–
Tufted Titmouse	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Red-breasted Nuthatch	112	46	7	11	11	1	1	–	30	11	7	8	9	10	21	20
White-breasted Nuthatch	43	5	174	97	75	8	8	18	3	30	80	86	10	9	2	38
Brown Creeper	1	–	6	16	–	–	3	–	–	–	13	2	–	–	–	–
Carolina Wren	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winter Wren	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Golden-crowned Kinglet	–	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Eastern Bluebird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Townsend's Solitaire	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–
Hermit Thrush	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Robin	87	–	65	1	15	3	–	5	–	–	21	–	–	1	–	–
Varied Thrush	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Gray Catbird	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brown Thrasher	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
European Starling	1,418	14	1,265	899	297	61	609	–	30	229	777	245	22	47	–	1
Bohemian Waxwing	942	92	–	–	–	–	–	0	27	310	1	–	0	155	–	–
Cedar Waxwing	19	–	272	48	323	22	4	27	–	–	141	56	–	–	–	–
American Tree Sparrow	–	–	112	18	16	2	12	1	–	–	60	211	–	–	–	–
Chipping Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Vesper Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fox Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Song Sparrow	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
White-throated Sparrow	4	–	–	–	1	–	–	–	–	–	–	–	–	1	–	–
Harris's Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dark-eyed Junco	72	–	250	244	96	39	51	10	7	–	698	357	–	1	–	–
Lapland Longspur	–	–	–	50	150	8	–	–	–	–	–	–	–	–	–	–
Snow Bunting	2	–	4	1	62	53	4	40	2	220	–	–	–	2	–	–
Northern Cardinal	15	–	222	144	6	–	10	–	2	1	127	90	–	–	–	1
Red-winged Blackbird	1	–	1	–	3	–	–	–	–	–	–	200	–	–	–	–
Rusty Blackbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brewer's Blackbird	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Common Grackle	1	–	1	–	1	–	1	–	–	–	–	–	–	–	–	–
Brown-headed Cowbird	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Pine Grosbeak	82	278	–	–	–	–	–	–	201	35	–	–	52	174	126	17
Purple Finch	15	11	6	45	14	–	1	–	–	12	1	11	30	–	–	22
House Finch	148	–	105	196	84	35	48	37	13	–	102	63	–	–	–	4
Red Crossbill	12	12	–	–	–	–	–	–	0	–	–	–	–	–	11	–
White-winged Crossbill	–	7	–	–	–	–	–	–	–	–	–	–	–	0	10	5
Common Redpoll	559	749	4	23	353	58	–	34	153	488	17	–	229	180	458	227
Hoary Redpoll	2	–	–	–	2	–	–	–	–	–	–	–	1	–	–	3
Pine Siskin	675	15	6	76	160	32	1	13	24	30	3	13	137	101	15	72
American Goldfinch	65	27	279	151	76	38	48	–	3	10	151	127	32	75	22	80
Evening Grosbeak	34	52	–	–	–	–	–	–	13	5	–	–	60	92	12	82
House Sparrow	249	31	684	326	331	426	312	185	–	76	260	241	4	0	–	–
Count Week	–	2	2	–	2	1	3	1	4	–	1	–	2	4	–	1
Count Day	65	29	60	44	49	35	33	19	34	30	53	39	23	30	22	24
Sum	11,038	2,514	15,541	10,581	12,474	5,702	6,619	579	1,535	1,959	12,813	3,670	921	1,461	1,013	938
goose sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
scaup sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	30	–	–
scoter sp.	–	–	–	–	–	–	–	–	25	–	–	–	–	–	–	–
grouse sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
accipiter sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
buteo sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
hawk sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
gull sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
owl sp.	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
waxwing sp.	13	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
pheucticus sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
sparrow sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
crossbill sp.	5	–	–	–	–	–	–	–	–	–	–	–	–	–	6	–
finch sp.	57	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
bird sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sum	76	–	–	–	–	–	1	–	25	–	–	–	–	30	6	

Table 1, continued.

Species	Lamber	Little	Long P	Lac qu	Marsha	Mankat	Morris	Minnea	Mounta	New Ul	Northw	N. Wri	Owaton	Philbr	Pillag	Pine C
Snow Goose	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cackling Goose	13	–	–	5	–	–	–	–	–	–	14	–	–	–	–	–
Canada Goose	8,744	117	–	20,000	5	1,272	–	1,892	300	–	6,563	733	869	–	92	–
Mute Swan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Trumpeter Swan	–	–	–	–	–	–	–	1	–	–	–	1,140	–	–	28	–
Tundra Swan	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Wood Duck	–	–	–	–	0	–	–	–	–	–	–	3	–	–	–	–
Gadwall	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Black Duck	–	2	–	–	–	–	–	1	–	–	–	3	–	–	–	–
Mallard	–	153	22	15	–	184	13	1,971	12	–	346	678	330	–	–	–
Northern Shoveler	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Pintail	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Canvasback	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Redhead	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Ring-necked Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greater Scaup	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lesser Scaup	–	–	–	–	–	–	–	14	–	–	–	–	–	–	–	–
Harlequin Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Long-tailed Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bufflehead	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Common Goldeneye	–	13	–	3	–	–	–	22	–	–	–	61	–	–	–	–
Barrow's Goldeneye	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hooded Merganser	–	3	–	–	–	–	–	1	–	–	–	–	1	–	–	–
Common Merganser	–	1	–	–	–	–	–	–	–	–	–	6	–	–	–	–
Red-breasted Merganser	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ruddy Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gray Partridge	–	–	–	–	–	–	–	–	–	15	–	–	–	–	–	–
Ring-necked Pheasant	38	–	1	19	15	12	14	–	49	2	49	3	38	5	–	–
Ruffed Grouse	–	–	5	–	–	–	–	–	–	–	–	–	–	–	2	2
Spruce Grouse	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sharp-tailed Grouse	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greater Prairie-chicken	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wild Turkey	7	–	0	4	1	70	4	–	–	38	23	5	78	–	5	6
Red-necked Grebe	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American White Pelican	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–
Double-crested Cormorant	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Great Blue Heron	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Green Heron	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkey Vulture	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Osprey	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bald Eagle	1	14	6	10	–	8	7	–	0	3	7	5	3	7	7	2
Northern Harrier	–	1	–	–	–	–	–	2	–	–	1	–	–	–	–	–
Sharp-shinned Hawk	1	–	1	–	–	1	–	4	1	–	–	1	–	–	–	–
Cooper's Hawk	1	–	–	–	0	1	1	4	1	–	1	–	3	–	–	–
Northern Goshawk	–	–	1	–	–	–	–	–	–	–	–	–	–	–	2	–
Red-shouldered Hawk	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
Red-tailed Hawk	13	4	12	4	3	15	–	13	1	14	21	12	9	3	1	–
Rough-legged Hawk	–	10	0	–	–	–	–	–	–	1	1	–	–	25	9	7
Golden Eagle	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–
American Kestrel	4	2	3	–	1	–	–	–	–	1	6	1	3	–	–	–
Merlin	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peregrine Falcon	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Coot	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Sandhill Crane	–	–	–	–	–	0	–	–	–	–	–	–	–	–	–	–
Wilson's Snipe	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ring-billed Gull	–	–	–	–	–	–	–	142	–	–	–	–	–	–	–	–
Herring Gull	–	–	–	–	–	–	–	8	–	–	–	–	–	–	–	–
Thayer's Gull	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Glaucous Gull	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Rock Pigeon	132	183	151	–	128	167	153	713	7	384	602	276	83	72	111	–
Eurasian Collared-Dove	–	–	–	10	2	–	–	–	–	–	–	–	–	–	–	–
Mourning Dove	–	2	2	25	–	8	–	30	1	2	8	6	25	–	–	23
Eastern Screech-Owl	–	–	–	–	0	–	–	–	1	1	–	–	–	–	–	–
Great Horned Owl	5	–	0	1	3	1	1	1	4	1	7	–	1	–	–	–
Snowy Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Hawk Owl	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	4
Barred Owl	1	–	1	–	–	2	1	1	–	–	–	1	–	–	1	1
Great Gray Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	3
Long-eared Owl	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Northern Saw-whet Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Belted Kingfisher	2	–	–	–	2	1	–	–	–	–	–	–	–	–	1	–
Red-headed Woodpecker	1	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–
Red-bellied Woodpecker	7	2	21	6	12	15	3	11	2	20	34	24	19	1	3	2
Yellow-bellied Sapsucker	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Downy Woodpecker	18	8	49	21	66	22	16	47	12	34	120	45	65	4	11	13
Hairy Woodpecker	24	2	29	10	25	10	9	26	7	12	52	8	17	4	7	16
American Three-toed Woodpecker	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 1, continued.

Species	Lamber	Little	Long P	Lac qu	Marsha	Mankat	Morris	Minnea	Mounta	New Ul	Northw	N. Wri	Owaton	Philbr	Pillag	Pine C
Black-backed Woodpecker	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
Northern Flicker	2	–	–	1	6	1	1	6	1	–	13	–	–	–	–	–
Pileated Woodpecker	–	2	13	5	1	2	0	–	1	2	13	4	2	1	11	6
Northern Shrike	1	2	3	2	1	3	2	1	–	1	9	3	–	9	4	8
Gray Jay	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Blue Jay	31	44	63	18	26	17	38	41	18	36	141	105	98	22	71	142
Black-billed Magpie	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Crow	107	314	131	69	149	503	37	537	39	139	317	134	740	88	152	57
Common Raven	–	–	–	–	–	–	–	–	–	–	–	–	–	1	14	71
Horned Lark	19	–	2	120	7	–	9	–	65	3	15	3	2	–	1	–
Black-capped Chickadee	50	77	170	68	161	54	198	255	17	48	333	246	158	80	242	226
Boreal Chickadee	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tufted Titmouse	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Red-breasted Nuthatch	4	7	15	1	2	1	1	70	1	1	28	2	16	3	19	28
White-breasted Nuthatch	22	11	72	23	68	20	22	70	6	28	158	59	74	25	46	17
Brown Creeper	6	1	1	4	6	5	–	3	–	1	25	1	–	–	–	2
Carolina Wren	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winter Wren	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Golden-crowned Kinglet	–	–	3	2	2	–	–	–	–	–	–	–	–	–	–	–
Eastern Bluebird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Townsend's Solitaire	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Hermit Thrush	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Robin	–	–	6	1	–	1	10	107	–	9	4	8	–	–	–	–
Varied Thrush	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Gray Catbird	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Brown Thrasher	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
European Starling	444	186	149	230	579	610	220	1,059	59	697	1,707	620	243	20	122	232
Bohemian Waxwing	–	–	17	–	–	–	–	–	–	–	–	–	–	–	–	106
Cedar Waxwing	2	–	63	119	1	26	88	14	5	5	4	14	–	60	6	9
American Tree Sparrow	224	40	18	51	98	12	0	4	51	13	156	66	36	2	4	15
Chipping Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Vesper Sparrow	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–
Fox Sparrow	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Song Sparrow	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
White-throated Sparrow	1	–	–	–	2	–	–	–	–	–	1	–	–	–	–	–
Harris's Sparrow	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dark-eyed Junco	14	114	118	90	67	109	59	86	31	209	421	219	185	14	10	–
Lapland Longspur	96	–	–	3	97	–	25	–	779	–	50	–	4	–	–	–
Snow Bunting	2	–	12	17	36	6	3	–	–	–	90	20	10	37	58	113
Northern Cardinal	9	5	32	7	3	41	1	51	1	33	60	47	72	1	1	–
Red-winged Blackbird	33	–	–	346	51	8	–	–	–	2	–	–	–	–	–	–
Rusty Blackbird	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brewer's Blackbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Common Grackle	29	–	–	1	1	–	1	–	0	–	4	–	2	–	–	–
Brown-headed Cowbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pine Grosbeak	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	47
Purple Finch	6	–	29	16	8	–	2	–	–	1	25	2	2	–	1	16
House Finch	63	–	5	15	31	74	6	340	14	44	246	110	180	–	–	–
Red Crossbill	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	13
White-winged Crossbill	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
Common Redpoll	–	239	868	–	–	–	13	–	–	–	14	172	–	376	420	500
Hoary Redpoll	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1
Pine Siskin	8	14	198	3	16	–	6	2	0	3	31	45	73	–	131	38
American Goldfinch	43	25	166	27	208	17	87	111	11	33	158	93	124	15	74	49
Evening Grosbeak	–	–	–	–	–	–	–	8	–	–	–	–	–	–	–	0
House Sparrow	281	59	258	152	649	174	772	225	103	422	1,641	681	906	11	233	43
Count Week	–	–	3	–	3	1	2	–	3	–	–	–	–	–	–	1
Count Day	44	33	38	44	38	38	34	41	30	35	45	43	36	25	37	35
Sum	10,520	1,659	2,716	21,529	2,539	3,475	1,824	7,896	1,600	2,258	13,522	5,668	4,474	886	1,905	1,824
goose sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
scaup sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
scoter sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
grouse sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
accipiter sp.	–	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–
buteo sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
hawk sp.	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–
gull sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
owl sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
waxwing sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
pheucticus sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
sparrow sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
crossbill sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
finch sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
bird sp.	–	–	–	–	–	–	–	–	–	–	–	12	–	–	–	–
Sum	–	1	–	–	–	–	–	–	–	1	–	13	–	–	–	

Table 1, continued.

Species	Rochester	Rice Lake	Rosea	Sax-Zi	St. Cl	Sherbu	St. Paul North	St. Pa NE	Tamara	Two Harbors	Virgin	Wabash	Warren	Whitew	Wild R	Willma	Winona
Snow Goose	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cackling Goose	47	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
Canada Goose	22,780	–	–	–	1,690	12	452	3,219	2	2	–	75	–	1	43	4,534	1,235
Mute Swan	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Trumpeter Swan	–	–	–	–	–	7	0	–	2	–	–	–	–	–	5	–	–
Tundra Swan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	921
Wood Duck	1	–	–	–	0	–	1	–	–	–	–	–	–	–	–	–	1
Gadwall	–	–	–	–	–	–	8	8	–	–	–	–	–	–	–	–	3
American Black Duck	4	–	–	–	–	–	2	18	–	–	–	–	–	–	–	–	14
Mallard	732	–	–	–	859	–	887	8,000	–	–	77	33	–	–	6	37	483
Northern Shoveler	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Pintail	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Canvasback	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
Redhead	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ring-necked Duck	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
Greater Scaup	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lesser Scaup	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	93
Harlequin Duck	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Long-tailed Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bufflehead	–	–	–	–	–	–	–	–	–	4	–	–	–	–	–	–	–
Common Goldeneye	25	–	–	–	77	–	–	60	–	12	–	–	–	–	–	3	2
Barrow's Goldeneye	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hooded Merganser	–	–	–	–	1	–	–	1	–	–	3	–	–	–	–	–	–
Common Merganser	2	–	–	–	1	–	1	4	–	–	–	1	–	–	–	–	186
Red-breasted Merganser	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ruddy Duck	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gray Partridge	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ring-necked Pheasant	29	–	–	–	–	1	48	–	2	–	–	1	1	2	15	17	1
Ruffed Grouse	–	6	–	3	–	1	–	–	2	7	2	–	–	–	2	–	–
Spruce Grouse	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sharp-tailed Grouse	–	4	–	1	–	–	–	–	–	–	–	–	17	–	–	–	–
Greater Prairie-chicken	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wild Turkey	94	–	–	–	86	60	284	6	2	–	–	16	1	–	61	32	49
Red-necked Grebe	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American White Pelican	–	–	–	–	–	–	–	3	–	–	–	–	–	–	–	–	–
Double-crested Cormorant	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Great Blue Heron	0	–	–	–	–	–	–	14	–	–	–	–	–	–	–	–	–
Green Heron	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkey Vulture	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Osprey	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Bald Eagle	16	4	–	7	17	6	46	31	13	15	4	65	–	40	13	3	135
Northern Harrier	0	–	–	–	–	10	–	–	–	–	–	–	–	–	–	1	3
Sharp-shinned Hawk	3	–	–	–	1	–	1	–	–	1	–	–	1	1	1	2	4
Cooper's Hawk	1	–	–	–	–	–	2	5	–	–	–	–	–	2	1	3	2
Northern Goshawk	0	1	–	–	–	–	–	1	–	3	2	1	–	–	–	–	–
Red-shouldered Hawk	1	–	–	–	–	2	6	–	–	–	–	–	–	–	1	–	–
Red-tailed Hawk	38	–	1	–	13	14	46	35	–	–	–	18	–	12	23	7	38
Rough-legged Hawk	1	18	–	8	1	2	5	2	1	–	–	–	–	1	1	1	4
Golden Eagle	0	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	1
American Kestrel	1	–	–	–	1	–	1	6	–	–	–	3	–	4	–	–	9
Merlin	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peregrine Falcon	–	–	–	–	–	–	–	4	–	–	–	–	–	–	–	–	–
American Coot	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	1	12
Sandhill Crane	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wilson's Snipe	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–
Ring-billed Gull	–	–	–	–	–	–	2	417	–	–	–	–	–	–	–	1	8
Herring Gull	–	–	–	–	–	–	–	107	–	291	–	–	–	–	–	–	–
Thayer's Gull	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Glaucous Gull	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Rock Pigeon	490	27	25	23	225	19	246	4,709	–	–	270	163	167	228	111	266	457
Eurasian Collared-Dove	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mourning Dove	117	–	1	–	10	6	73	27	–	6	0	26	–	9	35	–	77
Eastern Screech-Owl	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Great Horned Owl	10	–	–	–	–	–	10	4	–	–	–	1	3	–	1	0	1
Snowy Owl	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
Northern Hawk Owl	–	5	–	42	–	–	–	–	–	4	–	–	–	–	–	–	–
Barred Owl	2	–	–	2	–	–	5	1	–	–	–	–	–	–	–	0	1
Great Gray Owl	–	2	0	70	–	–	–	0	2	56	13	–	–	–	–	–	–
Long-eared Owl	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northern Saw-whet Owl	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Belted Kingfisher	4	–	–	–	–	–	1	4	–	–	–	1	–	–	–	4	3
Red-headed Woodpecker	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Red-bellied Woodpecker	39	1	–	–	10	7	65	26	6	–	–	14	–	6	16	28	42
Yellow-bellied Sapsucker	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Downy Woodpecker	111	4	1	4	17	10	195	93	14	32	8	30	14	11	50	61	59
Hairy Woodpecker	28	7	0	9	10	5	77	46	10	23	10	11	11	7	21	22	28
American Three-toed Woodpecker	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 1, continued.

Species	Rochester	Rice Lake	Rosea	Sax-Zi	St. Cl	Sherbu	St. Paul North	St. Pa NE	Tamara	Two Harbors	Virgin	Wabash	Warren	Whitew	Wild R	Willma	Winona
Black-backed Woodpecker	–	–	–	3	–	–	–	–	–	1	–	–	–	–	–	–	–
Northern Flicker	5	–	–	–	–	1	4	1	–	–	–	4	–	3	–	5	2
Pileated Woodpecker	6	2	1	3	3	2	32	7	13	8	1	4	2	–	9	14	10
Northern Shrike	6	12	–	6	1	1	5	2	1	8	4	5	–	1	3	2	11
Gray Jay	–	–	–	5	–	–	–	–	–	5	13	–	–	–	–	–	–
Blue Jay	135	89	8	21	29	61	332	43	85	52	38	31	17	20	72	51	37
Black-billed Magpie	–	–	3	2	–	–	–	–	–	–	–	–	2	–	–	–	–
American Crow	1,247	91	–	36	110	123	1,067	1,582	8	57	33	143	–	164	544	146	546
Common Raven	–	30	24	94	–	–	–	–	9	53	107	–	–	–	1	–	–
Horned Lark	0	–	–	–	–	–	–	–	–	–	–	3	–	6	–	–	–
Black-capped Chickadee	394	200	9	185	84	102	1,032	577	202	415	290	168	79	68	341	201	371
Boreal Chickadee	–	–	–	6	–	–	–	–	–	–	1	–	–	–	–	–	–
Tufted Titmouse	2	–	–	–	–	–	0	–	–	–	–	–	–	4	–	–	12
Red-breasted Nuthatch	10	5	2	7	4	13	61	7	8	35	38	13	8	1	6	1	7
White-breasted Nuthatch	102	7	2	1	25	26	271	92	41	8	16	44	25	23	74	73	99
Brown Creeper	2	–	–	2	2	1	3	2	1	–	–	1	–	–	1	6	3
Carolina Wren	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Winter Wren	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Golden-crowned Kinglet	–	–	–	–	–	–	–	–	–	3	–	–	–	–	–	–	–
Eastern Bluebird	–	–	–	–	–	–	4	–	–	–	–	–	–	–	–	–	2
Townsend's Solitaire	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Hermit Thrush	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
American Robin	62	–	–	–	30	–	515	176	–	2	–	108	1	21	44	6	206
Varied Thrush	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	0	–
Gray Catbird	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Brown Thrasher	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
European Starling	755	38	14	26	190	5	120	1,709	–	141	213	237	20	138	807	511	1,037
Bohemian Waxwing	–	–	–	–	–	–	–	–	–	309	119	–	–	–	–	–	–
Cedar Waxwing	44	–	2	–	11	17	100	109	–	–	–	35	–	–	76	336	113
American Tree Sparrow	39	–	–	–	14	31	72	68	–	–	–	124	–	9	18	40	150
Chipping Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Vesper Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fox Sparrow	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
Song Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
White-throated Sparrow	1	–	–	–	–	–	0	1	2	–	–	–	–	4	–	1	–
Harris's Sparrow	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dark-eyed Junco	429	–	–	–	143	99	339	159	1	17	–	303	3	214	143	94	262
Lapland Longspur	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Snow Bunting	0	9	21	26	–	–	–	–	15	–	8	–	1,688	–	–	106	16
Northern Cardinal	172	–	–	–	11	7	284	147	3	2	–	60	5	35	55	46	86
Red-winged Blackbird	–	–	–	–	–	–	–	–	–	–	–	176	–	–	–	566	4
Rusty Blackbird	–	–	–	–	–	67	–	–	1	–	–	–	–	–	–	–	–
Brewer's Blackbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Common Grackle	1	–	–	–	–	–	–	0	1	–	–	–	–	6	–	3	5
Brown-headed Cowbird	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pine Grosbeak	–	14	7	57	–	–	–	–	–	90	227	–	–	–	–	–	–
Purple Finch	34	–	–	1	–	20	5	6	97	–	–	40	17	10	6	74	27
House Finch	241	–	–	–	79	18	162	206	–	4	16	38	9	47	36	188	77
Red Crossbill	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
White-winged Crossbill	–	–	–	13	–	–	–	–	–	16	–	–	–	–	–	–	–
Common Redpoll	7	177	184	171	206	135	53	3	247	219	601	–	400	–	4	50	–
Hoary Redpoll	–	–	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–
Pine Siskin	75	33	5	3	119	50	266	–	33	81	63	53	18	2	53	34	29
American Goldfinch	345	2	–	–	71	51	484	300	191	2	2	86	–	85	164	119	345
Evening Grosbeak	–	6	0	12	–	–	–	–	1	–	26	1	–	–	–	–	–
House Sparrow	1,056	16	43	10	102	10	280	2,052	42	71	43	244	231	185	200	167	725
Count Week	7	–	3	–	1	–	3	2	–	–	1	–	–	–	–	3	–
Count Day	55	27	19	33	35	38	48	53	33	39	30	40	25	35	41	43	59
Sum	29,754	810	354	860	4,253	1,004	7,958	24,106	1,059	2,058	2,249	2,381	2,741	1,371	3,065	7,863	8,063
goose sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
scaup sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
scoter sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
grouse sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
accipiter sp.	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
buteo sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
hawk sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
gull sp.	–	–	–	–	–	–	–	18	–	–	–	–	–	–	–	–	–
owl sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
waxwing sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
pheucticus sp.	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
sparrow sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	4	–	–	–
crossbill sp.	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
finch sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
bird sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sum	–	–	1	1	–	–	–	19	–	–	–	–	–	–	–	–	–

Table 1, concluded.

Location	MN Code	Date	Compiler	CD	CW	Sum
Afton	AFTON	1-Jan-05	Joseph Merchak	36	0	12,371
Albert Lea	ABLEA	18-Dec-04	Allen Batt	46	0	4,961
Aurora	AUROR	18-Dec-04	Cathy Leece	23	0	1,173
Austin	AUSTN	2-Jan-05	Terry Dorsey	47	0	6,633
Battle Lake	BATLK	2-Jan-05	Steve Millard	42	0	4,510
Baudette	BAUDT	28-Dec-04	Martin Kehoe	27	0	1,210
Beltrami Island	BLTRM	29-Dec-04	Martin Kehoe	21	0	593
Bemidji	BEMID	18-Dec-04	Katherine Haws	35	0	2,403
Bloomington	BLOOM	18-Dec-04	Mark Ochs	63	0	17,748
Carlton-Cloquet	CRLCL	19-Dec-04	Larry Weber	41	0	1,906
Cedar Creek Bog	CEDRC	19-Dec-04	James Howitz	36	0	1,899
Cook Area	COOK	20-Dec-04	Jerry and Charlotte Jacobsen	27	0	1,804
Cottonwood	COTTN	15-Dec-04	Paul Egeland	35	0	1,169
Crookston	CROOK	18-Dec-04	Tom Feiro	22	0	2,029
Crosby	CROSB	18-Dec-04	Jo Blanich	27	0	1,611
Detroit Lakes	DLAKE	18-Dec-04	Bruce Beese	29	0	747
Duluth	DULUT	18-Dec-04	Jim Lind	65	0	11,038
Ely	ELY	14-Dec-04	Bill Tefft	29	2	2,514
Excelsior	EXCEL	18-Dec-04	Howard Towle	62	0	15,541
Fairmont	FRMNT	18-Dec-04	Brad Bolduan	33	3	6,619
Fargo-Moorhead	FRGMH	18-Dec-04	Bob O'Conner	35	1	5,702
Faribault	FARIB	18-Dec-04	Gene Bauer	44	0	10,581
Fergus Falls	FERGS	18-Dec-04	Steve Millard	51	0	12,474
Grand Forks-East Grand Forks	GFEGF	19-Dec-04	Dave Lambeth	19	4	579
Grand Marais	GRMAR	18-Dec-04	Jeff Kern	38	0	1,535
Grand Rapids	GRRAP	2-Jan-05	Kenneth Zimmer	30	0	1,959
Hastings-Etter	HASTE	1-Jan-05	Roger Field	54	0	12,812
Henderson	HENDR	18-Dec-05	Arthur Straub	39	0	3,670
Hibbing	HIBBG	2-Jan-05	Janet Petersen	25	0	921
International Falls	IFALL	18-Dec-04	Leland Grim	34	0	1,461
Isabella	ISBEL	1-Jan-05	Steve Wilson	22	0	1,013
Itasca State Park	ITSCA	26-Dec-04	Douglas Johnson	25	0	938
Lac Qui Parle	LQPRL	22-Dec-04	Paul Egeland	44	0	21,529
LaCrosse-LaCrescent	LCRLC	18-Dec-04	Rick Kinzie	0	0	0
Lamberton	LAMBR	16-Dec-04	Lee French	44	0	10,520
Little Falls	LFALL	19-Dec-04	Murdoch Johnson	33	0	1,659
Long Prairie	LNGPR	1-Jan-05	John and Susan Kroll	41	0	2,716
Mankato	MNKTO	18-Dec-04	Merrill Frydendall	39	0	3,475
Marshall	MARSH	18-Dec-04	Roger Schroeder	38	3	2,539
Minneapolis (North)	MPLSN	18-Dec-04	Terence Brashear	41	0	7,896
Morris	MORIS	18-Dec-04	Donna Oglesby	36	0	1,824
Mountain Lake-Windom	MTLKW	1-Jan-05	Edna Gerber	33	0	1,600
New Ulm	NEWUL	2-Jan-05	Brian Smith	35	0	2,258
Northern Wright County	NWRCO	2-Jan-05	Claudia Egelhoff	43	0	5,668
Northwest McLeod	NWMCL	18-Dec-04	Robert Schroeder	45	0	13,522
Owatonna	OWATN	18-Dec-04	Darryl Hill	36	0	4,474
Philbrook	PHILB	1-Jan-05	John and Susan Kroll	25	0	886
Pillager	PILGR	1-Jan-05	Michael North	37	0	1,905
Pine County	PINEC	29-Dec-04	Mark Alt	36	0	1,824
Rice Lake N.W.R.	RLNWR	2-Jan-05	Michelle McDowell	27	0	810
Rochester	RCHST	18-Dec-04	Clifford Hansen	62	0	29,754
Roseau	ROSEU	2-Jan-05	BettyM. Johnson	22	0	354
Sax-Zim	SXZIM	20-Dec-04	Sparkey Stensaas	34	0	860
Sherburne NWR	SHNWR	18-Dec-04	Jim Pasch	38	0	1,004
St. Cloud-Collegeville	SCCLG	18-Dec-04	Brian Jungels	36	0	4,253
St. Paul (North)	SPNOR	18-Dec-04	Julian Sellers	55	0	24,106
St. Paul (northeast suburban)	SPNES	26-Dec-04	Richard Wachtler	51	0	7,958
Tamarac NWR	TMNWR	20-Dec-04	Lowell Deede	33	0	1,059
Two Harbors	THRBR	19-Dec-04	Frank Nicoletti	39	0	2,058
Virginia	VIRGN	26-Dec-04	Deb Buria-Falkowski	30	1	2,249
Wabasha	WABAS	2-Jan-05	Jonathan Peterson	40	0	2,381
Warren	WAREN	30-Dec-04	Gladwin Lynne	25	0	2,741
Whitewater Valley	WWATR	1-Jan-05	Julie McCormick, Andy & Joyce Buggs	35	0	1,371
Wild River	WILDR	18-Dec-04	Tom Anderson	41	0	3,065
Willmar	WILMR	18-Dec-04	Randy Frederickson	43	3	7,863
Winona	WINON	18-Dec-04	Walt Carroll	59	0	8,063

Table 2. 2004–05 Minnesota CBC locations, dates, compilers, and totals. CD = Count Day, CW = Count Week.

Proceedings of the Minnesota Ornithologists' Union Records Committee

Peder H. Svingen, Chairman

The most recent meeting of the Minnesota Ornithologists' Union Records Committee (MOURC) was held on 10 July 2005. In attendance and voting at this meeting were Paul Budde, Phil Chu, Ann Kessen, Jim Lind (alternate member), Bill Marengo (alternate), Jim Mattsson, Drew Smith, Steve Stucker (alternate), Peder Svingen (Chairman), and Tom Tustison.

Among the items on the agenda at this meeting was discussion of two potential addtions to the state list. Whooper Swan (*Cygnus cygnus*) was Not Accepted on the basis of origin. No action was taken on the Carolina Parakeet (*Conuropsis carolinensis*) pending further discussion (***The Loon*** 76:175–181). The state list therefore remains at 430 species following the most recent addition of the Cackling Goose (*Branta hutchinsii*).

Criteria for the field identification of Cackling Goose are still being developed; its separation from *parvipes* and other small forms of the Canada Goose complex (*B. canadensis*) remains particularly challenging. The Committee is seeking banding recovery data that will unequivocally establish the presence of Cackling Goose in Minnesota. Meanwhile, we continue to request written details or physical evidence for all reports of this species in the state. Please send inclusive dates, specific locations, number of individuals and how identified, along with photographs, sound recordings, and any additional information pertaining to this species in Minnesota, to Peder Svingen (address below).

The following records were voted on by mail January – July 2005 and were Accepted (also see Not Accepted records #2005-013 and 2005-035 which involved qualified Accepted votes).

Record 2005-001: Barrow's Goldeneye, 27 December 2004, Hastings, Dakota County. Digital photo by James P. Mattsson.

• Eurasian Wigeon (*Anas penelope*), 8 May 2005, Red Lake Falls, Red Lake County (record #2005-014, vote 7–0).

Photographs and written documentation by two of three observers confirmed the identification of this adult male and eliminated hybrid Eurasian X American Wigeon (*A. penelope* X *A. americana*)

• Cinnamon Teal (*Anas cyanoptera*), 26–27 May 2005, Oakland Township, Mahnomen County (record #2005-028, vote 7–0).

An adult male was photographed at close range while it displayed towards a female Blue-winged Teal (*A. discors*).

• Barrow's Goldeneye (*Bucephala islandica*), 27 December 2004 – 11 January 2005, Hastings, Dakota County (record #2005-001, vote 7–0).

This adult male was recorded on the

Record 2005-005: Gyrfalcon, 3 February 2005, Nininger Township, Dakota County. Digital photo by James P. Mattsson.

Hastings-Etter Christmas Bird Count and was photographed during its 16 day stay.

• Yellow-billed Loon (*Gavia adamsii*), 4–11 January 2005, Two Harbors, Lake County (record #2005-003, vote 7–0).

Bill size and shape, bill color, and brown auricular spot on this juvenile were documented by experienced observers. Sixth state record.

• Glossy Ibis (*Plegadis falcinellus*), 19–22 April 2005, near Aitkin, Aitkin County (record #2005-008, vote 7–0).

This cooperative adult in alternate plumage was studied and photographed by many observers, and established the state's second confirmed record.

• White-faced Ibis (*Plegadis chihi*), 19 April 2005, Hills, Rock County (record #2005-010, vote 5–2).

This adult had red irides, red facial skin, and red legs, but completely lacked a white facial border, which concerned two Committee members.

• White-faced Ibis, 1 May 2005, Hills, Rock County (record #2005-013, vote 7–0 for one adult in alternate plumage; also see Not Accepted records below).

• White-faced Ibis, 13–15 May 2005, Osakis, Douglas County (record #2005-032, vote 7–0).

• *Plegadis* ibis, sp., 30 April – 2 May 2005, Clare Johnson W.M.A., Lincoln County (record #2005-035, vote 7–0 for two adults, also see Not Accepted records below).

Although both birds were unanimously Accepted as *Plegadis* ibis sp., the written description eliminated neither Glossy Ibis nor hybrid White-faced X Glossy Ibis (see *North American Birds* 57:136–139).

• *Plegadis* ibis, sp., 28 May 2005, Plover Prairie, Lac Qui Parle County (record #2005-033, vote 7–0).

Seven dark ibises of indeterminate age were seen only in flight and prudently, were left unidentified.

• Gyrfalcon (*Falco rusticolus*), 9 January 2005, Two Harbors, Lake County (record #2005-004, vote 5–2).

Those not accepting this record of an adult gray morph were concerned that the identification was based primarily on size

Record 2005-016: White-winged Dove, 7 May 2005, Empire Township, Dakota County. Digital photo by Blaine Seeliger.

and shape; the bird was seen for less than a minute and only in flight.

• Gyrfalcon, 3 February – 10 April 2005, Nininger Township, Dakota County (record #2005-005, vote 7–0).

• Gyrfalcon, 6 February 2005, county road 18 near county road 5, Aitkin County (record #2005-006, vote 6–1).

• Gyrfalcon, 21 February 2005, county road 5 north of Palisade, Aitkin County (record #2005-022, vote 5–2).

Northern Goshawk (*Accipiter gentilis*) can show pointed wings under certain field conditions; two members concluded that written details were insufficient to conclusively eliminate this possibility.

• Gyrfalcon, 21 March 2005, Virginia, St. Louis County (record #2005-031, vote 6–1).

• Black-necked Stilt (*Himantopus mexicanus*), 21–24 April 2005, Centennial W.P.A., Big Stone County (record #2005-009, vote 7–0).

• Black-necked Stilt, 8–10 May 2005, Spindler's Pond near Rice Lake S.P., Steele County (record #2005-015, vote 7–0).

Of interest was its possible relationship to three adults at Spindler's Pond 16–17 May 2004 (***The Loon*** 76:197, 77:49).

• Long-billed Curlew (*Numenius americanus*), 16–18 April 2005, Fleming Township, Aitkin County (record #2005-007, vote 7–0).

This second county record was well-documented with written descriptions and photographs.

• California Gull (*Larus californicus*), Breckenridge, Wilkin County, 7 May 2005 (record #2005-029, vote 6–1).

Distant photographs and comparisons with Ring-billed Gulls (*L. delawarensis*) were included in the documentation.

• Arctic Tern (*Sterna paradisaea*), 20–22 May 2005, Park Point, Duluth, St. Louis County (record #2005-024, vote 7–0).

• White-winged Dove (*Zenaida asiatica*), 7–8 May 2005, Empire Township, Dakota County (record #2005-016, vote 7–0).

• Burrowing Owl (*Athene cunicularia*), 30 April – 14 May 2005, Hantho Township, Lac Qui Parle County (record #2005-012, vote 7–0).

Record 2005-008: Glossy Ibis, 19 April 2005, near Aitkin, Aitkin County. Digital photo by Kim and Cindy Risen.

Record 2005-011: Worm-eating Warbler, 14 April 2005, Warner Nature Center, Washington County. Digital photo by Kirk Mona.

Digital images were obtained of this apparently unmated adult at a burrow.

• Say's Phoebe (*Sayornis saya*), 15 May – 2 July 2005, Felton Prairie, Clay County (record #2005-019, vote 7–0 for each of two adults).

Both of the adults were photographed and described separately; their behavior suggested the possibility of breeding, but nesting evidence could not be found.

• Rock Wren (*Salpinctes obsoletus*), 10 May – 23 August 2005, Felton Prairie, Clay County (record #2005-017, vote 7–0).

One adult advertised from a pile of rocks in the same quarry where Minnesota's first breeding record occurred in 2004 (***The Loon*** 77:30, 59–62). Though seen carrying food in late June, neither a mate nor young were observed in 2005.

• Yellow-throated Warbler (*Dendroica dominica*), 15 May 2005, Belle Plaine C.P., Morrison County (record #2005-030, vote 7–0).

• Worm-eating Warbler (*Helmitheros vermivorus*), 15 April 2005, Warner Nature Center, Washington County (record #2005-011, vote 7–0).

Netted, banded, and photographed in the hand on a record-early date.

• Lark Bunting (*Calamospiza melanocorys*), 26 May 2005, Ely, St. Louis County (record #2005-026, vote 7–0).

• Black-headed Grosbeak (*Pheucticus melanocephalus*), 24 May 2005, near Luverne, Rock County (record #2005-025, vote 7–0).

This adult male pursued a female Rose-breasted Grosbeak (*P. ludovicianus*).

• Lazuli Bunting (*Passerina amoena*), 13 May 2005, Owatonna, Steele County (record #2005-021, vote 6–1).

This adult male was documented only by two photographs, which appeared to show some pale blue on the bird's belly. A written description might have addressed one member's concern that this suggested possible hybridization with Indigo Bunting (*P. cyanea*).

• Gray-crowned Rosy-Finch (*Leucosticte tephrocotis*), 30 December 2004 – early March 2005, near Hinckley, Pine County (record #2005-002, vote 7–0).

The following records were voted on January – July 2005 and were Not Accepted.

(Please note that a record which is Not Accepted only means that the documentation was not complete or convincing enough to include the sighting in ***The Loon***, the journal of the MOU, or in the MOU's archives of confirmed bird records. Such a vote does not necessarily mean the observer misidentified the bird or did not see it. Summaries of the reasons why a record was Not Accepted are included here. These are in no way intended to be critical of the observer. The only purpose is to highlight the difficulties an observer may encounter while identifying or documenting these and similar species.)

• Whooper Swan (*Cygnus cygnus*), 22 May 2005, Sherburne N.W.R., Sherburne County (record #2005-034, identification Accepted 10–0/origin Not Accepted 0–10).

All ten members vote on potential first state records and on questions of origin. This adult was documented by a single photograph; its identity was not in doubt, but there was no written information about the bird's behavior, ability to fly, condition of its bare parts and plumage, and whether or not it was banded.

A late May date would be most unusual for a true vagrant. This species has been reported about a dozen times in Minnesota, but very few were documented, all were assumed to be escaped or released from captivity, and none were previously voted on by the committee. Information on the release of captive Whooper Swans in Minnesota and this species' status in North America was recently summarized in *North American Birds* 58: 301–308.

• Tricolored Heron (*Egretta tricolor*), 20 May 2005, East River Gorge Park, Minneapolis, Hennepin County (record #2005-023, vote 2–5).

A brief description by an inexperienced observer of a heron that "apparently has been staying in the park for some time, because many neighbors are familiar with it" garnered minimal support. Its bill was yellow — atypical for Tricolored Heron in May — and the description of a "grayish-blue back" and "light" belly might also fit Great Blue Heron (*Ardea herodias*).

• White-faced Ibis, 30 April – 2 May 2005, Clare Johnson W.M.A., Lincoln County (record #2005-035, vote 0–7 for two adults; see Accepted record of *Plegadis* ibis, sp.).

• *Plegadis* ibis, sp., 1 May 2005, Hills, Rock County (record #2005-013, vote 2–5 for three individuals).

Three ibises reported with an Accepted record of one White-faced Ibis were not described in any way.

• Yellow-throated Warbler (*Dendroica dominica*), 30 April 2005, Northfield, Rice County (record #2005-020, vote 2–5).

This warbler had a yellow throat, a "horizontal white streak" above the eye, and a gray back, and may well have been a Yellow-throated Warbler, but despite 20 minutes of observation the description omitted key elements of this species, e.g., the white suborbital arc, the pattern of black on its face, the distinctive white patch on the side of its neck, and white wing bars. The possibilities of Grace's Warbler (*D. graciae*) and female Blackburnian Warbler (*D. fusca*) were not considered; though unlikely, the former was recently photographed in Chicago.

• Baird's Sparrow (*Ammodramus bairdii*), 5 May 2005, Felton Prairie, Clay County (record #2005-018, vote 2–5).

This report of an early Baird's Sparrow singing in atypical microhabitat (disturbed grassland with discarded farm equipment and materials) was not supported by field notes and the description did not conclusively eliminate other grassland sparrows.

The efforts of all those observers who document reports of unusual species are greatly appreciated, whether or not the records are Accepted. Accordingly, the Committee acknowledges with thanks those who provided written documentation for one or more of the records listed in this article: Dedrick Benz, Wayne Bjorlie, Paul Budde, Conny Brunell, Doug Buri, Dave Cahlander, Philip Chu, Bob Dunlap, Kim Eckert, John Ellis, Chris Fagyal, Steven Falkowski, Ben Fritchman, Mike Hendrickson, Jeanie Joppru, Bill Marengo, Jim Mattsson, Janet Petn, Peter Schmitz, Roger Schroeder, Bill Schuna, Peder Svingen, Dan & Sandy Thimgan, Tom Tustison, Tim Walsh, and Leo Wexler-Mann. The Committee also thanks an increasing number of photographers who submitted images in support of these records — a most welcome trend.

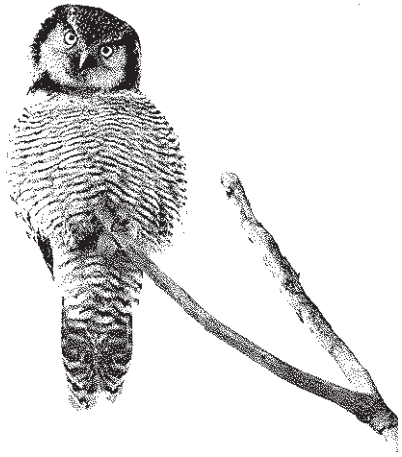
There were many more observers who provided written documentation and/or photographs for records of Regular species which were not voted on by the Committee. Although such records are not cited here, the efforts of these individuals are greatly appreciated. The Committee wishes to especially thank Conny Brunell, Craig Menze, and Dan and Sandy Thimgan for documenting several such records.

The Committee welcomes questions or comments from MOU members regarding any record in particular or our procedures in general. Please contact Peder Svingen by e-mail at <psvingen@d.umn.edu> or at the address below. Summary: 34 records voted on — 30 Accepted (88%), 4 Not Accepted (12%).

2602 East 4th Street, Duluth, MN 55812.

BIRDING BY HINDSIGHT

A Second Look at Grouse



Kim R. Eckert

It would be tempting to subtitle this piece "Grousing About Grouse," but there are plenty of reasons not to. For one thing, it was already used for a section on gallinaceous birds in an earlier Hindsight installment about range and habitat (***The Loon*** 70:232–237). Once is enough for this phrase – after all, it's not all that clever or funny. (Besides, as silly as it sounds, it's always possible someone out there might somehow think I was serious and really disliked grouse.)

There are relatively few ID problems among the ten species in the Order *Galliformes* which are included on the Minnesota list. The greater difficulty — the main thing to grouse about — tends to be just finding them in the first place. We are all familiar with how elusive rails, owls, and nightjars can be, but turning up a Spruce Grouse or Gray Partridge can be just as tough. There can also be a problem with how "countable" some are, considering how many are raised at game farms or elsewhere and how often they escape or get intentionally released.

In addition to identification, accordingly, this article will include hints on how to find gallinaceous birds and when to suspect captive origin. When relevant, other comments will be given for some species: range (all are generally permanent residents, non-migratory, and seldom stray out-of-range), season (some months are better than others for finding grouse), habitat (obviously), behavior (knowing their habits makes some easier to find), and vocalizations and other non-vocal sounds (though these tend to figure little in finding or identifying most species).

Though not currently found on the Minnesota checklist, it is appropriate to include Chukar in this discussion, since it was considered a locally established resident here decades ago, and individuals still escape from game farms.

Gray Partridge

Given a reasonable look, this introduced species presents no real ID problems (but see Chukar below). Except for the northeastern quarter of the state, they can occur wherever there are fields and open country. Curiously, I cannot recall ever finding partridge in tracts of native prairie. They always seem to be in disturbed areas: croplands, vacant lots at the edge of town, roadside shoulders and ditches, railroad right-of-ways, farmyards, etc.

This highly sought bird is best looked for in winter when individuals flock together and are more easily spotted against a snowy background. Also try late summer or fall when family groups are out running around. Conversely, it can often seem impossible to find in spring and early summer, and note that no flocks are around then, only singles or nesting pairs.

Your best bet is to look for partridge feeding along roadsides at dawn or dusk. And look on the ground. Period. I have never seen one up on a fence post, shrub, wire, or any other perch. (I was amazed

once to see one run up on an artificial dirt mound in response to a recording, but that's about it.) And it is nothing short of amazing how they can flatten themselves and disappear into grass no more than a few inches high after being spotted.

At least this species presents listers with few "countability" problems. About the only out-of-range sighting I remember raising questions of origin was once in the Duluth railroad yards. Odds are this individual was from the prairies and stumbled aboard a freight car hauling grain to the Duluth harbor.

Ring-necked Pheasant

Since pheasants aren't nearly as hard to find or as highly sought as partridge and involve only one potential ID problem, this section will be brief. It's another introduced species, generally ranging throughout the same farmlands (i.e., throughout except northeastern Minnesota), although they tend to be rare or absent in northwestern Minnesota. Interestingly, they were locally established in the Duluth-Superior harbor area until 1991, when essentially wiped out by a Halloween snowstorm. Occasional pheasants are still reported in Duluth and vicinity, but these certainly represent escaped/released individuals.

The one ID difficulty here occurs in summer and early fall when young pheasants are around. Their pointed tails are not fully grown, thus inviting them to be mistaken for Sharp-tailed Grouse. So, when this latter species is reported south of its normal range, it seems likely the observer was actually seeing a young pheasant.

Spruce Grouse

Consider that several birders with 700+ on their North American life lists have never seen a Spruce Grouse. What better evidence is there that this is Minnesota's most elusive gallinaceous bird — perhaps Minnesota's most elusive bird of any kind?

Spruce Grouse occur in the coniferous forest zone from Roseau to Cook counties, with probably the best numbers in parts of Beltrami Island State Forest in Lake of the Woods County. They are consistently reported as well in Koochiching County, in St. Louis County north of the Iron Range, in Lake County as close as 15–20 miles north of Two Harbors, and in Cook County starting about 15 miles inland from the lake. While there have been isolated reports in heavily birded Aitkin County, the Sax-Zim Bog, and along the North Shore of Lake Superior, I have yet to see any of these documented.

Most Spruce Grouse searches tend to be along roadsides in winter at dawn, when deep snow seems to force them out to pick at salt and grit. The most popular roads for birders are in Lake County: the northern third of County Road 2, and Minnesota Highway 1 between Isabella and the Kawashiwi River. At best, though, the sightings are erratic: on one morning a flock of a dozen might be standing in the road, but scour the area the next morning, or just five minutes later on the same day, and you'll often come up empty.

Mid-summer through fall is worth trying, when grouse groups with young are out wandering about. Or try springtime, when males are performing display flights (listen for a sudden, explosive flutter of wings) and can be attracted to recordings of female vocalizations. (Males give a curious, seldom-heard snoring or snort; they are also said to give soft, low-pitched hoots, but there is some uncertainty about this.) The worst time to look, at least in Minnesota, has to be in early summer when females are concealed on nests and invisible males stand motionless back in the woods.

Despite its name, Spruce Grouse are actually more associated with jack pines, at least in this part of the continent. Yes, they are in woods predominated by spruce, balsam fir, or northern white cedar, but looking in conifer stands with a jack pine component makes the most sense. I doubt they occur much in red or white pine stands or tamarack bogs, and I have never heard of one in a predominantly deciduous woods.

Similarly, don't be misled by its nickname, Fool Hen. While it's true that

Spruce Grouse are typically tame in their behavior, it doesn't follow that any such grouse is this species. Be aware that a Ruffed Grouse often acts excessively tame as well, and birders unaware of this mistakenly assume it has to be a Spruce Grouse. Clearly, this has to be the most frequent ID error involving gallinaceous birds.

Indeed, a Ruffed Grouse does resemble a female Spruce Grouse when its distinctive sub-terminal tail band isn't visible — or especially when it's one of those few showing a non-black tail band (see Ruffed Grouse below). (Note that many female Spruce Grouse have a nondescript tail pattern, lacking a rusty tail tip.) But if the grouse in question shows a crest and has thick black bands on its flanks, it's a Ruffed. Spruce Grouse lack a crested head profile (as do a few Ruffeds), and their underparts are densely and uniformly barred, with no contrasting flank markings.

As with others in this sedentary group, consider the possibility of a game farm escape when a Spruce Grouse is reported out-of-range or out-of-habitat. This seems to be the most logical explanation for an apparently correctly identified bird found in a deciduous area of southern Pine County in 1982 (see ***The Loon*** 54:200–202).

Ruffed Grouse

This grouse can not only resemble the Spruce Grouse in appearance (be sure to see above for ID comments on crests and flanks) and behavior (again, Ruffeds can act just as tame), but at times they can be just as hard to find. In spring and early summer the male's drumming can be heard (or is it felt?) wherever there are extensive woodlands in northern, central, and southeastern Minnesota counties. But it's tough at this time of year to follow the sound to the grouse's drumming log and actually see one, and many listers have to settle for a heard-only encounter.

As with other species, try later in the summer when family groups are out and about. An even better time is fall through winter when there is less foliage in the way and when Ruffed Grouse do a couple things to make them easier to spot. Especially at dawn and dusk, watch for them feeding on catkins of aspens, birch, and alders — often conspicuously out in the open in the higher branches. At the same time of day they will regularly appear at favored bird feeding stations with seeds spread on the ground or on low platforms. But watch cautiously then: when at feeders they tend to be quite wary and not at all tame.

Though Ruffed Grouse tend to favor deciduous or mixed woods, I have seen them in solid coniferous forests where only Spruce Grouse should have been, and this can lead to misidentifications. And, as you try to see whether or not that grouse lurking in the spruce bog has a tail band, it's important to know that not all Ruffed Grouse tail bands are black: a few are brown, or even reddish-brown! It's certainly easy to see how one with such a tail could be mistaken for a Spruce Grouse, especially if it's tame and in a spruce bog.

Sharp-tailed Grouse

Just as Ruffed and Spruce grouse can overlap in range and habitat, so can Ruffeds and Sharp-taileds. This latter species, though, is generally in more open landscapes along and north of a diagonal line from Polk to Pine counties, but absent from Lake and Cook counties and other solidly wooded areas. With many farmlands abandoned and overgrown in recent decades, this grouse has declined in numbers, but there seems to be an increase in reports lately from west central and southwestern Minnesota. While some of these may refer to misidentified pheasants (see above), and the question of game farm escapes/releases could be raised (usually not an issue with this species), some could be genuine Sharp-taileds wandering east from the Dakotas.

Of course, the surest way to see this sought-after bird is to get directions to a lek when they're displaying in spring. Photographers may prefer to enter blinds well before dawn, but birders can sleep in a

bit: the grouse are usually still active and visible from roadsides a couple hours after sunrise. Sharp-tailed lek sites, though, are often unreliable. While some are consistent for years, others will have moved elsewhere after a year; some can unpredictably change on a weekly or even daily basis within a season.

This grouse is decidedly elusive at other times of day and seasons, and finding any then is a matter of luck. In winter months, however, Sharp-taileds sometimes have the habit of venturing into the open to feed on tamarack cones or alder catkins — not at dawn or dusk, but curiously around an hour or two after sunrise. I've spotted them this way several times over the years, but I'm always surprised when I do.

A Sharp-tailed's tail is pointed (or sharp, if you prefer; again, beware of juvenile pheasants), but it isn't as long as some birders expect. It shows a lot of white on displaying and flying birds, and the ID of this and the previous two grouse is straightforward if their tails are visible. But when its tail is out of sight, a Sharp-tailed can still be told by its distinctively pale underparts: relatively lightly spotted on the breast and practically all-white on the belly, quite unlike Ruffed and Spruce grouse and prairie-chickens. Also note how much paler than a prairie-chicken it appears in flight, with uniform white spotting across its upper wings.

Greater Prairie-Chicken

While looking for Sharp-taileds in parts of northwestern Minnesota, you might as well watch for prairie-chickens too. They sometimes share the same leks, and the two are even known to hybridize. Prairie-chickens currently are found locally in a narrow band from southwestern Otter Tail County, north through Wilkin (e.g., Rothsay WMA) and Clay (e.g., Bluestem Prairie SNA and Felton) counties, and at least up to the prairie preserves southeast of Crookston in Polk County. They've also been introduced in the Lac Qui Parle area. (Decades ago this species was nearly statewide in occurrence, and until recently there were still a few in parts of Cass, Hubbard, and Wadena counties.)

Like Sharp-taileds, prairie-chickens are most easily seen when displaying on their leks and most easily missed at other times. Curiously, though, be sure to note they will sometimes gather at their leks at dusk as well as dawn, and in fall as well as spring. On the average, prairie-chicken lek sites seem more reliable over the years than those of Sharp-taileds; often when a lek gets plowed up they'll keep displaying there anyway. Prairie-chickens will also forage in these same croplands.

Unlike most gallinaceous birds, the sound given by a prairie-chicken is as distinctive as its appearance. This regular low-pitched "booming" given by a displaying male differs from the Sharp-tailed's more nondescript and random sounds. In the pre-dawn gloom, also note how displaying males differ in silhouette: the prairie-chicken with wings held by the body and both tail (short, all-dark, and rounded) and pinnae (neck feathers) projecting above the body; the Sharp-tailed with wings spread out and only the tail elevated.

As indicated in the previous section, birds away from the leks and with tails not visible are still easily identified. In contrast to the Sharp-tailed's paler and lightly spotted underparts, note the prairie-chicken's uniform and dense barring throughout its underparts.

Willow Ptarmigan / Rock Ptarmigan

As unlikely as it seems, two ptarmigan species have managed to wander as far south as Minnesota. The first Willow record was a 1914 specimen. Then, for some reason, at least a couple hundred Willows staged a unique invasion into the state during the winter of 1933–34. There's also a second-hand report of two Willows at a feeder in 1964 (see ***The Loon*** 36:66), but the description is vague, and there is nothing to indicate — if they even were ptarmigan — why they weren't Rocks.

At first, many thought the Rock Ptarmigan record in May 1996 from Grand Marais (***The Loon*** 68:79–81) was even

more incredible. But this species is no less likely than a Willow to occur here, given there are at least three records of Rocks from southern Canada within a hundred miles of the U.S. border. I have to wonder, though, had this not been a white, basic-plumaged male with diagnostic black loral smudges, if it would have been assumed to be a Willow. Though the ID of male ptarmigan in all plumages is not difficult, the females and young are really tough without bill measurements.

Accordingly, if and when the next ptarmigan is reported this far south, let's hope it's another male. Clues involving season, habitat, and behavior won't determine its ID, and only males on the breeding grounds utter diagnostic vocalizations. The issue of an escape from captivity will also have to be addressed, since Willows, at least, are kept at some game farms. I'll also have to wonder how often albinism can occur in grouse, leading to one being mistaken for a ptarmigan.

Wild Turkey

The appearance and vocalizations of turkeys present no real ID problems, but trying to tell if it's a truly wild one can be daunting. The Minnesota Department of Natural Resources introduction of wild birds in the last few decades has been successful, with wild, established, and "countable" populations in the southeastern quarter of the state. But in many places in northern and western Minnesota (turkeys of captive origin can turn up anywhere) you have to wonder if those you see come from some local barnyard or game farm.

I, for one, couldn't draw you a line showing the range limit of established DNR releases, but I do make guesses — not all of them educated — about when a turkey added to a day's checklist would be a dubious entry. If it's up here in Duluth or elsewhere far from its core southeastern Minnesota range, if it's in a farmyard, suburban landscape, or some other unnatural habitat, or if it stands its ground and fails to head away from me when I stop to look, I then tend not to take it too seriously.

Northern Bobwhite

Like turkeys, the ID of bobwhites presents no caveats (except see Chukar below), but there is a definite issue about escapes/releases from captivity. Unlike turkeys, though, it's easy to tell if a bobwhite you see in Minnesota is wild and countable. The answer: none of them is.

After research by Anthony Hertzel into the status of this species here and in adjacent states (see ***The Loon*** 75:3–7), in 2004 the MOU's Records Committee reclassified it as Extirpated — i.e., a bobwhite population was formerly established in the wild in Minnesota, but it no longer exists. Yes, bobwhites are still seen in the state (like turkeys, they can appear anywhere), but they're all assumed to be recent escapes or releases from captivity.

At least into the 1970s, presumably wild bobwhites occurred from the southern edge of the Twin Cities down through southeastern Minnesota. For a short time in the 1980s, bobwhites were also being spotted in Rock County, birds thought to be wild having wandered in from nearby South Dakota. By the 1990s, though, the only bobwhites which seemed to be wild were limited to south central Houston County, although perhaps even these were all of captive origin.

So what's a Minnesota lister to do? If you saw a bobwhite, say, in Houston County in 1995, was it wild or not? How about in 1990 or 2000? You're on your own: neither I nor anyone else can give a clear-cut expiration date for wildness. The best you can do, as with Wild Turkey, is consider the county it was in, the habitat, and its behavior.

Chukar

I suppose it's possible for someone unfamiliar with this species to mistake one for a Gray Partridge (both show rusty tails in flight) or a male Northern Bobwhite (both have white throats outlined with black). But this is yet another species kept widely in game farms which can literally turn up as an escape in any Minnesota

county, so don't be too surprised if you find one. You won't find it, though, on the current Minnesota list of bird species, but this was not always the case: Chukar was once a member in good standing on our checklist.

Starting in the 1930s, Chukars were introduced widely in Minnesota and elsewhere, but virtually all populations in states east of the Rockies eventually died out. A few Chukars, however, took a liking to the rocky slopes of abandoned open-pit iron mines in Ely, and seemed to be wild, established, and countable. By the 1970s, however, their numbers diminished, and the last one there was reported in July 1977. Accordingly, this population never really lived up to being established after all, and the species was eventually removed from this state's checklist.

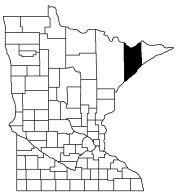
There are 11 other gallinaceous species found in North America: Himalayan Snowcock (an introduced exotic), Greater and Gunnison sage-grouse, White-tailed Ptarmigan, Blue Grouse, Lesser Prairie-Chicken, and Mountain, Scaled, California, Gambel's, and Montezuma quail. There is no need to discuss these, however, since all are resident far from here with virtually no potential for vagrancy; consequently, none can reasonably be considered potential additions to the Minnesota list.

Well, not unless one of them is introduced and eventually becomes established. Now wouldn't that be something: scaling the slopes of abandoned mines on the Iron Range in search of snowcocks! (Oops. Now I've done it. Probably incurred the wrath of someone from the Himalayas or Hibbing, soon to be on the internet, grousing.)

1921 W. Kent Rd., Duluth, MN 55812.

Notes of Interest

GREAT GRAY OWL KILLS NORTHERN HAWK OWL — On the afternoon of 23 December 2004, I took a drive up Minnesota Highway 61 from Two Harbors, Lake County, in search of owls. The first owl I encountered was a Great Gray perched low on the inland side of the highway, about 300 meters west of Crow Creek, and about 15 meters off the road. I pulled over to the shoulder to write down the time and mileage and get the GPS coordinates. After about three minutes, I was getting ready to pull away when I saw the Great Gray get up and slowly fly up the roadside towards the creek. As it flew, I noticed a smaller raptor flying ahead of it which landed in an alder bush. I put my binoculars on it and saw it was a Northern Hawk Owl with a dark brown vole or mouse in its talons. A split second later it flew from the alder bush and as I was watching, the Great Gray Owl came into my field of view, grabbed the hawk owl in mid-air, and took it to the ground on the slope of the ditch about 50 meters from my vehicle.



After comprehending what I had just witnessed, I quickly grabbed my digital camera, got out my spotting scope, and set it up in front of the vehicle. The Great Gray was still on the ground with the hawk owl beneath it. I took several photos of the Great Gray as it stood on the hawk owl, and I saw no movement from the hawk owl.

Great Gray Owl with Northern Hawk Owl, 23 December 2004, near Crow Creek, Lake County. Photos by James W. Lind.

The Great Gray appeared to take a few bites at the hawk owl while it was on the ground, but it spent most of its time looking around. It did not appear to be feeding, and I never saw any material in its bill. After about two minutes, the Great Gray tried to fly off, but appeared only able to make short flights of perhaps ten meters. It made three of these (see photo) in about seven minutes before it flew low into the birch forest and out of sight. It never flew any higher than three meters, and I never saw any flapping or other movement by the hawk owl. I assume the hawk owl was killed during the initial grab or when it was first pinned on the ground by the Great Gray.

The Great Gray appeared to have very little trouble grabbing the hawk owl in flight, even though the Great Gray was flying relatively slowly and hawk owls are typically faster fliers. Perhaps the hawk owl was too preoccupied with the small mammal in its talons to even notice the approaching Great Gray. I did not notice the hawk owl in the area until after the Great Gray left its perch, so I don't know if the hawk owl was on the ground or in the air when the Great Gray started to fly towards it.

I returned to the site the next morning to see if I could locate the hawk owl remains. All I could find was the upper mandible, face, and a few clumps of body feathers about ten meters into the woods from the right-of-way. From the prints in the snow, it looked as if the Great Gray had spent a fair amount of time pulling apart the carcass, and then flew off with it.

Microtus voles often comprise more than 80% of the Great Gray Owl's diet, but they will occasionally prey on other birds. Spruce Grouse, Sharp-shinned Hawks, Broad-winged Hawks, Gray Jays, and American Robins have all been documented as prey items in North America (Bull and Duncan 1993). A typical Northern Hawk Owl fits within the size and weight range of these species, yet this is the first documented case of one being preyed on by a Great Gray Owl. Avian species that have been documented preying on hawk owls include Great Horned Owls, Barred Owls, and Northern Goshawk (Duncan and Duncan 1998, Svingen and Nicoletti 2005).

In most agonistic encounters between these two species, the hawk owl is usually the aggressor (J. Duncan, pers. comm.). Since Great Grays are sometimes seen attacking conspecifics that are carrying food items, this bird may have flown towards the hawk owl with the intent of taking the prey from it. It may have then decided at the last second to prey on the hawk owl instead. **James W. Lind, 320 – 2nd Avenue, Two Harbors, MN 55616.**

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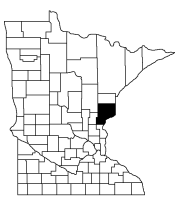
Duncan, J. R. and P. A. Duncan. 1998. Northern Hawk Owl (*Surnia ulula*). *In* The Birds of North America, No. 356 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and the American Ornithologists' Union, Washington, D. C.

Svingen, P. H. and F. J. Nicoletti. 2005. The 2004–2005 Influx of Northern Owls. Part I: Northern Hawk Owl. ***The Loon*** 77:132–140.

GRAY-CROWNED ROSY-FINCH OVERWINTERS IN PINE COUNTY — 

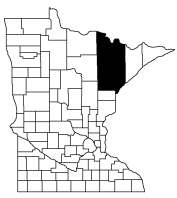
Between 2:55 and 3:10 P.M. on 31 December 2004, I watched and photographed a Gray-crowned Rosy-Finch (*Leucosticte tephrocotis*) at a private residence in Arlone Township, Pine County. The bird was first noticed at a bird feeder early in the morning on the 30th of December, but was not seen again the rest of the day. The homeowner called the statewide RBA and though reluctant to allow visitors, agreed to contact Anthony Hertzel if it returned so that the bird could be documented

for the M.O.U. Anthony and I had already made plans to meet in Hinckley to look for Great Gray Owls in eastern Pine County on the 31st. We got permission to drop off a request for documentation form and planned to talk with the family about the possibility of allowing visitors. When we arrived at approximately 2:30 P.M. on the 31st, the homeowner reported that the bird had once again appeared at his feeder early in the morning but had not returned; he granted permission to look for the bird. Much to our collective surprise, we found it perched in a tree on the south side of the house. It flew down to the ground below the feeder, where it fed on a mixture of millet and cracked corn. Anthony went inside the house to talk with the family, while I stayed outside in order to "digiscope" the bird and take field notes. I spent most of the time attempting to photograph the bird through my spotting scope and admittedly came away with an incomplete description and terse field notes.

Though still hesitant to allow additional visitors due to their remote location, the family gave permission to M.O.U. President Mark Alt and Rich Peet for a visit on New Year's Day; they saw the bird and recorded its vocalizations. After that day, the family requested no additional visitors and the bird's continuing presence was not confirmed until early May, when Anthony called and learned that it had overwintered at their feeder through early March 2005.

Description from field notes: Large finch, much larger than adjacent Common Redpolls. Mostly seen on the ground below the feeder. Bill yellow with a dusky tip. Irides dark. Grayish eye-ring. Leg color not noted. Black forecrown, lores, and throat. Gray hindcrown. Brown color from underparts invaded neck-sides. Gray supercilium. Blackish wings with whitish edging. Lesser wing-coverts edged pink. Extensive grayish-white on median wing coverts. Tail blackish and notched. Under tail-coverts not seen. Breast, belly, and flanks brown to pinkish-brown and scaly-looking. **Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812-1533**.

SCISSOR-TAILED FLYCATCHER IN ST. LOUIS COUNTY — After a week and a half hiatus from birding due to school and extraordinarily nice weather, I decided to take a hike around 40th Avenue in Duluth on 7 October 2004, around 4:40 P.M. As I rounded the corner by the gate and the impoundment came into view, I noticed a pale bird sitting atop the chain-link fence that encloses a small experimental pond. With the bird at some distance, I said to myself, "Is that a shrike?" I set up my scope and focused on the bird to happily discover that it was a brilliant adult Scissor-tailed Flycatcher (*Tyrannus forficatus*). I immediately called my good friend Mike Hendrickson, who happened to be but six blocks away. He came and was also able to view the bird.

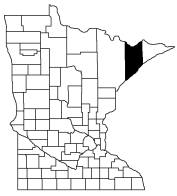


I watched the bird for a good 20 minutes, as it occasionally flew up from its perch to fly-catch, showing its quite long tail feathers and beautiful pink underwing, flanks, belly and undertail coverts. The bird would rise high in the air, then float and twist down gracefully to reposition itself on the fence top. I called others to get the word out on the bird. Later in the day, Mike went back to 40th and took some digiscope pictures, as did Earl Orf.

I found the bird on a Thursday evening and it was seen off and on through that Saturday. The winds three days previous to the day of the sighting had been strong out of the southwest and are likely the cause of this bird's appearance. I talked to Jim Lind around the time of the sighting and he mentioned the weather conditions to me and how he had jokingly predicted a Scissor-tailed Flycatcher. Nice prediction, Jim! **Tom Auer, 1728 E. 1st Street Apt.#6, Duluth, MN 55812.**

NOTE: A photograph of this bird appeared in the summer 2005 issue of ***The Loon*** (77:93) but was incorrectly credited. It should have been attributed to Earl Orf. — *AXH*

SECOND COMMON GROUND-DOVE FOR MINNESOTA — On 17 October 2004 we stopped in Lake County's Beaver Bay Township, on the side of Minnesota highway 61 at mile 47.5, to look for a Northern Hawk Owl that had previously been reported there; as our cars slowed, a bird that was roughly the size of a Horned Lark flushed from the shoulder of the road and landed on an exposed perch about 15 yards away. We quickly recognized the bird as a Common Ground-Dove.



In Beaver Bay Township, Lake Superior is bounded by a forested ridge through which a linear opening is provided by highway 61 and its associated zone of brush and felled saplings; this brushy zone was the area in which the ground-dove initially perched, and to which it returned whenever a passing vehicle flushed it from the weedy shoulders of the road.

Between 9:00 A.M. and 11:00 A.M. we accumulated about an hour of observations, usually during periods when the ground-dove was walking about on the shoulders of highway 61. Most of these observations were made through a telescope at close range (from 30 down to 10 yards).

Although the ground-dove was similar to a Horned Lark in overall length and relative length of the tail, direct comparison with two larks revealed it to be proportionally smaller-headed and a little bulkier-bodied.

Overall, the ground-dove appeared brown-gray; however, closer inspection revealed it to have more colorful areas.

(1) Its crown and hindneck were a blue-tinged gray, whereas the rest of its head and its foreneck, breast, flanks, and belly were vinaceous pink; both the gray of the crown/hindneck and the pinkish of the throat/foreneck appeared to be finely dark-scaled.

(2) The pinkish color of the face was complemented by the bill, with its reddish pink base and black tip, and by the brownish-orange irises.

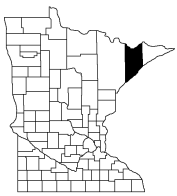
(3) The folded wings showed a vinaceous pink tinge on the median, lesser, and marginal upper secondary-coverts, and there were small black marks on the inner marginals, the inner medians, the inner greater upper secondary-coverts, and the inner tertials.

(4) The primaries were blackish brown with some rufous basally. Not surprisingly, the rufous was hard to see when the wings were folded; less expected was the difficulty of seeing the rufous when the wings were open – we observed 10 or 15 flights, and though we saw a rufous flash in the primaries during several of these, we more often failed to notice any rufous.

(5) Whereas the central tail feathers were brown-gray, more laterally located tail feathers were blackish with narrow white tips.

This Common Ground-Dove, Minnesota's second, was present through 19 October; the first, nearly 11 years earlier to the day and also from the North Shore, was netted on 16 October 1993 in St. Louis County (***The Loon*** 66:3). **Philip C. Chu, Department of Biology, St. John's University, Collegeville, MN 56321, and Ronald A. Erpelding, 701 4th Street SW, Willmar, MN 56201.**

BLACK VULTURE IN LAKE COUNTY — On 26 May 2004, while driving to Isabella for work, I spotted a group of vultures as they flushed off the south shoulder of state highway 61 in the Encampment Forest, approximately seven miles northeast of Two Harbors in Lake County. At 55 mph, I immediately noticed that one of the birds had bold whitish patches on the wing tips, and no pale trailing edge to the wing. I identified this individual as a Black Vulture (*Coragyps atratus*) and pulled over to the side of the road. It was with about eight Turkey Vultures (*Cathartes aura*), and they all circled the area for about 30 seconds and then



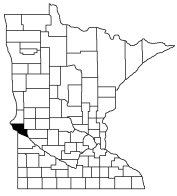
landed in the roadside trees. I grabbed my binoculars and got excellent views of the perched Black Vulture for about 20 seconds. Its blackish gray head and pale beak were very obvious, with the sun at about 90º to my line of sight. I then got out to get my scope, but the vultures all flew off as I was getting my equipment out of the vehicle. They flew southwest down the highway and perched again, but the Black Vulture was no longer visible.

In flight, the white patches on the wing were again very obvious, as were its short tail and shorter wings compared to the Turkey Vultures'. I drove back down highway 61 to get a better angle, and as I drove by the group I saw the Black Vulture perched farther back in the trees. It was about a third smaller than the nearby Turkey Vultures.

I stopped my vehicle, but a group of four semi trucks came by and flushed all the birds again. The flock continued southwest, while the Black Vulture flapped and soared over the highway for about 30 seconds. The wing beats were much shallower and faster than the nearby Turkey Vultures', its tail was very short in comparison, and the pale patches on its wings were again very obvious from all angles. It also appeared to be about a third smaller in overall size. The entire "jizz" was that of a buteo, whereas the Turkey Vultures all appeared long-tailed and long-winged, with constant tilting in flight, and showed a broad, pale area on the trailing edge of the wing. The entire flock flew north of highway 61 and may have roosted again. They were probably foraging on road kill when first seen, but I did not have time to check the shoulder of the highway.

I lived in Louisiana for five years and saw Turkey and Black vultures together almost daily. Just three weeks before this sighting, I saw both species in southern Arizona. Trina Stauff was a passenger in the vehicle and noted the same field marks. This represents the third Accepted record of the Black Vulture in Minnesota. **James W. Lind, 320 – 2nd Avenue, Two Harbors, MN 55616.**

NEOTROPIC CORMORANT IN BIG STONE COUNTY — On 15 August 2004, we found an adult Neotropic Cormorant standing on rocks near the shore of a pothole in section 29 of Otrey Township, Big Stone County; unfortunately, on subsequent days the cormorant could not be relocated.



We observed the cormorant for about 35 minutes, during which time Peder obtained diagnostic photographs. Our observations were not hindered by lighting — the sun was high in the eastern sky as we looked north — and, though the bird was an estimated 300 yards away, we were able to compensate by setting to 60x the zoom eyepieces of our spotting scopes.

The Neotropic Cormorant was standing near a Ring-billed Gull and two immature Double-crested Cormorants, allowing us to easily make size and shape comparisons. In bulk of body, the Neotropic was slightly smaller than the Ring-billed (!), and was only 65–70% as large as either Double-crested. Shapewise, the Neotropic was proportionally longer-tailed than the Double-cresteds.

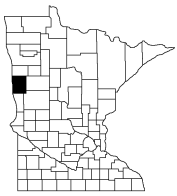
We paid particular attention to the Neotropic's bare parts. Its bare loral skin was grayish, not orangey as in the nearby Double-cresteds. In addition, its bare throat pouch differed in both color and shape from those of the Double-cresteds. The color was orange-yellow, neither as bright nor as orangey as the Double-crested's throat pouch, and shape-wise, the pouch extended farthest to the rear at the gape, and was much less extensive along the ventral midline of the throat. In contrast, the Double-crested's throat pouch extended nearly as far to the rear along the ventral midline of the throat as it did at the gape.

Finally, the Neotropic's bill was grayish, its legs and feet were black, and its irises were green.

The Neotropic's plumage was entirely black, with two exceptions. First, there was a narrow white border to the bare throat pouch. And second, there were a few fine whitish plumes on the sides of the head above and behind the throat pouch. On the right side of the head, the plumes together formed a faint, short, longitudinally oriented whitish line; on the left side of the head, the plumes were scattered rather randomly.

This Neotropic Cormorant record is Minnesota's third; the first was of a single individual from 16 July to 4 August 1992 in Ramsey County (***The Loon*** 64:176–178), and the second was of two birds from 12 August to 6 October 2003 in Lac Qui Parle County (***The Loon*** 76:46). Indeed, some have speculated that the present record represents a return visit by one of the two 2003 individuals — the 2003 and 2004 localities are separated by fewer than eight miles, as the cormorant flies. **Philip C. Chu, Department of Biology, St. John's University, Collegeville, MN 56321, and Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812.**

FURTHER NOTES ON MINNESOTA'S FIRST NESTING ROCK WRENS — The summer 2005 issue of ***The Loon*** included an article on the first confirmed nesting of the Rock Wren in Minnesota (77:59–62). I'd like to add a couple of comments to those given by Phil Chu in that article.



On 8 May 2004 Bill Marengo had an incredible day of birding in Clay County, finding not only a Say's Phoebe but also a singing Rock Wren. The wren was hanging around the closest thing to a talus slope a mountain bird could find in Western Minnesota — a pile of boulders in a gravel pit. Rock pile #6006 is a pile of football-sized to boombox-sized stones 15 feet high and 40 feet long.

In late June Herb Dingmann reported a second Rock Wren at the Felton Prairie gravel pit. What are the odds of TWO Rock Wrens showing up at a single spot 400 miles from their typical range? But it had happened before when two Rock Wrens built a nest near Bemidji from 27 May to 17 June 1984 (***The Loon*** 56:190). They eventually abandoned their nest.

After finishing up a month of bird surveys in Douglas County for the DNR's County Biological Survey, I headed up to Felton on 30 June. A half hour of silence was broken by a faint familiar song coming from the prairie just outside the pit. Finally a Rock Wren appeared at the neighboring rock pile — #6002. It had a fat caterpillar in its bill and was hopping down the east face of rocks. I snapped a few photos before it disappeared into a fist-sized crevice. It emerged shortly without the caterpillar. After perching on the highest rock of the pile, he sang several times and flew off. Seconds later, another Rock Wren emerged from the same crevice.

I backed off and sat down in some sweet clover about 30 yards away. Five minutes later, what I presume was the female returned and reentered the crevice. The male came back a few minutes later with another caterpillar, entered the crevice for 20 seconds and exited without a caterpillar. He once again perched on the highest rock, threw its head back, sang, and flew off.

After posting the sighting on MOU-net (but not giving the exact location for fear of disturbance), I got an e-mail from Tom Bell who knew the environmental manager for Aggregate Industries, the owner of the pit. Tom kindly volunteered to talk with him to see if they could protect the site. Much to Aggregate Industries credit they were very concerned about the welfare of the birds and agreed to avoid the rock piles for several weeks.

A few days later on 1 July, Craig Menze and his wife discovered a young Rock Wren out of the nest and the parents still carrying food to the crevice, thereby clinching Minnesota's first nesting record for Rock Wren. **Sparky Stensaas, 2515 Garthus Road, Wrenshall, MN 55797.**

Northern Hawk Owl, 21 January 2005, Sax-Zim Bog, St. Louis County. Photo by Michael Furtman, © www.michaelfurtman.com.

In This Issue

Purpose of the M.O.U.

The purpose of the MOU is the promotion of a broad program of conservation and natural history study, primarily in the field of ornithology.

To achieve this objective, the Union urges and promotes interest in field studies and observation of birds by individual members and affiliated bird clubs. We publish a quarterly journal, *The Loon*, and a newsletter, *Minnesota Birding*; we conduct field trips; we encourage and sponsor the preservation of natural areas; and we hold seminars where research reports, unusual observations, and conservation discussions are presented.

We are supported by dues from members, affiliated clubs, and special gifts. Any or all aspects of the MOU program could be expanded significantly with gifts, memorials, or bequests willed to the organization.

Suggestions to Authors

The Loon is a peer-reviewed journal on the birds of Minnesota published quarterly by the Minnesota Ornithologists' Union. The Editor welcomes submissions of articles, Notes of Interest, color slides, and photographs. All submissions should be typed, double-spaced, and single-sided. Notes of Interest should be less than two full pages. Photographs should be no smaller than 5"x7". Whenever possible, please include a digital copy of your submission in any standard format on floppy disk, CD, or via e-mail. Digital documents may be e-mailed to the Editor of ***The Loon*** — see inside front cover for contact information. Club information and other announcements of general interest should be sent to the Editor of our newsletter *Minnesota Birding* — see inside front cover for contact information. Bird sighting reports for each season should be sent to the Editor of "The Seasonal Report" — see "Key to The Seasonal Report" for contact information.

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The Loon

WINTER 2005
VOLUME 77 — NUMBER 4

Journal of the Minnesota Ornithologists' Union

THE MINNESOTA ORNITHOLOGISTS' UNION
J. F. Bell Museum of Natural History
University of Minnesota
10 Church Street Southeast
Minneapolis, MN 55455–0104

The Loon, Minnesota's journal of birds, is published four times each year by the MOU, the statewide bird organization. All members receive this publication and also our newsletter, *Minnesota Birding.*

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ISSN 0024–645X

In Memoriam: Dwain Willard Warner
1917–2005

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Dwain W. Warner was born in Cottonwood County, near Revere, Minnesota, on 1 September 1917. In 1924, the family moved to a farm near Northfield, where Dwain completed elementary and high school. He and his siblings grew up close to the land, becoming avid hunters, and it is no surprise that Dwain went on to become a biologist. He graduated from Carleton College in 1939, majoring in botany, and wrestled in the 145-lb weight class (a fact that later students found hard to square with his robust physique). From Carleton, he went on to Cornell for his Ph.D. In 1941, Dwain was one of four members on an expedition to northeastern Mexico led by George M. Sutton and Olin S. Pettingill, Jr. This field experience, later described by Sutton in his book *At a Bend in a Mexican River* began Dwain's lifelong dedication to the ornithology of Mexico. He started dissertation research on the birds of the Mexican state of Tamaulipas under Arthur A. Allen at Cornell, but this was interrupted by World War II. Dwain spent nearly three years in Army service, primarily in the South Pacific on the islands of New Caledonia, the New Hebrides, and New Zealand. He returned to Cornell in March 1946 with tales of rat control, wonderful natives, bird collecting, and shooting sambar deer for food. Based on his field experiences during the war, and with the guidance of both Allen and Sutton, he completed his dissertation on *The Ornithology of New Caledonia and the Loyalty Islands* in August 1947.

Dwain's first scientific publication appeared in the *Wilson Bulletin* in 1939; coauthored with Olin Pettingill, Jr, it was about a Glossy Ibis in Minnesota. His third publication was his debut in *The Flicker*, the predecessor to ***The Loon***, and

it appeared in 1948. He published over 100 papers during his long career, and some 19 of these were in *The Flicker* and ***The Loon***.

Upon completion of his Ph.D. at Cornell, Dwain returned to Minnesota and began a 40-year career as faculty member and Curator of Ornithology at the Minnesota Museum of Natural History at the University of Minnesota's Minneapolis campus, which later became the James Ford Bell Museum of Natural History. Teaching duties were a high priority in the early part of Dwain's career, before curation and research were gradually given their due by university administration. He was only able to do field research during the summers, when he usually would

try to go to Mexico. In later years, especially during the latter half of his career, he was able to get free of teaching for whole quarters and could effectively begin research in Mexico when nonbreeding migrants were present there.

In addition to teaching during the school year, Dwain often taught Field Ornithology at the Lake Itasca Field Biology Station. Field trips were an integral part of his spring Introductory Ornithology course in Minneapolis and of his summer course at Itasca. As part of the ornithology course each spring, Dwain would lead a group out to Cheyenne National Grasslands and Sand Lake, South Dakota, to see booming grouse and migrating geese. At Itasca, field trips would typically begin at dawn in a bog somewhere and end at dark watching Woodcock display from positions as close as the birds would allow. For many students, these trips were important introductions not just to birds and the natural world, but to a Warneresque lifestyle. Dwain knew intimately a host of diverse facts about the biology, geology, and history of the areas through which he traveled, and as he drove he would be talking, pointing, and waving his hands as he described aspects of the area that enthralled him.

I (Robert Dickerman) met Dwain in 1953 in Mexico City, where he was on sabbatical with his first wife Dorothy and family. We had passed without realizing it when I entered Cornell as Dwain was leaving for Minnesota. We talked into the night; I was starved for ornithological chatter and Dwain was the one to supply it. He offered me a curatorial fellowship he had just received if I would apply to the U of M, and ornithology has regretted it ever since. I will never forget the casual suppers at Dwain's house, with Dwain eating on a counter because his bustling family was too large for the kitchen table. Nor will I forget our wonderful frigid winter trips to northern Minnesota, when we would take a case of wine and have to open every bottle and drink off a portion to leave expansion room for the wine to freeze! Dwain was an incredible raconteur; perched on the corner of a desk or table, he would hold everyone spellbound by his stories. As an instructor, he created a wonderfully productive environment, allowing students to explore and grow. I published 36 notes or short articles while there, several coauthored with Dwain.

I (John Rappole) met Dwain in January of 1968, while canvassing graduate schools with my wife, Bonnie. Cedar Creek radio-tracking, a Warner creation, was going full-bore at that time, and he had many individuals of outstanding talent working in his lab. Warner's enthusiasm was electric, and when I joined the program in the summer of 1968, projects and funding were plentiful. Unfortunately, the war intervened and I was drafted. When I returned to graduate school in January of 1972, drastic changes had taken place administratively and programmatically. But, with a lot of help from his wife at that time, Gloria, Dwain was rebuilding, establishing a program on the birds of the southern Veracruz rainforest that he maintained for over two decades.

During the years I was at Minnesota, I found Dwain always busy, and yet always available. There was no time when I would stop by his office that he was not talking to someone in person or on the phone. He would motion for me to have a seat and, eventually, I would get my turn. Once I finally got to speak to him, I could be certain that he would give me his entire attention, and his insights would be well worth the wait. To those of us who had the privilege of working with him, it is surprising how little known he is in the larger intellectual community of ecology and ornithology. Dwain had a combination of extensive experience, vast eclectic reading, and the ability to express complex concepts both intelligently and often, entertainingly. He could think "outside the box" better than any other person I have known, and he asked brilliant questions. The world is certainly a dimmer and duller place without him.

I (Kevin Winker) met Dwain in the autumn of 1979 at the University of Minnesota. As a volunteer in his lab skinning

birds, I was exposed to his enthusiasm for birds and for life itself. An important part of Dwain was his gift for imparting his enthusiasm and insights to students. Hearing Dwain's stories of birds, people, and places was always stimulating, and after I left Minnesota I would call him every few months for invariably rejuvenating conversations.

Dwain was someone who welcomed people of all kinds. One of my favorites of his expressions ("Warnerisms") was "Pump 'em full of sunshine!" He gave a lift to me every time I spoke with him, effortlessly imparting his own enthusiasm for life and the exciting things we were working on as scientists. All of my ornithology students know some "Warnerisms". The "cloacal kiss" remains a very vivid way to describe avian copulation; and "Drive fast with your lights out" is certainly an eyebrow-raising concept for obtaining meat or specimens.

In 1984, Dwain and a group of us began the Belwin migration study near Afton, Minnesota, which wound up forming the core of my dissertation research. Dwain and his wife Marie Ward let us invade their home twice each year to catch and band thousands of migratory birds. Living with such great company, and with our agenda dictated by the weather and the movement of migratory birds, was incredibly inspiring.

Dwain had a strong influence on students, both graduate and undergraduate. And under his curatorship, the bird collection of the Bell Museum grew to become one of national importance. Scientifically, Dwain was a pioneer with lasting influence in several areas: Mexican ornithology, radio tracking, migrant ecology, and the diversity and ecology of Neotropical resident birds. Many of his students carry on research in these areas today. His enthusiasm inspired people and helped direct them to a productive course. In addition to his teaching, curation, and research at the university, Dwain also consulted for government and private agencies on biological diversity, the routing of power lines and highways, air-

port planning, bird-aircraft strikes, identification of biological material, landfill, real estate evaluation, and other environmental issues. He served on the board of trustees for the Science Museum of Minnesota from 1950 through his retirement, and was environmental director at the Belwin Outdoor Education Laboratory (1983–1989). After retiring in 1987, he began visiting Kenya and led approximately 20 safaris to that country to observe its wildlife and people. Throughout his life, Dwain was also a dedicated hunter. Dinner guests were often treated to tasty venison or other choice treats, as Dwain was a gourmet both as a chef and as a diner.

Dwain's death on 30 September 2005 followed those of his first wife, Dorothy Warner (Holway), and his son Robert. He is survived by his wife Marie Ward, daughters Betsy and Bonnie, sons Bill, Richard, and David, 11 grandchildren, and 15 great-grandchildren. A wonderful memorial service was held at the Belwin Outdoor Education Laboratory on a fine autumn day on 29 October 2005. As those

attending met, re-met, and reminisced, it became clear that such a large and diverse group was a tribute to the broad, positive influence that Dwain had had on so many. He will be fondly remembered and greatly missed.

We thank Marie Ward for her help in preparing this manuscript.

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The 2004–2005 Influx of Northern Owls
Part II: Great Gray Owl

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Extraordinary numbers of "northern" owls were discovered in Minnesota beginning in fall 2004 (Eckert 2005). In this article, part 2 of a series in ***The Loon***, we discuss the distribution and chronological progression of the irruption of Great Gray Owls (*Strix nebulosa*) in 2004–2005 and compare these data to previous owl incursions in Minnesota.

Irruptive flights are thought to correlate with fluctuations in populations of voles (*Microtus* and *Clethrionomys* spp.) at three to five-year intervals; factors such as the influence of snow cover on the availability of prey need more study (Duncan 1992, Bull and Duncan 1993, Cheveau *et al.* 2004). Jim Duncan, a Great Gray Owl researcher currently working for the Manitoba Department of Conservation, found small mammal populations in Roseau County in Fall 2004 to be the lowest since 1992. He also reported that no Great Gray Owls attempted to nest in 2004 on the structures he checks in his study area, which includes part of the Roseau Bog (J. Duncan, pers. com.).

Since 2001, a number of small mammal surveys conducted in northern Minnesota has been coordinated and standardized by the 1854 Authority (Olson 2005); 30 of 45 routes were run in Fall 2004. The total number captured in Grass/Brushland and Forested transects declined 30% and 46% respectively from 2003 to 2004. Most (36 of 47) of the small mammals caught

Great Gray Owl, 27 November 2004, Sax-Zim Bog, St. Louis County. Photo by David Cahlander.

in Grass/Brushland transects during Fall 2004 were meadow voles (*Microtus pennsylvanicus*); this species accounted for 18 of 68 captures in Fall 2003 (Olson 2005).

Methods

The total number of Great Gray Owls was estimated by continuously updating a database as soon as possible after sightings were posted to listserves, called in to one of the three rare bird "hotlines" in Minnesota, or e-mailed to us. Each and every sighting of a Great Gray Owl at a specific location on a specific date was included in the database; thus, birds that were judged to be the same individual at a specific location over a period of days or weeks would have each date entered in the database.

In order to determine the total number of Great Gray Owls in the state during this irruption, it was necessary to make some assumptions and these were similar to the approach used in previous articles: a bird refound within ½ mile of its original location within two weeks, or within about a mile of its original location less than a month later, was assumed to be the same individual; a bird found more than a mile from the original location or more than a month later with no interim sightings was treated as a new individual. We consider this approach conservative and the true number of Great Grays in Minnesota was undoubtedly far greater than documented herein.

Descriptive details or photographs were solicited for all reports of Great Gray Owls from the Twin Cities metro area and other locations in southern Minnesota. Though Great Grays are unlikely to be misidentified as any other species, Barred Owls (*S. varia*) are occasionally misidentified as Great Grays by inexperienced observers. Only 14 of the Great Grays reported from southern Minnesota by inexperienced observers had no details.

For the first time during a northern owl irruption in Minnesota, randomized surveys were conducted by volunteers at monthly intervals to assess prevalence of owls; methodology, results, and analyses of survey data will be discussed in a separate article. Survey data compiled by Dave Grosshuesch and Jim Lind were made available within a few weeks after each of the four surveys. These data were especially useful for eliminating duplicate sightings and greatly increased our confidence in the results presented here. Records of banded, recaptured, recovered, injured, or dead birds were also entered as soon as possible, though much of the banding and mortality data could not be included until summer or fall 2005; indeed, we finally entered the last batch of these records in December!

Largely due to periodic outreach and communication to Minnesota Department of Natural Resources (DNR) area wildlife managers coordinated by Steve Wilson, and contemporaneous documentation of locations, dates, and cause of death (if known) by Dave Grosshuesch and Dave Willard, we received more complete data for owls picked up injured or dead than ever before. Minnesota Ornithologists' Union president Mark Alt wrote periodic summaries of the irruption and posted the summaries to listserves. Nearly every newspaper published in northern Minnesota, most major media in the Twin Cities, local and national television, National Public Radio "On Point", and Minnesota Public Radio featured the irruption.

As a result, the level of awareness within the state and elsewhere, and the number of out-of-state birders traveling to Minnesota were probably unprecedented. However, this did not result in better geographical coverage; most birders went to Aitkin County and/or the Sax-Zim Bog and nearby areas in southern St. Louis County. By February, Great Grays were easily found in Carlton, Kanabec, and Pine counties, and many observers traveled no farther north than those locations.

Previous articles have excluded birds seen after about mid-April as potential breeding birds; however, there was no documented nesting by this species in Minnesota in 2005. There was evidence of continuing northward migration during early May; therefore, we included all

Irruption	Total	Dead/Injured	Rate	Counties	# South	Reference
1965–1966	37	?	---	6N --	0	38:44–45
1968–1969	~68	~13/--	19.1%	10N 10S	~33	41:36–39
1977–1978	58	14/--	24.1%	10N --	0	50:63–68
1983–1984	122	5/--	4.1%	10N 4S	4	56:143–147
1988–1989	115	7/--	6.1%	11N 1S	1	61:115–117
1990–1991	134	6/4	4.5%	15N --	0	63:163–167
1991–1992	218	3/--	1.4%	12N 2S	2	64:189–195
1995–1996	342	62/--	18.1%	22N 16S	>50	68:221–228
1996–1997	168	11/11	6.5%	18N 14S	41	69:114–124
2000–2001	394	26/8	6.6%	19N 1S	1	73:135–143
2001–2002	31	0	---	6N --	0	74:137–153
2004–2005	5225	752/15	14.4%	27N 15S	69	77:194–208

Table 1. Total number of Great Gray Owls, number dead/injured, mortality rate, number of north and south counties, number of owls in southern Minnesota, and reference in *The Loon* for 12 irruptions of *Strix nebulosa*.

Great Grays seen through mid-May in our analyses and final figures. Furthermore, as discussed below, significant numbers of Great Grays were still present in southern Minnesota in late May and even into June!

Results

Including a mid-August report of one near Agassiz N.W.R. and two birds along Owl Avenue in the Sax-Zim Bog area 22 August, the total number of Great Gray Owls in Minnesota from Fall 2004 through mid-May 2005 was determined to be about 5,225 — *more than 13 times the previous record* of 394 in 2000–2001 (Svingen *et al.* 2001). Excluding injured or dead birds, about 66% (2,127 of 3,201) of the owl records in the database were of birds seen only once; note that each "record" in the database refers to one or more individuals at a specific location for one or more days. Including birds found dead or injured, but excluding duplicate reports and reports from vague locations, the total number of sightings entered in the database was much higher than the total number of individuals; no fewer than 9,000 reports of Great Gray Owls from all sources were included.

A minimum of 767 Great Grays were picked up dead or injured. An additional 65 dead Great Grays had no location data and could not be reconciled as potential duplicates of dead owls in the database. We suspect that most of these 65 could be added to the total of 767, as very few dead owls were reported by observers without being picked up and turned in to the Minnesota DNR. The mortality rate of 14.4% during the 2004–2005 irruption was above average (Table 1).

A total of 585 Great Gray Owls was banded in Minnesota and northwest Wisconsin during the 2004–2005 irruption; banding data will be presented in detail and discussed in a separate article. We know that some Great Grays stayed in one location for extended periods of time; recapture and recovery data also showed significant movement by a few individuals over a short period of time. To complicate matters further, there are banding data proving that Great Grays in the exact same location for more than one day are often different individuals.

Similar to the owl irruptions of 1968–1969, 1995–1996 and 1996–1997 (Table 1), Great Gray Owls reached southern Minnesota in good numbers; they were found in 27 north and 15 south counties, and no fewer than 69 reached southern Minnesota. At least four strayed as far south as Iowa (Cecil 2005, Dinsmore 2005). Single-party counts of >100 Great Gray Owls within one Minnesota county in one day were routine and several single-party day

Date	Duration	Total	Location	Observers
14 Nov	3 hours	10	Lake/St. Louis	J. Lind
21 Nov	afternoon	9	FH 11, Lake/St. Louis	J. Lind
24 Nov	all day	27	St. Louis	J. Lind
25 Nov	7:00–9:30 A.M.	23	Cotton area, St. Louis	B. Yokel, J. Yokel
25 Nov	all day	54	Lake/St. Louis	J. Lind, S. Lind
1 Dec	7:20–11:20 A.M.	20	W of US 53/S of CR 133, St. Louis	K. Eckert
5 Dec	unknown	32	Sax-Zim bog, St. Louis	B. Yokel
11 Dec	unknown	33	Sax-Zim bog and FH 11, St. Louis	C. Fagyal
11 Dec	unknown	36	Melrude area, St. Louis	B. Yokel, J. Yokel
24 Dec	10:30–4:45	48	Sax-Zim bog, St. Louis	R. Brady
24 Dec	afternoon	69	Cotton/Melrude area, St. Louis	B. Yokel
25 Dec	unknown	41	Duluth–Two Harbors	P. Svingen
27 Dec	unknown	49	Sax-Zim bog, St. Louis	John Ellis & family
28 Dec	7 hours	60	Duluth–Two Harbors	J. Lind
3 Jan	all day	54	Sax-Zim bog, St. Louis	G. Himber, A. Blessing
4 Jan	4:00–5:00	31	1–6 miles S of Wrenshall, Carlton	J. Lind
8 Jan	afternoon	37	northern Aitkin	W. Nelson
9 Jan	unknown	31	Carlton	D. & B. Martin
10 Jan	afternoon	51	northern Aitkin	J. Richardson
10 Jan	2:00–dusk	47	Sax-Zim bog, St. Louis	L. Erickson
15 Jan	11:30–5:30	62	northern Aitkin	T. & E. Bell *et al.*
16 Jan	3:35–5:15	22	northern Pine	M. Alt, A. Nelson
19 Jan	8:00–5:30	174	northern Aitkin	C. & K. Risen
24 Jan	unknown	40	southern Pine	G. Wieberdink
29 Jan	6 hours	51	NE Kanabec/central Pine	D. & B. Martin *et al.*
29 Jan	unknown	187	Aitkin	C. Wood *et al.*
30 Jan	7½ hours	226	Aitkin/Pine	A. Jones, M. Robbins
30 Jan	11:20–5:35	214	Aitkin/Pine	J. & S. Lind
31 Jan	unknown	97	southern Aitkin	C. Risen
31 Jan	unknown	32	Rabbit Lake Twp., Crow Wing	S. & J. Blanich
6 Feb	12:00–3:00	33	east-central Pine	K. Eckman, M. Raasch
12 Feb	all day	130	Aitkin	W. Nelson *et al.*
20 Feb	unknown	108	western Aitkin	W. Nelson
20 Feb	9:45–6:00	256	Pine/Kanabec/Aitkin	J. & S. Lind
24 Feb	45 minutes	51	CR 1, Aitkin	W. Nelson
25 Feb	unknown	104	Aitkin	P. & J. Gunderson
27 Feb	7:30–5:45	210	Pine/Kanabec/Aitkin	J. & S. Lind
2 Mar	45 minutes	46	CR 1, Aitkin	W. Nelson
4 Mar	4:30–6:30 P.M.	17	Pine	J. Vieth *et al.*
5 Mar	morning	121	Aitkin	W. Nelson *et al.*
6 Mar	morning	104	Aitkin	W. Nelson
17 Mar	5½ hours	69	Carlton/Pine	J. Lind
20 Mar	all day	103	Aitkin	C. Fagyal
20 Mar	8:00–6:45	224	Carlton/Pine/Kanabec/Aitkin	J. & S. Lind *et al.*
25 Mar	3:00–7:00	70	Aitkin Co.	C. Risen
2 Apr	evening	35	eastern Aitkin/Carlton	J. Lind *et al.*
3 Apr	unknown	31	western Aitkin	W. Nelson
10 Apr	all day	10	Aitkin	W. Nelson *et al.*

Table 2. Single-party high counts of Great Gray Owls in one day within selected areas of northern Minnesota during the 2004–2005 irruption.

counts of >200 were submitted (Table 2).

Our decision to include Great Gray Owls seen through mid-May as part of the irruption was supported by the presence of non-breeding Great Grays in Wisconsin (Svingen *in press*) and southern Ontario (Jones 2005) during the summer, and the startling late May occurrence of a Great Gray Owl in North Dakota (Martin 2005b). Dozens of Great Gray Owls were seen during summer 2005 in northwestern Wisconsin and northeastern Minnesota, but none was known to nest in either state in 2005. No Great Grays nested on platforms monitored by Jim Duncan in southeastern Manitoba and adjacent Minnesota in 2005 (J. Duncan, pers. com.). In Ontario, none of the birds lingering into May, June, or July south of this species' normal breeding range was known to nest (Jones 2005). Even within traditional Great Gray Owl breeding areas in the boreal forests of Manitoba and Saskatchewan, none was known to breed following the irruption (Koes and Taylor 2005b).

Discussion

Aside from the sheer number of Great Gray Owls, unquestionably the most ever documented in Minnesota, this irruption was noteworthy in several respects. The general public was more aware of Great Grays than during any previous irruption, not only due to extensive media coverage, but also due to the owls' behavior and distribution. As numbers peaked in some areas within the coniferous forest zone, it was difficult to *not* see Great Grays hunting along county roads and most major highways in the early morning and late afternoon. During the first few months of the irruption, birds remained active and visible throughout the day. School bus drivers, rural mail carriers, and commuters noticed and reported Great Grays along roadsides. Unusually high numbers were found in urban areas, especially in Duluth, where more than 200 were found within the city limits (about 37% of the Great Grays found in Duluth died or were turned in for rehabilitation).

It must be emphasized that vast areas of suitable habitat within the coniferous forest zone remain entirely roadless or lightly populated, thus greatly reducing the probability of detection. Offsetting this trend of underreporting to some degree were randomized owl surveys; these were conducted by experienced observers at optimal times of day and since routes were randomly selected, owls were detected in areas that were neglected or lightly sampled during previous irruptions. Still, the total number of miles along all 75+ randomized survey routes combined is negligible compared to the total miles of roadway and the total surface area within Minnesota's coniferous forest zone.

As the irruption progressed, Minnesota Department of Natural Resources area wildlife managers and staff were overwhelmed with reports of dead Great Gray Owls and personally saw so many that they could not possibly keep track of live birds; collecting, transporting, and storing carcasses, and documenting locations and dates for the dead owls became a priority for many DNR field offices.

Eckert (2005) summarized the status of Great Gray Owl and associated species in other states and provinces during fall and winter 2004–2005. Most of this information was gleaned from *North American Birds*, but Volume 59, No. 3 covering spring 2005, had not been published by the time that Eckert penned his overview article. Also just published and devoted entirely to the Great Gray Owl irruption in Ontario is the December 2005 issue of *Ontario Birds*. Information obtained from these additional sources, exact dates and locations for extralimital records in Iowa and North Dakota, and spring records are discussed below.

Chronology

Though preceded by one near Agassiz N.W.R. 17–18 August, two in the Sax-Zim Bog 22 August, one in Roseau County along state highway 89 just north of the Marshall county line 19 September, and sporadic reports from southern St. Louis County in early October, the first indication that substantial numbers of Great

Grays were infiltrating the state came in mid-October. Heidi Hughes and Tom Valega visited Lake of the Woods County 15–19 October and found five Great Grays in Minnesota's Northwest Angle and one in Manitoba, about three miles northwest of the Warroad Customs Station. At about the same time, one was found in Duluth Township and the first of several banded at Hawk Ridge Nature Reserve in Duluth furnished only the second such record there since 1972 (*fide* D. Waters).

In order to present a dynamic picture of this irruption, we assigned all records of Great Gray Owls for which we had a specific location and date to either the north half or the south half of a latilong; each latilong is one degree of latitude by one degree of longitude. Anthony Hertzel created a series of maps (Figure 1) showing owl prevalence in each hemi-latilong (hereafter, referred to as blocks) at 10-day intervals. We chose 10-day intervals to minimize "weekend bias" and ensure that at least one full weekend but never more than two was included in each interval.

After the data were stratified by blocks and 10-day intervals, there were 86 different quantities of owls/block/interval; we assigned a gray scale value of zero (i.e., white) to blocks that had no owls during a 10-day interval and a gray scale value of 100% (i.e., black) to all blocks with a 10-day prevalence of 258 or more owls. The remainder of the 86 quantities were assigned to one of sixteen gray scale values (please see the legend for Figure 1). Gray scale values for each block for each 10-day interval beginning 15 October 2004 were then imported into a digital drawing program and the resultant maps (Figure 1) best represent the gradual progression of the owl irruption in Minnesota over time.

Northward movement in the spring was difficult to document. There were fewer reports from fewer observers and the final randomized surveys were conducted in early March. In south-central St. Louis County, Ben Yokel reported possible northbound Great Grays beginning 12 March, when three birds appeared near Melrude after none was found for more than four weeks. In Koochiching County, none was reported between 15 March and 24 April, but 20 individuals were seen between 24 April and late May. In Lake of the Woods County, only 2 were reported in all of March and April, but 11 were found in May. Great Gray Owl records in Minnesota from mid-May through July 2005 are shown in Table 3 and Table 4.

Movements

Except for recoveries and recaptures of banded birds, movements of individual owls were difficult to detect and impossible to prove. Recapture and recovery data will be presented in detail in a future article in ***The Loon***. Examples of individual movement include a Great Gray banded by Dave Grosshuesch in Schroeder, Cook County on 25 December which was found dead near Larsmont, Lake County six days later; and one banded by Frank Nicoletti on the Korkki Road in southern St. Louis County in late December, which was recaptured by Dave Grosshuesch in east-central Carlton County on 5 January.

Sudden shifts in highest density loci and unprecedented reports of dozens of Great Grays migrating at dusk along the North Shore of Lake Superior were truly amazing. Approximately 50 Great Grays suddenly disappeared in early January from side roads and along the expressway between Duluth and Two Harbors. On 3 January in Two Harbors, Lake County, at least 16 Great Grays were seen flying down the shore with many more birds seen in subsequent days flying over the treetops in and near Duluth, all headed southwest.

Eleven days later, and two days after temperatures plunged and ten inches of snow fell along the North Shore, Tony Leukering and others witnessed 21 Great Grays flying at dusk in the *opposite* direction across Agate Bay in Two Harbors. The very next day, Jim and Sharon Lind counted 27 more Great Grays flying across Agate Bay and up the shore between 5:00 and 6:00 P.M. At about the same time and also on the 15th, Frank Nicoletti saw nine Great Grays flying northeast along the

Last Seen	Location	County	Comments
15 May	section 32, T163N R46W	Kittson	McKinley Township
15 May	section 20, T158N R31W	Lake of the Woods	0.4 miles W of Carp
15 May	~3.5 miles S of Faunce	Lake of the Woods	since 1 May; Faunce FR
15 May	Fiero FR	Koochiching	just N of Pine Island FR
15 May	CR 13, S of Nevis	Hubbard	since 13 May
15 May	0.25 miles NE of Kerrick	Pine	same location 2 April
16 May	Roseau River W.M.A.	Roseau	found dead
16 May	Stony River FR	Lake	near S end
16 May	CR 2, N of Greenwood L.	Lake	N47º31'45.5" W91º39'20.1"
17 May	section 19–21, T49N R24W	Aitkin	since 30 April
18 May	CR 86, 0.8 miles N of CR 32	Koochiching	pair in Pine Island S.F.
18 May	section 34, T60N R22W	Itasca	George Washington S.F.
19 May	section 27, T160N R35W	Lake of the Woods	HBV
20 May	section 27, T158N R32W	Lake of the Woods	Pitt Grade Rd SW
21 May	CR 59, 1.1 miles E of US 53	St. Louis	west of Melrude
21 May	CR 52, just E of CR 7	St. Louis	Sax-Zim Bog area
21 May	CR 28, just W of CR 207	St. Louis	Sax-Zim Bog area
21 May	CR 213, 1.1 mile N of CR 28	St. Louis	Sax-Zim Bog area
21 May	Norris-Roosevelt FR	Lake of the Woods	near 19 May HBV
22 May	section 15, T65N R14W	St. Louis	Echo Trail
22 May	10.0 miles N of Nashwauk	Itasca	found dead, probably HBV
23 May	3.0 miles E of Baudette	Lake of the Woods	state highway 11
23 May	Wealthwood	Aitkin	found dead, probably HBV
24 May	section 3, T157N R32W	Lake of the Woods	Pitt Grade Rd SW
24 May	section 14, T161N R35W	Roseau	Norris-Roosevelt FR
24 May	section 33, T57N R13W	St. Louis	forest highway 11
24 May	Toumey-Williams FR	Koochiching	3.0 miles NW of CR 30
24 May	MN 6, 4.4 miles S of CR 5	Koochiching	just N of county line
24 May	section 35, T160N R45W	Kittson	just W of county line
26 May	section 1, T159N R31W	Lake of the Woods	0.75 miles from bird HBV
27 May	section 6, T143N R40W	Mahnomen	Oakland Township
27 May	~6.5 miles SW of Littlefork	Koochiching	HBV on US 71
27 May	CR 84, just S of MN 11	Koochiching	~6.0 miles E of Birchdale
28 May	section 1, T59N R9W	Lake	Stony River FR, jct MN 1
28 May	section 7, T59N R8W	Lake	east end of Stony Loop Rd
28 May	T61N R10W	Lake	vague location
28 May	T60N R11W	Lake	vague location
28 May	Spruce Rd, T62N R11W	Lake	vague location
28 May	~7.5 miles SW of Littlefork	Koochiching	HBV on US 71
28 May	Rice Lake N.W.R.	Aitkin	far west side of refuge
29 May	4.5 miles N of Tamarack	Aitkin	multiple dates since 2 April
30 May	CR 202, just S of CR 980	St. Louis	Sax-Zim Bog area
31 May	section 2, T49N R20W	Carlton	just S of Heikkila L.
31 May	section 2, T49N R20W	Carlton	0.6 mile W of Heikkila L.
31 May	CR 24/CR 137	Pine	also seen 30 May

Table 3. Minnesota records of the Great Gray Owl 15–31 May 2005 (n=45) arranged by last date of observation. Abbreviations: CR (county road), FR (forest road), HBV (hit by vehicle), N.W.R. (National Wildlife Refuge), S.F. (State Forest), W.M.A. (Wildlife Management Area). MN 6, MN 11, and MN 72 are state highways.

Last Seen	Location	County	Comments
1 June	CR 7, 2.3 miles S of CR 319	St. Louis	Sax-Zim Bog area
2 June	US 169, 0.9 mile W of CR 88	St. Louis	injured, released next day
3 June	10.0 miles N of Tamarack	Aitkin	same as 7 April?
3 June	near Palo	St. Louis	since 22 May
3 June	6.0 miles N of Tamarack	Aitkin	also seen 2 June
6 June	Medicine L., Plymouth	Hennepin	since late May (and earlier?)
7 June	US 2, 1.0 mile W of CR 88	Itasca	NW of Cohasset
? June	Skull Lake W.M.A.	Kittson	vague date "week of 9 June"
9 June	MN 72, near Loran C tower	Lake of the Woods	2 birds; 2 injured here in May
9 June	Bankton Trail	Lake of the Woods	
11 June	CR 52, near CR 208	St. Louis	Sax-Zim Bog area
14 June	section 15, T53N R17W	St. Louis	CR 133, 0.7 miles W of US 53
16 June	US 169, 0.7 mile N of CR 7	Aitkin	found dead
21 June	CR 213, 2.5 miles N of CR 28	St. Louis	Sax-Zim Bog area
21 June	CR 207, 0.1 mile N of CR 52	St. Louis	Sax-Zim Bog area
22 June	near Nine AM L.	Lake	off FR 374, N of Isabella
26 June	2.0 miles W of Jacobson	Aitkin	state highway 200
28 June	FR 2517, 1.8 mi N of CR 4	Itasca	Sand Lake Twp.
5 July	CR 4/CR 100	St. Louis	1.5 miles S of Palo

Table 4. Minnesota records of the Great Gray Owl in Summer 2005 (n=18) arranged by last date of observation. Abbreviations same as in Table 3.

North Shore between Stoney Point and Lakewood Road in St. Louis County.

Farther northeast along the North Shore, at three Cook County locations on 16 January, Great Gray Owls were also observed flying northeast shortly before dusk: 9 owls in Schroeder between 5:00 and 5:30 P.M. (*fide* C. Tveekrem), 13 owls flying up the shore at dusk about three miles southwest of Grand Marais (H. Sobieck *fide* M. Grover), and at least 5 owls between about 4:00 and 5:00 P.M. near Five Mile Rock, just northeast of Grand Marais (O. Lunke *fide* S. Wilson).

On 29 January, Jan and John Green covered the same route that had produced 20 Great Grays on the Two Harbors CBC and found no owls. On 13–14 February, Shawn Conrad drove U.S. highway 2 from Grand Rapids to Duluth, highway 61 along the North Shore to Grand Marais, most of the Gunflint Trail, state highway 1 through Isabella to its junction with Lake County Road 2, forest highway 11 and St. Louis County Road 16 to its junction with U.S. 53, and several roads in the Sax-Zim Bog. He and his wife found only one Great Gray Owl during the entire trip!

In northern Koochiching County, Great Gray Owls were seen regularly by Tom Crumpton and others until an ice and snow storm coated the county in early January (Itasca County to the south and St. Louis County to the east were relatively unaffected by this storm). Mary Perala, Boise forester, reported numerous Great Grays along roadsides in areas near the junction of St. Louis, Itasca, and Koochiching counties prior to this storm, but virtually none after the storm. Five owl surveys were conducted in Koochiching County 7–9 January; the resultant total of eight Great Grays was about half of that found in early December along the same routes. Early February and early March surveys in Koochiching County found only two Great Grays each time.

Though banding and recovery data cannot be offered as proof, it's tempting to speculate that owls left Koochiching County around the time of the early January ice and snow storm, and moved south into Itasca County. The number of Great Grays found on randomized surveys in Itasca County increased from 10 in early December to 28 in early January. Subse-

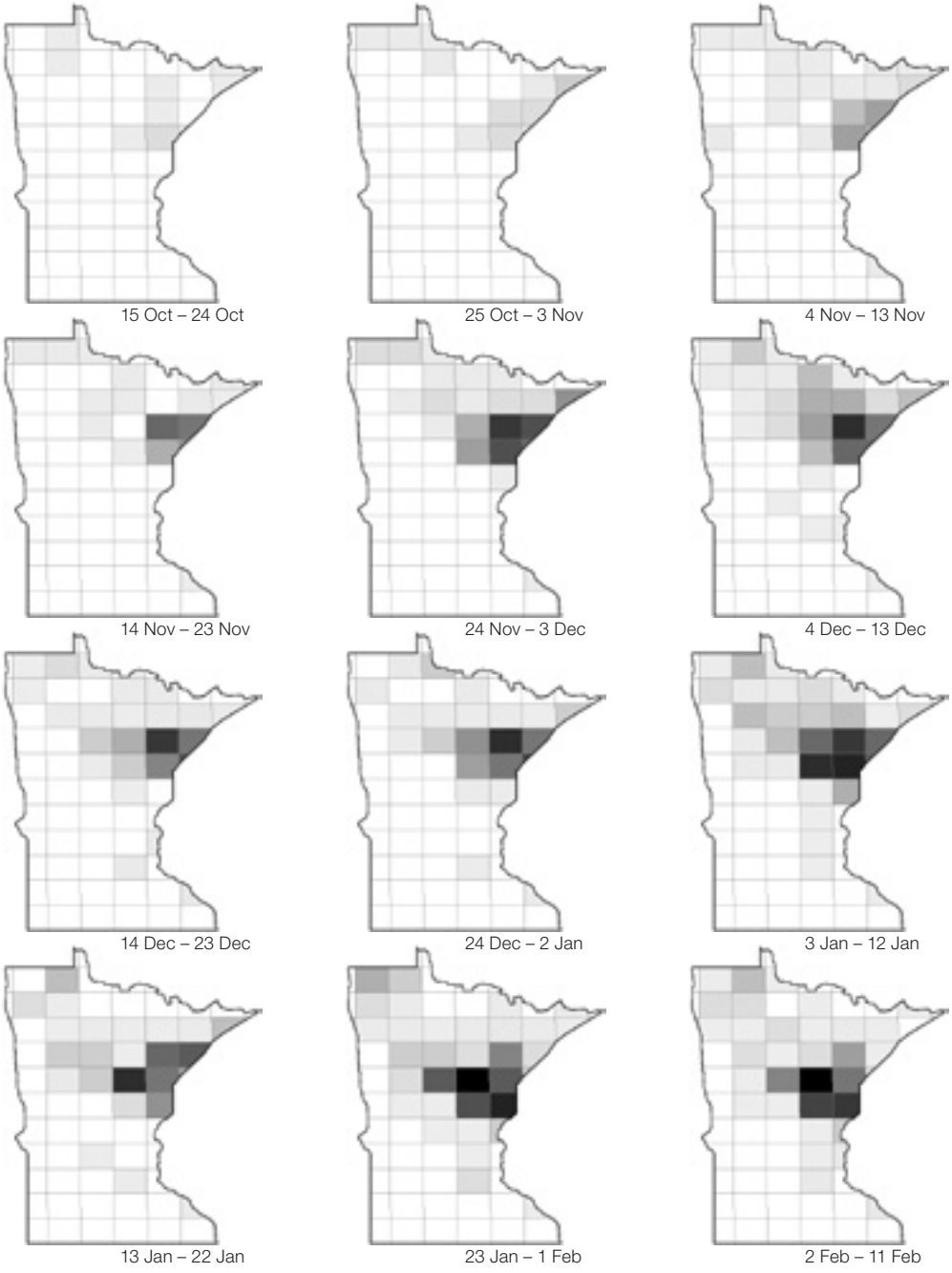

Figure 1. Maps showing hemi-latilong or "block" distribution of Great Gray Owls in 24 consecutive ten-day time periods from 15 October 2004 to 11 June 2005. The 86 different quantities of owls represented by the maps range in value from 1 to 459 birds and are indicated using 16 shades of gray, plus black. The greater the concentration of owls, the

darker the shade of gray. The 16 groupings for each shade of gray from lightest to darkest represent the following quantities of owls: 1=1–5, 2=6–10, 3=11–15, 4=16–22, 5=23–27, 6=28–33, 7=35–43, 8=46–51, 9=53–58, 10=59–67, 11=71–85, 12=87–111, 13=116–151, 14=153–179, 15=180–187, 16=196–252; black=258–459. Total number of blocks with owls = 46.

quent surveys found none (!) in early February and only one in early March. During the second week of January, Shawn Conrad found only two Great Grays that were not along U.S. highway 2; he found none in areas that previously had owls.

In south-central St. Louis County, Ben Yokel surveyed roads in the vicinity of Melrude and Cotton on a regular basis and conducted non-random surveys in the Sax-Zim Bog area throughout the winter. Numbers of Great Grays had been very high in November and December, but dropped dramatically after mid-January. Sparky Stensaas found 40 Great Grays in the Sax-Zim Bog between 10:00 A.M. and noon on the 20th, but Mike Hendrickson saw only two later that day and none two days later. Several observers also noted fewer Great Grays in Duluth and vicinity beginning about 15 January.

Anthony Hertzel explored roads in eastern Cass County, northern Morrison County, and western Crow Wing County 21 November and found no owls despite favorable conditions (overcast skies, light winds, and good habitat). Ten were found in Cass County in December and 37 more showed up in January. One Great Gray in late November provided the only report from Crow Wing County prior to January.

Bob Janssen searched central Mille Lacs County, northern and eastern Morrison County, and northern and eastern Benton County on 24 January, but found no Great Grays.

Dennis & Barbara Martin drove more than 100 miles of backroads in Carlton and Pine counties on 19 November and found no owls. Anthony Hertzel and Paul Hertzel spent the entire day driving around Pine County and parts of southern Carlton County 26 November and found one Great Gray.

Randomized surveys in Carlton County found only one Great Gray Owl in early December, but 26 Great Grays (plus 55 more on non-randomized routes) in early January, 10 Great Grays (plus 6 on non-randomized routes) in early February, and possibly reflecting the beginning of northward movement, a total of 19 Great Grays (plus 6 on non-randomized routes) in early March. Other observers reported a dramatic increase in numbers of Great Gray Owls in Carlton County beginning in early January, followed by a gradual decrease after mid-January; Bruce Pomeroy found 48 Great Grays in central Carlton County on the 11th, then none on the 13th, ten on the 15th, none on the 26th, and only one on the 30th.

A similar phenomenon occurred in Pine County, though survey results could not be compared since most of these data were obtained during non-randomized surveys. The best depiction of chronology and distribution in Pine County is from the maps in Figure 1 and the single-party high counts shown in Table 2.

Following isolated reports of Great Gray Owls in Chisago County during late January, more were found in February and March, especially in and around Wild River State Park. Ultimately, nearly two dozen Great Gray Owls were reported in Chisago County.

Extralimital Records

Though Great Grays were found in a variety of habitats during the early phase of the irruption, the first occurrence well outside of the coniferous forest zone was one picked up injured near Dilworth, Clay County on 9 November. A Great Gray Owl perched on a yield sign at Lake Center, near Big Cormorant Lake in southwestern Becker County, was found by Margie and Pat Stoy on 13 November.

The first of two Great Gray Owls that strayed the farthest south in Minnesota reached Winona County in early November and stayed through mid-February on a farm in Norton Township. The second Great Gray in Winona County was more than 10 miles farther south in March.

Though a few Great Grays had already been found in some counties west of the coniferous forest zone, significant movement into Marshall, Polk, Mahnomen, Clearwater, and Becker counties occurred during the second and third weeks of January. By the end of the third week of January, an influx into southern Cass

and Hubbard counties was evident, and the first Great Grays showed up northwest of there in Pennington and Red Lake counties. Jeanie Joppru, Zeann Linder, and Shelley Steva found 15 Great Grays in south-central Kittson County on the 29th.

Harbingers of the total of 34 Great Grays tallied in the seven county metro area during the 2004–2005 irruption were found near the St. Paul campus of the University of Minnesota, Ramsey County on 5 December, and in Stillwater Township, Washington County on the 11th. Outside of the seven county metro area in southern Minnesota was a total of 35 Great Grays in Benton (1), Chisago (23), Kandiyohi (1), Meeker (2), Sherburne (3), Stearns (2), Winona (2), and Wright (1) counties. Most of the total of 69 that were known to reach the southern half of the state were discovered after the first of the year; sorted by month of discovery, they were first seen in November (1), December (7), January (21), February (17), March (20), and no date (3).

Concentrations

St. Louis County hosted concentrations of Great Grays at several locations in late fall and early winter. Best known and most frequently visited was the "Sax-Zim Bog" area northwest of Duluth; this rectangular area is roughly defined by county road 27 (Zim Road) on the north, U.S. highway 53 on the east, county road 133 through Meadowlands on the south, and on the west, county road 5 north to Toivola, then county road 83 north and east to its junction with the Zim Road. The Sax-Zim Christmas Bird Count (CBC) recorded a North American CBC record of 70 Great Gray Owls within the 15-mile diameter count circle on 20 December. Great Grays could be found by driving virtually any road in late November and December; e.g., 20–27 were found within an eight-mile stretch of county road 7 north of county road 52 (Arkola Road) and up to 20 more inhabited a seven-mile segment of county 7 south of Arkola Road.

Noteworthy concentrations elsewhere in St. Louis County included nine Great Grays visible at once in fields either side of county road 42 (Homestead Road), one mile south of county road 40 (Hegberg Road) in Duluth Township on 26 December. On the east side of U.S. 53 at about the same latitude as the Sax-Zim Bog, Ben Yokel conducted periodic surveys in and around Melrude; up to 12 Great Grays along county road 52 (Comstock Lake Road) and up to 18 along county 59 (Melrude Road) in December dwindled to almost none by late January.

Owls congregated in several Aitkin County locations between January and March. Along a six-mile stretch of county road 18, a maximum of 60 was found by Cindy & Kim Risen 19 January. High numbers were also found along county road 1 late January through March (maximum of 54 on 5 March); a single field just north of the diversion channel attracted 20–29 Great Grays at a time. A parliament of 34 assembled in less than one square mile of southeastern Fleming Township beginning in late January. Not far from the parliament was a gallery of up to 21 Great Grays kibitzing from a three-mile stretch of county road 5 (Nature Avenue) in February and March. Another famous location dubbed the "owl field" along county road 4 (Dam Lake Street) in Lee Township ultimately attracted more birders than birds, as up to 17 owls congregated there for more than two months. Nineteen Great Grays were visible at one time along county road 23 (Alder Street), 0.5–0.7 miles west of Sprandel Road in Wagner Township on 20 March.

In Crow Wing County, up to 32 Great Grays inhabited two sections of Rabbit Lake Township beginning late January, and up to 27 hunted along state highway 6 north of Crosby in mid-February, including 9 owls in three miles on the 13th. Good numbers were also found in portions of Carlton, Pine, and Kanabec counties. In early January, when numbers peaked in Carlton County, eight Great Grays were visible at once in a large field along state highway 23, and six more were observed in an open area along Mattson Road in Wrenshall Township;

many more were found elsewhere in east-central Carlton County at about the same time. Dennis & Barbara Martin managed to point out 51 Great Grays in six hours on 29 January, while touring Pine County in a 48-passenger bus. In Kanabec County, a total of 21 Great Grays was reported by Craig Menze "around Kroschel" in just one hour on 20 March.

Morbidity and Mortality

As mentioned earlier, a total of between 767 and 832 Great Gray Owls was found injured or dead in Minnesota from Fall 2004 through Spring 2005. Detailed information on the cause of death or injury (if known), the chronology of death or injury, necropsy results including stomach analysis, measurements, and age and sex data will be presented elsewhere. Starvation was a contributing or causative factor in less than 10% of more than 500 specimens examined by Dave Grosshuesch. The exact cause of death was unknown in most cases, but was often presumed to be the result of collisions with motorized vehicles. Known causes of death included starvation, shooting, and electrocution; one was hit by a train and one collided with an airplane.

Among the 69 Great Grays reaching southern Minnesota, a total of 16 were found injured or dead. The majority of these (11) were found in Chisago County; the others were in Carver (2), Dakota (1), and Hennepin (2) counties. Since only 8 of the 69 Great Grays reaching southern Minnesota did so by the end of December, it's not surprising that most of those found injured or dead were picked up in February or March; the 16 injured/dead birds were picked up in December (1), January (2), February (3), March (7), and no date (3).

Other States and Provinces

Great Gray Owl irruptions seldom if ever occur across this species' entire range, but the 2004–2005 irruption was relatively widespread across the Prairie Provinces of Canada (Koes and Taylor 2005a), through southern Ontario (Currie 2005, Jones 2005) and Québec (Bannon, Denault *et al.* 2005), and southward well into Minnesota, Wisconsin, and Michigan (Granlund 2005a). Please see Volume 59, No. 1 (fall migration), No. 2 (winter season), and No. 3 (spring migration) of *North American Birds* and the December 2005 issue of *Ontario Birds* for details.

Record-high numbers of Great Grays were recorded in Ontario and Québec, but the 2004–2005 irruption diminished farther east. Only one Great Gray reached the Maritime Provinces during the winter (Dalzell 2005). Maine had the only Great Grays recorded in all of New England during this irruption: one in winter and three in spring (Hunt 2005, Perkins 2005).

Complementing the numerous Great Grays lingering into May and June 2005 in Minnesota were spring reports from adjacent states and late lingering birds farther east. North Dakota had two documented records during the winter season, its first since 1966: one photographed near Grand Forks 22–29 December 2004 and one in Steele County 12 February 2005 (Martin 2005a). Most astonishing was an injured bird photographed in Grand Forks County 14 May 2005 (Martin 2005b).

Three Great Grays were photographed in Iowa during the winter (Cecil 2005): Boone County 16–18 January, Buchanan County 14–15 February, and Dickinson County 16–19 February. One was found near Decorah, Winneshiek County 6 and 17 April 2005 (Dinsmore 2005).

Dozens of Great Grays lingered into summer on Wisconsin's Bayfield Peninsula and 44 were found in Michigan during the spring season, including those banded at Whitefish Point Bird Observatory 8 April – 22 May 2005 (Granlund 2005b). Unusual for Michigan's Lower Peninsula was one in Emmet County 21 June 2005 (Svingen *in press*).

Farther east, a Great Gray in Jefferson County through 12 May 2005 provided the second-latest date ever for New York (Veit *et al.* 2005). Many lingered through late May in Québec, especially along the Lower St. Lawrence River; six strayed to the Gaspe Peninsula where there had been only two previous records (Ban-

non, Barden *et al.* 2005). Ontario reported Great Grays lingering south of their usual breeding range into May or June in several locations; even later was one loitering into early July near Belleville, Hastings County (Table 2 *in* Jones 2005).

Previous North American Irruptions

Bent (1938) and Nero (1980) reviewed southward movements of Great Gray Owls in North America as far back as 1831. Major Great Gray Owl irruptions in North America most recently occurred in 1978–1979, 1983–1984, 1991–1992, and 1995–1996. The 1978–1979 irruption was not apparent in Minnesota and primarily involved birds moving south through Québec and into New England. Interestingly, an owl irruption was detected in Minnesota the preceding winter when a total of 58 Great Grays was found in 1977–1978 (Eckert 1978).

The 1983–1984 irruption of Great Grays primarily involved Ontario and Québec (James 1989, Bull and Duncan 1993) but brought (at the time, record-high) 122 Great Grays to Minnesota (Eckert 1984). The 1991–1992 irruption was concentrated in Minnesota and Michigan; the total of 218 Great Grays in Minnesota (Eckert 1992) had been preceded immediately by 134 in 1990–1991 (Eckert 1991). Minnesota data (Table 1) carefully compiled over the past several decades shows two additional Great Gray irruptions lasting more than one year: 1995–1996 (342, Eckert 1996) and 1996–1997 (168, Svingen 1997), and 2000–2001 (304, Svingen *et al.* 2001) and 2001–2002 (31, Bardon 2002).

Acknowledgments

We are indebted to Anthony Hertzel for creating the maps that illustrate this article. We thank Jim Duncan, Kim Eckert, and Dave Grosshuesch for comments that improved this article. We thank Carlye Olson and the 1854 Authority for sending the small mammal survey report. In addition to all of the individuals already acknowledged by Eckert (2005), special thanks to the Minnesota Department of Natural Resources staff for assisting with owls turned in to their field offices and for providing the Landview GIS mapping program, the University of Minnesota's Raptor Center for accepting injured or starving owls, and the Chicago Field Museum for preparing specimens. Dave Grosshuesch examined most of the dead or injured Great Grays, and he, Dave Willard, and Steve Wilson carefully compiled dates, locations, and other information about these birds; much of these data were lost or could not be included in previous owl irruption articles.

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The 2004–2005 Influx of Northern Owls
Part III: Northern Hawk Owl Banding

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During the fall and winter of 2004–2005, Minnesota experienced the largest irruption of northern owls ever recorded in North America with an estimated 5,225 Great Gray Owls (*Strix nebulosa*), 475+ Northern Hawk Owls (*Surnia ulula*), and 600 Boreal Owls (*Aegolius funereus*) (Eckert 2005). The vast majority of these owls inhabited northeastern Minnesota, especially including St. Louis, Carlton, Pine, and Aitkin counties (Eckert 2005). As discussed in detail elsewhere (Duncan and Duncan 1998, Eckert 2005, Svingen and Nicoletti 2005), such periodic irruptive movements of northern owls are well documented at three to five-year intervals and are likely related to decreased availability of rodent prey in typical wintering areas farther north.

Efforts to band northern owls in Minnesota during past irruptions have been sporadic, with no apparent purpose other than to capture and band owls. The irruption of 2004–2005 provided an unprecedented opportunity to take a more concerted and systematic approach to owl banding. As a result, perhaps more information about these northern owls was collected during this irruption than in any other year.

In this article, we focus on results concerning Northern Hawk Owls (hereafter, hawk owls), which were banded in record numbers in Minnesota in 2004–2005. Banding results relating to other species, including Great Gray Owls and Boreal Owls, will be dealt with in forthcoming articles from these and other authors. Overall, great efforts were made to capture, band, and recapture as many hawk owls as possible. Specifically, this study had the following objectives:

Northern Hawk Owl, 4 November 2004, Sax-Zim Bog, St. Louis County. Photo by Sparky Stensaas.

1. Band hawk owls to explore long-term movement patterns and survival rates.
2. Determine the age ratio of hawk owls comprising this irruption.
3. Gather morphometrics and compare these between adult and immature hawk owls.
4. Assess relative body condition of hawk owls throughout the irruption.
5. Examine patterns of molt in adult hawk owls.
6. Quantify movement distances and changes in weight of recaptured hawk owls.

Methods

Study Area and Period

In November and December 2004, we began to monitor Minnesota's two internet-based state birding lists for hawk owl observations. We then concentrated our banding efforts on those areas with the most sightings, which included primarily portions of southern St. Louis and northern Aitkin counties. As the winter season progressed and hawk owls appeared in greater numbers across a larger area of the state, we expanded our trapping efforts. The final study area was roughly bordered on the east by Two Harbors, on the north by Hibbing, on the west by a line just west of Grand Rapids running through Aitkin, and on the south by Hinckley. The approximate area studied was 7,000 square miles (18,500 square kilometers) but the majority of owls banded were in an ovoid area bisected by Zim and Aitkin. We visited nearly every road in the study area at least once and several areas more than once because of the abundance of owl reports. We did not extend the study area into Wisconsin, although owls were reported there. We started to band as soon as our work schedules allowed and continued until most owls had departed the study area. This resulted in a study period that spanned from 8 November 2004 to 26 March 2005.

Trapping Techniques

We used one of two trapping techniques to capture hawk owls. The preferred method was to set a Bal-chatri (BC) trap near a perched owl. The BC is essentially a small, rectangular cage of wire mesh with monofilament nooses on its upper surface. We placed a mouse within the BC and captured the owl as it attempted to foot at the bait. If the BC did not attract an owl, we attempted a secondary method using a lure mouse attached to a string. As the owl approached the lure, we captured it by hand-operating a muskie fishnet.

We used the BC on most owls with great success. However, for distant owls the fishnet seemed to be more successful, probably because the bait was less visible when confined to, and obscured by, the cage of the BC. Some owls were recaptured one or more times using these techniques. On the other hand, we attempted both methods on some owls and still were unable to capture them (~10%).

Measurements

Once captured, we fitted all hawk owls with size 7B "short" aluminum leg bands per recommendation of the U.S.G.S. Bird Banding Laboratory. We then took a series of standard measurements including wing chord, tail length, and weight. We measured wing chord as the unflattened wing length from the leading edge of the carpal joint ("shoulder") to the tip of the longest primary and tail length as the distance between the tip of the longest rectrix and the point of insertion of the two central rectrices. We did not re-measure wing chord or tail length on recaptured birds. For all banded birds, we used GPS to record the location of capture.

Ageing and Sexing

We aged all captured hawk owls as "hatch-year/second-year" (hereafter, immatures) or "after-hatch-year/after-second-year" (hereafter, adults) on the basis of flight feather molt. Immature hawk owls have entirely juvenal flight feathers that are uniform in color and wear (Duncan and Duncan 1998). Adult hawk owls typically replace some but not all flight feathers each year and thus have multiple generations of flight feathers. Feathers from different generations strongly contrast each other as the relatively new feathers are darker brown and less worn (Forsman 1980, Pyle 1997). Although a sub-adult (second-year/third-year) plumage does exist (Forsman 1980, Duncan and Duncan 1998), we did not attempt to separate these birds from the adult age class. For all adult birds, we examined molt patterns by recording each flight feather of each wing as "new" or "old."

Criteria for sexing hawk owls are poorly developed (Pyle 1997). As in most owls,

	Adults	Immatures	Pooled
Wing (mm)	226.4 ± 0.6 (212-238, 94)	225.1 ± 0.7 (215-235, 51)	226.0 ± 0.5 (212-238, 145)
Tail (mm)	171.4 ± 0.5 (159-181, 94)	174.7 ± 0.8 (162-186, 51)	172.6 ± 0.5 (159-186, 145)
Weight (g)	340.5 ± 2.7 (264-415, 95)	323.3 ± 3.9 (266-387, 53)	334.4 ± 2.3 (264-415, 148)

Table 1. Linear measurements and weight for Northern Hawk Owls in Minnesota, 2004–2005. Data are given as mean ± SE (range, n). Wing chord and tail length were not measured on three (one adult, two immatures) of the 148 sampled owls.

there are no known plumage characteristics to separate the sexes (Pyle 1997; Duncan and Duncan 1998). Unlike many other owls, size dimorphism between the sexes is not strongly pronounced in hawk owls (Duncan and Duncan 1998). As a result, even with bird in hand, we could not and did not sex any of the hawk owls captured in this study.

Results

Banding and Age Ratio

Overall we captured and banded 148 hawk owls, which represents 31% of the estimated 475 individuals observed in Minnesota (Eckert 2005, Svingen and Nicoletti 2005). The first birds were banded on 8 November 2004 and the last on 26 March 2005. We banded 10 hawk owls in November, 60 in December, 30 in January, 35 in February, and 13 in March. The majority of birds were captured in St. Louis (105 individuals, or 71%) and Aitkin (27 individuals, or 18%) counties, but we also captured six hawk owls in Itasca County, four in Carlton, three in Pine, two in Kanabec, and one in Lake County (Figure 1). Of the 148 hawk owls banded, 95 (64.2%) were adults and 53 (35.8%) were immatures. Thus, the ratio of adults to immatures captured during the 2004–2005 irruption was approximately 1.8 to 1.

Morphometrics and Body Condition

We assessed wing chord and tail length of 145 hawk owls and weight of all 148 hawk owls captured (Table 1). Wing chord did not differ significantly between adults and immatures (two-sample *t* test: $t_{143} = 1.39$, $p = 0.166$; Table 1). However, immatures had significantly longer tails than adults (two-sample *t* test: $t_{143} = 3.53$, $p = 0.001$; Table 1). Immatures also had significantly lower weights than adults (two-sample *t* test: $t_{146} = 3.65$, $p < 0.001$; Table 1). On average, weights of adult hawk owls were about 17 g (~5% of total body weight) greater than those of immature hawk owls (Table 1).

Nearly all hawk owls captured appeared to be healthy with occasional fat deposits and good muscle mass. Body weight significantly differed (at an alpha level of 0.05) by month of capture (one-way analysis-of-variance: $F_{4,143} = 3.10$, $p = 0.018$; Figure 2). Post-hoc means comparisons indicated that owls captured in February (n = 35) had significantly greater weights than those captured in December (n = 60; Tukey-Kramer HSD test: $p < 0.05$). These results demonstrate that hawk owls did not, on average, lose weight throughout the winter. In fact, they appeared to gain weight as spring approached. A similar analysis controlling for wing chord yielded nearly identical results.

The patterns of weight change by month generally were consistent for both adults and immatures with the exception of February – March. Adults, on average, increased weight from 345.8 ± 4.6 g (mean ± SE; n = 23) in February to 372.9 ± 12.1 g (n = 7) in March, while immatures decreased weight from 343.0 ± 8.4 g (n = 12) in February to 313.8 ± 11.1 g (n = 6) in March.

Molt Patterns in Adult Hawk Owls

We collected molt data on 72 of the 95 adult hawk owls captured. Overall, we observed: (1) no active flight feather molt, (2) complete primary molt, and (3) the secondaries always consisted of two (and only two) generations of feathers. Second-

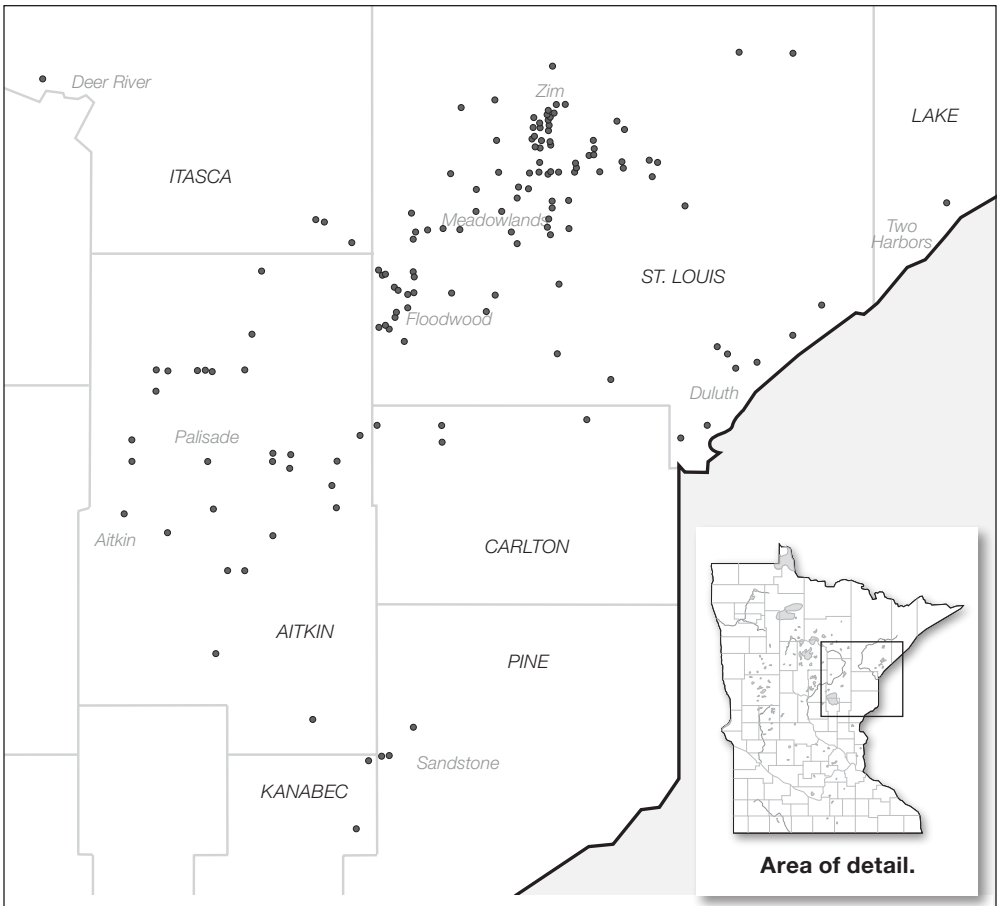

Figure 1. Approximate locations of all Northern Hawk Owls banded during the winter of 2004–2005 (n=148).

ary molt was generally symmetrical, with S1, S5, and S10 – S12 most likely to be replaced (i.e., new; Table 2). Blocks of S2 – S4 and S6 – S9 were most likely to be retained (i.e., old; Table 2). Hawk owls technically have 15 secondaries (Pyle 1997, Duncan and Duncan 1998), but the three innermost, commonly known as "tertials," were often worn regardless of age and thus were not assessed.

Recaptures

We recaptured 27 (18.2%) of the 148 hawk owls originally banded during this study. We did not recapture any birds banded in previous years or at locations outside of Minnesota. Of the 27 recaptures, 23 were recaptured once, 3 were recaptured twice, and 1 bird was recaptured three times. Note that in all following analyses, data for the four birds recaptured more than once have been reduced to include the original and final captures only.

We recaptured owls from 1 to 114 days (mean ± SE = 43.5 ± 7.0 days) from the date of original capture (Table 3). Six birds (22%) were recaptured within ten days of original capture, 6 (22%) between 11 and 30 days, 12 (44%) between 31 and

Secondary #	% owls with NEW Left wing	Right wing
1	76	69
2	50	53
3	31	32
4	28	26
5	68	64
6	44	39
7	32	33
8	35	33
9	47	47
10	69	71
11	97	96
12	96	96

Table 2. Summary of secondary molt in 72 adult Northern Hawk Owls in Minnesota, 2004–2005. Data represent the percent of owls that have replaced the indicated feather.

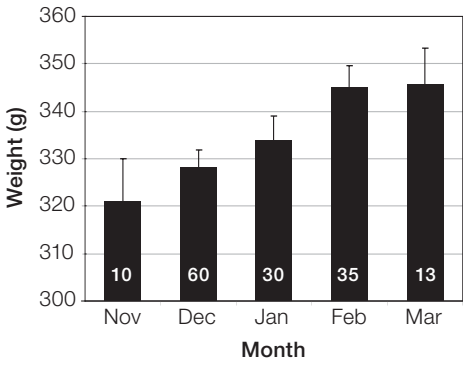

Figure 2. Mean weight (g) of captured Northern Hawk Owls (n = 148) by month. Values within bars represent the number of owls captured during that month. Lines represent one standard error from the mean. Only December and February showed statistically significant differences.

100 days, and 3 (11%) more than 100 days from original capture (Table 3).

Eleven (41%) of 27 recaptures were immatures and 16 (59%) were adults (Table 3). This ratio was proportional to that of all banded hawk owls (Chi-square goodness-of-fit test: $\chi^2 = 0.28$, df = 1, p = 0.596) and indicates we were as likely to recapture adult hawk owls as immatures.

Three of 27 hawk owls (two adults and one immature) were recaptured less than five days from the date of original capture. These birds are mentioned in the following results on movement distances and changes in body weight but were removed from all statistical analyses, resulting in a final sample size of 24 birds.

Fourteen (58%) of 24 recaptured birds moved less than one mile between the original and second captures, seven (29%) moved 1 to 5 miles, and three (13%) moved 10 to 53 miles (Table 3). Movement distance averaged 5.1 ± 2.7 miles. However, the mean is sensitive to outliers, so the median of 0.51 miles is a more appropriate measure of center and shows that many hawk owls did not wander widely throughout the winter. Movement distance was not correlated with the number of days between captures (Spearman rank correlation analysis: $r_s = 0.022$, p = 0.919).

All recaptured adults (n = 14) moved less than 3.5 miles between captures (Table 3). Seven of ten recaptured immatures moved less than 5 miles and three moved from 10 to 53 miles (Table 3). Average movement distances for adults and immatures did not differ statistically (Wilcoxon rank sums test: $Z = 0.38$, p = 0.703), but the large movement of some immatures and no adults is an interesting disparity.

Eight (33%) of 24 owls had lower body weights when subsequently recaptured, while 1 (4%) bird showed no change and 15 (63%) increased weight (Table 3). Overall, mean change in body weight (± SE) was 5.6 ± 3.6 g (range: -31 to 37 g). Increases in body weight (n = 15) averaged 16.2 ± 2.6 g and ranged from 1 to 37 g, while decreases in body weight (n = 8) averaged 13.8 ± 3.9 g and ranged from 1 to 31 g (Table 3). Noteworthy were two birds excluded from analyses, including an adult recaptured one day later that lost 19 g and another adult that gained 16 g in just two days. Body weight at original capture (330.0 ± 5.5 g) and at recapture

		Original Capture		Recapture		Summary Statistics			
Indiv	**Age**	**Date**	**Weight (g)**	**Date**	**Weight (g)**	**Days[1]**	**Dist (mi)[2]**	**ΔWeight (g)**	**%ΔWeight[3]**
1	Adult	22 Dec	339	31 Dec	308	9	0.20	-31	-9.1%
2	Adult	8 Dec	355	18 Jan	331	41	0.29	-24	-6.8%
3	Adult	17 Feb	356	18 Feb	337	1	0.53	-19	-5.3%
4	Adult	7 Dec	321	22 Feb	313	77	1.31	-8	-2.5%
5	Adult	29 Jan	322	11 Feb	318	13	2.06	-4	-1.3%
6	Adult	22 Feb	387	20 Mar	385	26	0.00	-2	-0.5%
7	Adult	6 Feb	352	26 Feb	352	20	0.54	0	0.0%
8	Adult	11 Jan	385	26 Feb	386	46	1.15	1	0.3%
9	Adult	28 Jan	326	10 Feb	332	13	3.51	6	1.8%
10	Adult	5 Dec	325	10 Dec	333	5	0.42	8	2.5%
11	Adult	23 Jan	302	26 Feb	311	34	0.03	9	3.0%
12	Adult	27 Jan	314	29 Jan	330	2	0.32	16	5.1%
13	Adult	9 Dec	339	22 Mar	360	103	0.58	21	6.2%
14	Adult	28 Nov	334	8 Dec	358	10	1.24	24	7.2%
15	Adult	18 Jan	321	22 Feb	346	35	0.44	25	7.8%
16	Adult	19 Jan	315	26 Mar	352	66	0.48	37	11.7%
17	Immature	3 Dec	302	7 Feb	279	66	52.97	-23	-7.7%
18	Immature	31 Dec	315	19 Jan	301	19	1.33	-14	-4.4%
19	Immature	8 Dec	347	22 Mar	343	104	0.01	-4	-1.2%
20	Immature	12 Dec	350	22 Mar	355	100	0.06	5	1.4%
21	Immature	18 Jan	344	22 Feb	354	35	0.01	10	2.9%
22	Immature	5 Dec	336	7 Dec	346	2	2.36	10	3.1%
23	Immature	7 Feb	304	25 Mar	316	46	41.17	12	3.9%
24	Immature	5 Dec	328	14 Feb	341	71	10.87	13	4.0%
25	Immature	8 Dec	344	13 Mar	364	95	4.41	20	5.8%
26	Immature	28 Nov	274	22 Mar	299	114	0.21	25	9.1%
27	Immature	27 Dec	289	18 Jan	317	22	0.05	28	9.5%

[1] Number of days between original capture and subsequent recapture
[2] Distance between original capture and recapture
[3] Relative weight change calculated as ratio of absolute weight change to weight at original capture

Table 3. Summary of data from 27 recaptured Northern Hawk Owls in Minnesota, 2004–2005. Note that individuals 4, 24, 25, and 26 were recaptured more than once and the data shown represent the original and final captures only. Individuals 3, 12, and 22 were removed from all analyses because they were recaptured less than five days after original capture.

(335.6 ± 5.6 g) did not differ significantly (matched-pairs *t* test: $t_{23} = 1.56$, p = 0.132). Relative changes in body weight averaged 1.8 ± 1.1% of original body weight and ranged from -9.1 to 11.7% (Table 3).

Eight (57%) of 14 recaptured adults gained body weight, 1 (7%) showed no change, and 5 (36%) lost weight, while 7 (70%) of 10 immatures gained weight and 3 (30%) lost weight (Table 3). Change in body weight did not differ significantly between adults (4.4 ± 5.0 g) and immatures (7.2 ± 5.2 g; Wilcoxon rank sums test: $Z = 0.56$, p = 0.578).

To demonstrate that we did not recapture only underweight and potentially-starving hawk owls, we compared body weights of owls upon recapture (n = 24) to weights of all captured owls (n = 148). Body weight of recaptured birds (335.6 ± 5.6 g) did not differ significantly from that of all birds (334.4 ± 2.3 g; two-sample *t* test: $t_{170} = -0.19$, p = 0.847). Thus, we likely recaptured an unbiased sample of

the state's overwintering hawk owl population.

Band Recoveries

The U.S.G.S. Bird Banding Laboratory received reports of three hawk owls found dead after initial banding. Two were thought to be killed by vehicle collisions. One of these was first banded on 11 January and found dead on 30 January near the original capture location. The second owl, first banded on 8 February, was found dead on 14 March three miles northwest of the original capture location. Most interesting was the third bird, which was originally banded on 11 January near Palisade. A Grand Rapids man discovered the dead hawk owl on 1 March inside a sewer pipe that had just come off a delivery truck originating from the Brainerd area.

Discussion

General Banding

The extraordinary irruption of northern owls in 2004–2005 presented a wonderful opportunity to band and study hawk owls. From 1956–1992, 504 hawk owls were banded in all of North America, or roughly 14 individuals per year on average (Duncan and Duncan 1998). In just five months during 2004–2005 we banded 148 hawk owls in northern Minnesota alone. In fact, our banding total easily sets the mark for the most hawk owls ever banded in the United States in a single season. More importantly, we collected valuable data toward a better understanding of this seldom-studied species.

Our banding efforts included a relatively large portion of the area and period in which hawk owls were present in appreciable numbers. As many others experienced, we found owls nearly everywhere we searched. In many winters, hawk owls are concentrated in black spruce and tamarack bogs, like those in and adjacent to Sax-Zim Bog in St. Louis County and the "Big Bog" region of Koochiching, Beltrami, and northern St. Louis counties. This year, however, hawk owls seemed to occupy many habitat types, including bogs but also wooded farmlands, homesteads, dense forests, cutovers, agricultural land, and even industrial areas. Such habitat use is atypical, but not unprecedented (Lane and Duncan 1987, Nero 1995) and likely stems from the extent of this year's irruption. Interestingly, unlike in most irruption years, hawk owls (and Great Grays as well) were notably scarce in the "Big Bog" of extreme northern Minnesota (Svingen and Nicoletti 2005), perhaps due to a lack of suitable prey there.

Once we found owls, they generally were easy to catch. We ultimately captured 31% of the 475+ hawk owls reported in Minnesota and only rarely (~10% of attempts) failed to capture a bird. Our approximate capture rate of 90% was high among raptors. Moreover, the aggressive and opportunistic nature of hawk owls allowed us to recapture a significant number of birds. We likely could have recaptured more, but often prioritized banding new individuals.

Age Ratio

Sixty-four percent of the 148 hawk owls captured in our study were adults. This is smaller than the proportions found for other species of northern forest owls during this irruption. Of the 584 Great Gray Owls banded in Minnesota and northwest Wisconsin during 2004–2005, approximately 98% were adults (FJN unpubl. data, D. Grosshuesch, pers. comm.). In a separate study conducted in the fall of 2004, we captured and banded 268 Boreal Owls and 80% of these were adults (FJN unpubl. data). Great Gray Owls and Boreal Owls specialize in feeding on small rodents such as mice and voles (Duncan and Duncan 1998, Hayward and Hayward 1993). Hawk owls also feed primarily on voles (Johnsgard 1988, Duncan 1993) but they are less specialized and often prey on rabbits, hares, squirrels, weasels, grouse, woodpeckers, jays, finches, and other birds and mammals (Duncan and Duncan 1998). This more diverse prey base may allow hawk owls to have better reproductive success than vole specialists in irruption years characterized by

a scarcity of small rodents.

Few previous studies have investigated the age composition of hawk owls during an irruption year. The 1950 irruption in Sweden (n = 80 birds) consisted of 15% adults and 85% immatures (Cramp 1985), while Finland's 1976 irruption (n = 52) consisted entirely of immatures (Forsman 1980). Of 150 Finnish specimens from south of the normal breeding range with varying dates, 88% were immatures and 12% adults (Forsman 1980). Because of the high immature to adult ratios demonstrated in these studies, irruptions are thought to be correlated to high reproductive success followed by severe winter conditions and decreased prey availability (Duncan and Duncan 1998).

The relatively high adult to immature ratio found during our study suggests this correlation was not true in the 2004–2005 irruption. Assuming immatures did not disproportionately spend the winter outside of Minnesota, reproductive success clearly was not high in summer of 2004. Furthermore, hawk owls arrived in Minnesota in good numbers by October (Svingen and Nicoletti 2005), suggesting birds departed breeding areas well before winter weather became severe. The most plausible scenario is that vole populations crashed in late spring or summer across a broad section of the owls' breeding area, which caused reduced breeding success and forced large numbers of adult hawk owls to disperse southward from their typical range. Such reproductive failure and subsequent southward movement of adult birds can be seen in other irruptive raptors, such as the Northern Goshawk (*Accipiter gentilis*; Squires and Reynolds 1997) and Rough-legged Hawk (*Buteo lagopus*; FJN unpubl. data, Bechard and Swem 2002).

Morphometrics

Duncan and Duncan (1998) summarized linear measurements and weight for a broad sample of hawk owls in North America. For all measures, our values fell well within the ranges they reported. Wing chords of 321 individuals in their sample averaged 224.9 ± 0.4 mm, which is similar to our mean (± SE) of 226.0 ± 0.5 mm (Table 1). Our tail lengths averaged 172.6 ± 0.5 mm (Table 1), which is slightly less than their computed average of 175.7 ± 0.6mm. Given that immatures are longer-tailed than adults (see Results), perhaps their sample of 257 birds consisted of more immature birds. Finally, Duncan and Duncan (1998) reported an average weight of 339 birds as 346.4 ± 2.5 g, whereas the 148 birds we captured averaged 334.4 ± 2.3 g (Table 1). These lower weights might be explained by time of year. Duncan and Duncan's synthesis contains birds from all times of year and of variable (but unknown) breeding status. Birds captured outside of winter may have greater weights because of less severe weather and increased prey availability, while nesting birds may attain their greatest weights at the onset of the breeding cycle. Furthermore, the birds in our study actually had greater weights than the average of 322 g reported by Mueller (1986).

Wing chords did not differ between adult and immature hawk owls. However, tail length for immature birds averaged 3.4 mm greater than adults. This relationship is common among many raptors (Ferguson-Lees and Christie 2001, Wheeler 2003). Longer tails may increase maneuverability and allow relatively inexperienced immature birds to more efficiently fly and capture prey. Adults and immatures also differed in regard to body weight. Although adults were not larger in linear measurements, their weights were 17 g (~5% of total body weight) greater than those of immature hawk owls. Adults may acquire and defend higher-quality winter territories and/or be more adept at food acquisition. Nonetheless, an age-related analysis of post-irruption survivorship would be of interest.

Molt

Molt patterns of hawk owls have been poorly studied in North America (Duncan and Duncan 1998), with most data coming from the Eurasian subspecies *S. u. ulula*. Nonetheless, our findings were

consistent with those from the Palearctic. Flight feathers are actively molted from April through September (Duncan and Duncan 1998) and thus explains why we saw no active molt during our November – March study period. We observed complete primary molt in every adult bird captured, which also is expected given that all primaries are completely replaced within the same year (Cramp 1985, Forsman 1980, Duncan and Duncan 1998). Previous studies also show that secondary molt for 1-year-old birds ("second-year/third-year" or "sub-adult" birds) starts from four centers: S1, S5, about S10, and S15 (Forsman 1980, Duncan and Duncan 1998). Because of the similar replacement and retention patterns we observed (Table 2), many of the adult birds in our study may have been in their second year of life. Although we did not attempt to distinguish this age class by plumage in this study, we hope to do so in the future. Patterns of old and new secondaries are difficult to follow in older birds (Duncan and Duncan 1998) and present another challenge in future investigations of hawk owl molt.

Seasonal Changes in Weight

Periodic irruptions of hawk owls and other birds typically result from reduced availability of prey in normal breeding and wintering areas. This scarcity of food may deplete a bird's body condition and often forces it (and others relying on that food source) to move southward in search of prey. Although they often reach new areas in relatively poor condition, their ability to find food and survive in rather harsh winter conditions becomes paramount. Indeed, in many irruption years, large numbers of owls (e.g., Great Grays, Borealis) are found dead or sickened by starvation.

Using body weight as an indicator of potential stress (Fair *et al.* 1999), our study provides strong evidence that hawk owls fared well in Minnesota during the 2004–2005 irruption. Our analysis of body weight by month showed that owls captured in February averaged greater weights than those captured in December. In fact, although not statistically significant, birds tended toward greater weight with each passing month (Figure 2), ultimately averaging 20 – 25 g higher in March than in November. Moreover, results from recaptured birds indicated that more owls gained weight than lost, and weight at recapture tended to be greater than the original weight. Though again not statistically significant, these results support the notion that hawk owls certainly did not lose weight as winter progressed and appeared to adequately find food in their respective wintering areas.

Duncan and Duncan (1998) stated that most hawk owls captured and banded during irruptions in Manitoba appeared to be healthy. Of an estimated 100 hawk owls recorded during the winter 1996–1997 influx in Minnesota, only one was known to have died (Svingen 1997). During the irruption of 2004–2005, 15 hawk owls were found dead or injured and most of these appeared to result from collisions with motor vehicles, not starvation (Svingen and Nicoletti 2005). Furthermore, this season's mortality rate of approximately 3% was slightly higher than most previous irruptions (Svingen and Nicoletti 2005). Great Gray Owls seemed to find food similarly well during this irruption. D. Grosshuesch (pers. comm.) examined 509 Great Gray Owl specimens and attributed only 47 deaths to starvation.

Changes in weight appeared to be similar for both adult and immature hawk owls. However, reasons for why adults apparently gained weight from February to March while immatures decreased weight need further study. Perhaps adults increase their feeding rate in preparation for breeding or our small sample sizes during March (7 adults, 6 immatures) did not reflect the population as a whole.

Movements of Recaptures

Winter movements, home ranges, and territoriality of hawk owls are poorly understood (Duncan and Duncan 1998). Our findings from 24 recaptured owls demonstrate that most hawk owls did not wander widely throughout the 2004–2005 irruption. An amazing 21 of 24 owls (87%)

recaptured from 5 to 114 days later moved less than five miles from the location of original capture (Table 3). Even more astounding, all four owls recaptured at least 100 days later (1 adult and 3 immatures) moved only 0.58, 0.01, 0.06, and 0.21 mi, respectively (Table 3). Nonetheless, one owl recaptured only two days later moved 2.4 miles between captures, suggesting a minimum capacity for some birds to shift areas in a short period of time.

Data from hawk owls banded in previous years is scarce, but one Alberta bird moved 24 miles within the month of December and a Minnesota bird moved 14 miles from December to March (Duncan and Duncan 1998). Three birds were in the same location as banded after up to 80 days (Duncan and Duncan 1998), but the time of year and location were not reported. Extent of such movements may be related to food availability and associated body condition. Hawk owls having difficulty in finding food may lose weight and should be inspired to move to new areas in an attempt to exploit new prey sources. Such was not the case in our study and thus the lack of movement among recaptures helps confirm the idea that hawk owls coped well in 2004–2005.

Directional movements are difficult to assess in our study because most recaptured birds covered relatively small areas. However, two immatures (Table 3, individuals 17 and 24) captured in early December in St. Louis County and recaptured in February moved at 221 degrees and 224 degrees (southwest), respectively. A third immature (Table 3, individual 23), captured originally in early February and again in late March, moved roughly 41 miles at 329 degrees (north-northwest), possibly revealing a late-winter urge to migrate north.

Although movement distances for adults and immatures did not statistically differ, the fact that adults shifted little while three immatures traveled widely is notable. These immatures may have been bumped off territories by dominant adults or forced to leave lower-quality territories with insufficient prey densities.

Future Work

Because they are one of the least-studied bird species in North America (Duncan and Duncan 1998), much remains to be learned from banding hawk owls. Molt patterns of the North American subspecies *S. u. caparoch* are poorly understood, especially among older adult birds. Methods for sexing hawk owls outside the breeding season currently do not exist, demanding need for future investigations of subtle plumage and morphometric differences of known-sex birds. There are little data on habitat selection, home range, diet, site fidelity, dispersal, and territoriality during winter. Comparing these and other aspects of the species' behavioral ecology among age and sex classes and between irruption and non-irruption years would be fruitful. Banding would also enrich studies of breeding hawk owls in Minnesota, especially following irruption years. Finally, we are particularly interested to see if the hawk owls banded in this study are found in different locations or subsequent years, although their nomadic and remote lifestyle may render this a slow process.

Summary

We banded a record 148 Northern Hawk Owls in northern Minnesota during the 2004–2005 irruption. Nearly two-thirds of these were adults, which counters previous belief that hawk owl irruptions consist mainly of immature birds following summers of high reproductive success. Although the age classes did not differ in wing length, immatures had longer tails and lower weights than adults. Average owl weight tended to increase with each passing month. Molt patterns of adults were consistent with earlier findings from Europe. We also recaptured 27 hawk owls up to four months later in the season. These owls moved little with all but three individuals traveling less than five miles. Recaptured owls tended to increase weight and more individuals gained weight than lost, further suggesting that hawk owls maintained good body condition throughout the winter season.

Acknowledgments

Dave Grosshuesch and Denny Meyer banded nearly a fifth of the Northern Hawk Owls in this study. We are tremendously grateful for the data they so kindly and unselfishly provided. We also thank the many volunteers who assisted us in trapping and banding the owls, including Mike Lanzone, Chris Neri, Kate Nicoletti, and Colorado's Steve Wilson. The Minnesota birding community did a wonderful job of reporting owl locations and we greatly appreciate their cooperation. Many thanks to Anthony Hertzel for creating the graphics featured in this article and to two anonymous reviewers for their helpful suggestions. Finally, we are indebted to our ever-tolerant and wonderful spouses for giving us the time and support to undertake this project.

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The Spring Season
1 March through 31 May 2005

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Except for record-high counts of **Ross's Geese** and two **Eurasian Wigeon**, waterfowl migration was unremarkable. A total of 10 **Snowy Egrets** was barely more than ¼ of last spring's 36, but **Cattle Egrets** showed well. The highlight for many observers was the state's second **Glossy Ibis**, an adult in breeding plumage that stayed put for four days. Frank Nicoletti and Dave Carman conducted the West Skyline Hawk Count in Duluth for the ninth consecutive spring and obtained several noteworthy daily counts.

Shorebird surveys were conducted again this year in Big Stone, Lac Qui Parle, and Traverse counties beginning in April; habitat conditions were not as favorable as last spring, especially after heavy rains in mid-May. The only unusual shorebird species in western Minnesota was the **Black-necked Stilt** in Big Stone County; another visited Spindler's Pond near Rice Lake State Park and may have been one of the three stilts seen at this pond a year ago. A **Long-billed Curlew** in Aitkin County was a surprise birthday gift for Warren Nelson. Shorebird migration was poor along the North Shore of Lake Superior; only one **Whimbrel** and no **Red Knots** were found, and numbers of **Ruddy Turnstones** and **Sanderlings** continued to be low.

Any jaeger is unexpected in spring in Minnesota; three **Parasitic Jaegers** were carefully identified and photographed together off Park Point in Duluth. The Kanabec County landfill produced first county records for three larid species this spring, including an **Iceland Gull** and three **Lesser Black-backed Gulls**. Another Lesser Black-backed furnished a first record for Mille Lacs Lake and graciously wandered between two different counties while doing so. Unlike last spring's adult

Say's Phoebe, 24 May 2005, Felton Prairie, Clay County. Photo by James P. Mattsson.

at the Breckenridge sewage lagoons, the **Arctic Tern** at Duluth was at the traditional location for this species in late May.

A **White-winged Dove** photographed in Dakota County was Minnesota's fifth in two years. Observers looking for a Rock Wren at Felton Prairie chanced upon a pair of **Say's Phoebes** in early May; this species has nested just across the state line in North Dakota, but evidence of breeding could not be found even though this pair lingered well into early July. A total of 31+ **Loggerhead Shrikes** in 16 counties almost matched last spring's showing, but remained below average compared to the early 1990s for the ninth consecutive spring.

Participants in the annual Hawk Ridge Birdathon found 26 species of **warblers** in St. Louis County 21 May. Good numbers of **warblers** emerged at Hole-in-the-Mountain County Park near Lake Benton, Lincoln County on the 24th. Additional peaks included 21 warbler species at Wood Lake, Hennepin County on the 17th (CMB) and 20 species plus a "Lawrence's" Warbler at Murphy-Hanrehan

Park Reserve on the 19th (RBW). Two rare warblers were found: Morrison County's first **Yellow-throated Warbler** near Little Falls and a record-early **Worm-eating Warbler** banded at Warner Nature Center, Washington County.

Only slightly less than last spring's 11 was an influx of 9 **Summer Tanagers**. Five **Western Tanagers** were noteworthy. A **Lark Bunting** roaming between center and right field was one of several unusual species found at the ballfields in Ely, St. Louis County this season. Record-high numbers of **Henslow's Sparrows** were tallied in Minnesota this spring and summer. Hooray for CRP! Whether or not the Crop Reserve Program continues long term is unfortunately fraught with uncertainty. Two **Black-headed Grosbeaks**, two **Lazuli Buntings**, and the state's fifth **Eurasian Tree Sparrow** rounded out the list of Casual or Accidental species.

Weather Summary: Average temperatures during March were close to normal statewide, though the rest of the season was anything but normal. April started warm and dry, and the first 17 days were 10° F above normal statewide. This weather was more similar to the first half of May. On the 18th, temperatures reached the 80s at International Falls — 100° warmer than the -21° endured on 2 March! During the last week of the month, however, a shift in the jet stream brought a dramatic change in weather as temperatures across the state fell to an average of 10°–12° below normal. On balance, April temperatures averaged 5° above normal. Ice-out occurred three to six days earlier than normal across central Minnesota, and most lakes in northern Minnesota were ice-free seven to ten days ahead of schedule. By 25 April, all lakes in Minnesota were ice-free.

Frequent upper level troughs and Canadian high pressure systems kept temperatures lower than normal for the last month of the season. This May, in fact, was only the second time in 70 years that the Twin Cities airport did not record an 80+ degree day — though International Falls did on the 8th! The statewide average for the month was three degrees below normal.

Precipitation was slightly below average in March and April, while May averaged about one inch above the norm. This was in contrast to states south of Minnesota: Illinois and Missouri experienced their 4th and 6th driest springs, respectively, since 1895. The most notable storm of the season occurred on 18 March when up to 21 inches of snow fell over parts of the South-central and Southeast — one of the heaviest March snowfalls ever recorded in the state.

Undocumented reports: **Spruce Grouse** 3/19 Aitkin (CR 64); **Gyrfalcon** 3/7 Kandiyohi; **Prairie Falcon** 5/6 Otter Tail (Otter Tail Prairie S.N.A.); **California Gull** 3/30 Dakota (Inver Grove Heights); **Northern Shrike** 5/22 Dakota; **Yellow-throated Warbler** 5/22 Dakota; **Summer Tanager** 5/10–14 Stearns (Kramer L.), 5/11 or 5/12 Nicollet (St. Peter), 5/16 Freeborn (near L. Francis), 5/20 Anoka (Linwood L.); **Western Tanager** 5/12–18 Crow Wing, 5/13 Rock, 5/17 Freeborn, 5/23 Waseca; **Great-tailed Grackle** 3/28 Lyon (Sham L.), 4/29 Martin (location?), 5/13 Stearns (Luxemburg Twp.).

Acknowledgments: We thank Dave Carman and Frank Nicoletti for data from the West Skyline Hawk Count in Duluth, and Dave Benson, Anthony Hertzel, Jim Lind, and Jeanie Joppru for transcripts of weekly birding reports. Medians of recent arrival and departure dates were calculated by Paul Budde from published and unpublished seasonal report data from 1985 through 2004. We thank all of our contributors and especially those who submit documentation for unusual sightings. We note with sadness the death of Ron Kneeskern in March; his consistent contributions to *The Season* from Mower County will be missed.

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KEY TO THE SEASONAL REPORT

1. Upper case (**LEAST TERN**) indicates a Casual or Accidental species in the state.
2. Dates listed in bold (**10/9**) indicate an occurrence either earlier, later, or within the three earliest or latest dates on file.
3. Counties listed in bold (**Aitkin**) indicate an unusual occurrence for that county.
4. Counties with an underline (**Becker**) indicate a first county record.
5. Counties listed in italics (*Crow Wing*) indicate a first county breeding record.
6. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.
7. Counts listed in bold (**150**) indicate a total within or exceeding the top three high counts for that species.
8. Dagger "†" preceding observer's initials denotes documentation was submitted.
9. Species documented with a photograph are denoted with "ph".
10. Species documented with digital or video tape are denoted with "v.t."

The *Seasonal Report* is a compilation of seasonal bird sightings from throughout Minnesota. We particularly invite reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor, contact the Editor of the *Seasonal Report*, Peder H. Svingen, 2602 East 4th St., Duluth, MN 55812–1533, or via e-mail at psvingen@d.umn.edu.

Greater White-fronted Goose — Seen in 26 south and 9 north counties, and in all regions except the North-central and Northeast. Early south 3/5 Cottonwood BRB, 3/6 in six counties; peaks 3/31 Traverse (5,000 at Mud L.) KJB, 3/6 Jackson (4,050) DFN, PEJ. Early north **3/5** Otter Tail RAE, HHD, then none until peak north concentrations of "thousands" on 3/26 in Grant, Wilkin, Otter Tail and Stevens SPM, HFe. Late south 5/15 Dakota (4) JPM. No north reports after early April.

Snow Goose — Reported from 18 south and 11 north counties in all regions except the Northeast. Early south 3/6 in five counties, including peaks in Nobles (4,600) and Jackson (4,000) DFN, PEJ, Cottonwood (2,000) BRB, and Watonwan (2,000) BRB. Peak north concentrations of "thousands" on 3/26 (early north) in Grant, Wilkin, Otter Tail and Stevens SPM, HFe, 4/1 Traverse (1,800 at Mud L.) KJB. Late south 5/16 Brown BRB, 5/17 Olmsted JWH, PWP. Late north 5/19 Marshall GT, 5/23 Traverse LS.

Ross's Goose — Observed in 13 south and 6 north counties. Record high counts 3/6 (early south) in Jackson (**400+**) and Nobles (**460+**) DFN, PEJ. Otherwise scarce with only 37 birds reported elsewhere (325+ in 27 counties Spring 2004). All north reports: 3/26 Grant and Otter Tail SPM, 3/29 Clay (4) DPJ, 4/1 Traverse (4 at Mud L.) KJB, plus single birds 4/14 St. Louis (Hoyt Lakes) ALE, 5/12 Norman (Ada) PHS. Late south 5/1 Lac Qui Parle PHS, ph. MLH, 5/2 Fillmore JJS, HHD.

Cackling Goose — Reported from 31 south and 5 north counties, but documented only in 5 counties. Please see winter report for overwintering and early south migrants. Early north (no details) 3/20 Otter Tail BWF, 3/21 Clay BWF. Peak counts 3/31 Traverse (200 at Mud L.) KJB, 3/22 Murray (178 at L. Wilson) KJB. All documented south reports: 3/19 Dakota (5 in Vermillion Twp.) †ADS, 3/31 Carver †WCM, 4/2 Stearns †RPR, 4/9 Hennepin †CFa, 4/30–5/13 Dakota (4 at L. Byllesby) †ADS. Only documented north reports: 4/3 Polk †JMJ, 5/21 St. Louis (Interstate Island, Duluth) ph. †PHS. Observers are asked to document all sightings with notes, photographs, or recordings to improve our understanding of this species in the state.

Canada Goose — Reported throughout the state.

Mute Swan — Birds of uncertain origin reported 3/6 **Nobles** and Cottonwood (Cottonwood L.) DFN, PEJ, 4/21 Houston FZL, 4/22 Washington (2 nesting at Lake

Carnelian) MPa, 4/25 Meeker (near Cokato) DMF.

Trumpeter Swan — Statewide total at least 263 in 21 south and 21 north counties in all regions. Please continue to report numbers, exact locations and dates of observations.

Tundra Swan — Reported from 21 south and 23 north counties, none in Southwest. Early south 3/19 Houston FZL, 3/24 Swift RBJ. Early north 3/29 Clay DPJ and Marshall *fide* JMJ. Late south 5/1 Big Stone PHS (median 5/5). Late north 5/1 Polk EEF (median 5/28). Peak concentrations 3/27 Houston (2,000+) FZL, 4/9 Polk (1,200) JMJ.

Wood Duck — Observed in 49 south and 28 north counties. Early south (but see winter report) 3/4 Waseca JEZ, 3/8 Sherburne HHD. Early north 3/20 Beltrami PJR and Clay *fide* JMJ, 3/21 Clay BWF.

Gadwall — Seen in 43 south and 15 north counties. Please see winter report for overwintering and early south migrants. Early north **3/5** (ties second earliest north date) Otter Tail RAE, HHD, 3/31 St. Louis MTA.

EURASIAN WIGEON — Two records of adult males: 3/28–31 **Winona** (Verchota Landing) KJB, ph. †JPM, 5/8 **Red Lake** (Red Lake Falls W.T.P.) †JMJ, ph. †PHS (***The Loon*** 77:260).

American Wigeon — Reported from 40 south and 18 north counties. Please see winter report for early south migrants; also reported 3/6 in five south counties. Early north 3/31 St. Louis *fide* DRB, 4/5 Grant and Otter Tail LS.

American Black Duck — Observed in 14 south and 6 north counties, none in the Southwest. Late south 5/12 Nicollet ChH. Only west reports: 3/31 Douglas SWi, 4/18 Marshall (Agassiz N.W.R.) DPS.

Mallard — Reported statewide.

Blue-winged Teal — Seen in 48 south and 27 north counties. Early south 3/5 Nicollet RMD, 3/8 Sherburne HHD (median 3/12). Early north **3/21** (ties earliest north) Clay BWF, 3/28 Todd BWF (median 3/30).

CINNAMON TEAL — An adult male 5/26–27 **Mahnomen** (Oakland Twp.) aggressively courted a female Blue-winged Teal (HHD, RAE, JJS; ph. †PHS).

Northern Shoveler — Reported from 47 south and 22 north counties. Early south 3/6 Dakota JPM, and Rice FVS *et al*. Early north 3/23 Clay BWF, 3/26 Douglas SWi. Peak count 4/2 Meeker (800 in Greenleaf Twp) DMF.

Northern Pintail — Seen in 30 south and 17 north counties. Please see winter report for overwintering and early south migrants. Early north 3/27 Red Lake JMJ and Polk *fide* JMJ, 3/28 Todd BWF.

Green-winged Teal — Observed in 41 south and 21 north counties. Early south 3/6 in four counties. Early north 3/27 Otter Tail DTT, SMT, 3/28 Todd BWF.

Canvasback — Found in 40 south and 16 north counties including St. Louis and Lake in Northeast. Please see winter report for early south migrants. Early north 3/30 Polk EEF, 4/1 Clay BWF.

Redhead — Observed in 44 south and 18 north counties. Please see winter report for early south migrants. Early north 3/31 Kanabec CAM, 4/2 St. Louis JCG and Clay RHO (median 3/24).

Ring-necked Duck — Seen in 47 south and 28 north counties. Please see winter report for overwintering and early south migrants; arrived 3/5-6 in nine counties. Early north 3/20 Clay RHO, 3/26 Wilkin HFe. Peak count 3/20 Cottonwood (est. 300) BRB.

Greater Scaup — Reported from 21 south and 12 north counties. Early south

3/6 Jackson DFN, 3/15 Mower RCK (median 3/9). Early north 3/25 Crow Wing RBJ, 3/30 Cass PJR (median 3/31). Late south 5/13 Steele KV, 5/15 Brown BTS. Late north 5/23 Traverse LS, 5/29 Pennington KRE, m.obs. High count 5/10 St. Louis (1,000 at Park Point, Duluth) PHS.

Lesser Scaup — Seen in 46 south and 25 north counties. Please see winter report for overwintering and early south migrants. Early north 3/23 Clay BWF, 3/30 Kanabec CAM (median 3/16). High count 5/10 St. Louis (250 at Park Point, Duluth) PHS.

Harlequin Duck — All reports: overwintering immature male in Lake (Agate Bay, Two Harbors) seen through 3/15 SLF, m.obs., 3/21–4/28 Cook (3 at Grand Marais) KMH, 4/2–14 St. Louis (Duluth) JCG, MTA, 5/17 St. Louis (Duluth) JEB.

Surf Scoter — Reported 5/13–23 St. Louis (max. 3 at Duluth) KRE, MTA, m.obs.

White-winged Scoter — One (same bird?) reported 4/5–5/28 St. Louis (Duluth) MTA, PHS, m.obs.

Black Scoter — All reports: 4/14–15 Dakota (male at Inver Grove Heights) DSc, 5/17–21 (2 at Park Point, Duluth) MSS, m.obs.

Long-tailed Duck — Only south report: 3/29 Wabasha (female at L. Pepin) JPM. All north reports from L. Superior: 3/2 Cook (2 at Temperance R.) DCZ, 3/25–4/22 St. Louis (max. 22) JWL, m.obs., 4/16–5/23 Lake (max. 30) JWL, 5/24–28 Cook (max. 15) SPM, DFN.

Bufflehead — Seen in 44 south and 23 north counties. Overwintered in Hennepin; early south 3/6 Cottonwood and Jackson DFN, 3/8 Sherburne HHD (median 3/4). Early north (away from L. Superior) 3/29 Marshall GT and Otter Tail DTT, SMT, 4/1 Clay BWF (median 3/22). Late south 5/13 Dakota ADS, 5/30 Lac Qui Parle FAE.

Common Goldeneye — Reported from 32 south and 20 north counties. Late south 4/18 Brown BRB, 5/4 Meeker DMF (median 5/12).

Hooded Merganser — Seen in 40 south and 26 north counties. Early south (away from overwintering locations) 3/1 Scott JEB and Washington BRL, 3/6 in four counties. Early north 3/20 Wadena PJB, 3/21 Clay BWF. Peak concentration 3/21 Dakota (159 at Black Dog L.) KJB.

Common Merganser — Found in 43 south and 16 north counties. Early north (away from overwintering locations) 3/6 Otter Tail DTT, SMT, 3/21 Clay BWF. Late south 5/3 Steele HHD, 5/9 Steele KV (median 5/25). Peak count 3/21 Goodhue (**2,200** at L. Pepin, record-high spring count) KJB.

Red-breasted Merganser — Seen in 37 south and 15 north counties in all regions. Early south 3/5 Goodhue BRL, 3/6 Jackson DFN. Early north (away from L. Superior) 3/29 Otter Tail DTT, SMT and Douglas *fide* JMJ. Late south 5/7 Dakota PEB, 5/14 Steele KV. Peak concentration 5/1 St. Louis (**736** on L. Superior, Lester R. to Stoney Pt.) JWL.

Ruddy Duck — Found in 37 south and 12 north counties. No reports from North-central, and only St. Louis in Northeast. Early south 3/6 Dakota PEB and Rice TFB, 3/20 Freeborn AEB (median 3/11). Early north 3/29 Marshall GT, 4/17 Douglas CRM (median 4/5). Unusual location 5/21 St. Louis (Biwabik W.T.P.) ALE.

Gray Partridge — Observed in 12 south counties; only Wright and Fillmore in east. All counts one or two birds except 5/25 Lac Qui Parle (4) PHS. All north reports: 3/30 Polk (2) EEF, 4/24 Clay (2) RHO, 5/20 Wilkin (3) PHS.

Ring-necked Pheasant — Recorded in 65 counties as far north as Polk, Mahnomen, Wadena, Todd, Morrison, Mille Lacs, Kanabec, Pine, and Carlton (escaped?).

Ruffed Grouse — Seen in 32 counties within range including Dakota (Miesville Ravine) JPM.

Spruce Grouse — All reports: small numbers in two Lake (JMP) and five Lake of the Woods locations (MHK, GMM).

Sharp-tailed Grouse — All reports: Aitkin (27 on 4 leks), Clearwater (max. 19), Kanabec (max. 18), Lake of the Woods (8 at 2 locations), Marshall (1), Pennington (1), Polk (max. 26), Red Lake (12), St. Louis (max. 6 near Meadowlands).

Greater Prairie-Chicken — Released birds seen in Lac Qui Parle (max. 20), Big Stone; origin of birds in Traverse unclear. All north reports: Becker (max. 14), Clay (max. 19 at 2 locations), Norman, Otter Tail, Polk (max. 10), Red Lake, Traverse (2) SPM, Wadena (18), 3/4 Wilkin (68) JPE.

Wild Turkey — Found in 54 counties as far north as Polk, Mahnomen, Becker, Wadena, Crow Wing, Aitkin, Pine, Carlton (escaped?). Peak count of 50 in Becker RAE, HDD.

Red-throated Loon — Only report: 5/13–27 St. Louis (max. 12 at Park Point, Duluth) MLH, MSS, ph. JWL, m.obs.

Pacific Loon — Only report: **4/22** Crow Wing (Mille Lacs L. at Garrison) †AXH. Record-early and one of the few spring occurrences away from L. Superior.

Common Loon — Reported from 27 south and 26 north counties in all regions. Early south 3/27 Freeborn AEB, 3/29 Rice DAB, TFB. Early north 4/5 Otter Tail SPM and St. Louis SLF, 4/7 Clay *fide* JMJ. Peak concentration 4/21 St. Louis (71 at W.S.H.C., Duluth) FJN, DSC.

Pied-billed Grebe — Observed in 40 south and 25 north counties. Early south 3/8 Sherburne HHD, 3/21 Olmsted PWP. Early north 3/28 St. Louis SLF, 3/30 Beltrami PJR.

Horned Grebe — Seen in 13 south and 17 north counties. Early south 3/30 Hennepin OLJ and Washington BRL, 4/1 Dakota JPM. Early north 4/6 Lake JWL, 4/9 Mille Lacs ASc. Late south 5/10 Olmsted PWP, 5/25 Big Stone PHS. Late north 5/26 Mahnomen JJS, HHD, 5/29 Cook DFN, but see summer report. Peak counts 4/18 St. Louis (240 on L. Superior) MTA, 4/25 St. Louis (830 on L. Superior) JWL.

Red-necked Grebe — Found in 17 south and 14 north counties in all regions. Early south 3/30 Hennepin OLJ, 3/31 Dakota ADS. Early north 4/2 St. Louis ALE, 4/6 Todd *fide* JMJ. Peak count 4/13 St. Louis (325 in Duluth) MTA.

Eared Grebe — Seen in 16 south and 10 north counties, none in North-central. Early south 4/13 Brown BTS, 4/16 Pipestone CFa (median 4/9). Early north 4/12 Polk EEF, 4/17 Marshall DPS (median 4/23). Unusual location 5/14–22 St. Louis (Biwabik W.T.P.) ALE.

Western Grebe — Observed in 19 south and 10 north counties, though none in Southeast. Reported from Hennepin and Dakota in East-central. Early south 4/9 Big Stone DFN, 4/16 Meeker DMF. Early north 4/15 Polk EEF, 4/17 Douglas CRM. Unusual location 5/21–23 St. Louis (Park Point, Duluth) MTA, MLH, MOc *et al.*

Clark's Grebe — No reports.

American White Pelican — Reported from 36 south and 21 north counties. Early south (away from Dakota where it overwintered) 3/23 Houston FZL, 4/1 Faribault BRB. Early north 3/31 Otter Tail SPM, 4/5 Becker *fide* JMJ. Seasonal total of 195 at W.S.H.C. in Duluth (FJN, DSC) down from 490 last spring.

Double-crested Cormorant — Seen in 38 south and 25 north counties. Early south 3/6 Dakota LS, 3/17 Rice FVS. Early north 4/5 Grant LS, Otter Tail DTT, SMT, LS, and Wadena PJB, 4/6 St. Louis SLF.

Little Blue Heron, 10 May 2005, Austin, Mower County. Photo by John E. Morrison.

Cattle Egret, 16 April 2005, Aitkin County. Photo by Kim and Cindy Risen.

American Bittern — Observed in 12 south and 20 north counties; none in Southeast and only Murray in Southwest. Early south 4/17 Steele KV, 4/19 Brown BTS. Early north 4/15 Becker *fide* JMJ, 4/16 St. Louis SLF, ALE and Wilkin CRM *et al*. High count 5/4 Aitkin (9) WEN, MMc.

Least Bittern — All reports: 5/20 Waseca JPS, 5/21 Meeker (Minnesota L.) DMF, 5/23 Polk (Glacial Ridge N.W.R.) RPR, 5/28 Marshall JJS, WCM, 5/29 Houston PHS.

Great Blue Heron — Seen in 44 south and 24 north counties. Early south 3/6 Freeborn AEB and Rice m.obs., 3/7 Olmsted DMA, but also see winter report. Early north 3/22 Pine RBJ, 3/24 Hubbard MAW and Crow Wing MRN.

Great Egret — Reported from 33 south and 9 north counties; none in Northeast. Early south **3/12** Hennepin RBJ, 3/27 Dakota JOt and Freeborn AEB. Early north 4/3 Otter Tail SPM, 4/12 Aitkin KWR.

Snowy Egret — Statewide total of 10 birds (36 last spring). Early south 5/6 Winona (Mud L.) JJS, 5/14 Murray (L. Wilson) NED. Singles also reported in Big Stone (Otrey Twp.), Kandiyohi (Nest L.), Meeker (L. Hanson), Brown (New Ulm), Steele (Rice Lake S.P.), Wright (Howard L.), and Olmsted (near Rochester). Only north report: 4/24 Otter Tail (1) SPM.

Little Blue Heron — Only report: 5/10 Mower (adunt at Austin) RCK, ph. JEM.

Cattle Egret — Best spring showing since 1993, with statewide total of 115+ birds. Early south 4/18 Winona (3) *fide* DBz, also reported in Big Stone (2), Brown, Carver (4), Dakota (4), Freeborn (3), Hennepin (1), Le Sueur, McLeod (1), Meeker (2), Nobles, Olmsted (6), Rice (11), Rock (1), Scott, Waseca (6), and Wright (3). Early north **4/14** (2nd earliest north date) Otter Tail SPM; six additional birds in two locations in Otter Tail. Also reported in Aitkin (1), Becker (12), Clay (1), Douglas (6), 5/15 Grant (record-high spring count of **31** at Pelican L.) JPE, Marshall (1), Todd (5), and 5/21 **Wadena** (one in Thomastown Twp.) PJB.

Green Heron — Seen in 26 south and 17 north counties. Early south 4/21 Rice TFB,

4/24 Meeker DMF. Early north 5/6 Mille Lacs ASc and Otter Tail MO, 5/8 Polk EEF and Aitkin SLF.

Black-crowned Night-Heron — Reported from 19 south and 7 north counties. Early south 3/29 Dakota GW, 4/3 Freeborn AEB. Early north 4/17 Otter Tail CRM, 4/23 Mille Lacs DPS; also seen in Grant, Marshall, Norman, Wilkin. Unusual location 4/27–5/21 St. Louis (max. 2 in Duluth) JWB, m.obs.

Yellow-crowned Night-Heron — Only report: 5/12–22 **Kandiyohi** (adult at Willmar) RSF *et al.*

GLOSSY IBIS — Adult in alternate plumage 4/19–22 **Aitkin** (Cedarbrook area) JSB, WEN, ph. KWR; written documentation †PCC, †CFa, †MLH, †PHS, †DTT, †SMT. Second state record.

WHITE-FACED IBIS — Accepted records of single birds 4/19 Rock (Hills W.T.P.) †DBz, 5/1 Rock (same location with no intervening sightings; presumably different bird) †RMD *et al.*, 5/13–15 Douglas (Osakis W.T.P.) †JPE.

IBIS, sp. — Unidentified *Plegadis* ibis 4/30–5/2 Lincoln (2 at Clare Johnson W.M.A.) †BSc, 5/28 Lac Qui Parle (7 at Plover Prairie) †DB.

Turkey Vulture — Seen in 46 south and 26 north counties. Early south 3/7 Houston FZL, 3/17 Nicollet RMD (median 3/9). Early north 3/19 Otter Tail ARo, 3/22 St. Louis (W.S.H.C., Duluth) FJN, DSC (median 4/1). Peak count 4/21 St. Louis (93 at W.S.H.C., Duluth) FJN, DSC. Also see Table 1.

Osprey — Reported from 28 south and 20 north counties. Early south 3/24 Olmsted DMA, 4/3 Freeborn AEB and Hennepin OLJ. Early north 4/4 Otter Tail ARo, 4/5 Pine RPR. Also see Table 1.

Bald Eagle — Observed in 41 south and 31 north counties. Season total of 2,859 at W.S.H.C., Duluth (**684** on 3/28; second highest in count history) FJN, DSC. Also see Table 1.

Northern Harrier — Reported from 40 south and 29 north counties. Possible early north migrants 3/5 St. Louis MLH, 3/7 Wadena PJB, but see winter report. Peak counts 4/2 Roseau (**23**) JMJ, PHS, 4/4 Kittson (**28**) JMJ. Also see Table 1.

Sharp-shinned Hawk — Seen in 28 south and 18 north counties. Early north 3/6 Otter Tail DTT, SMT, 3/17 St. Louis (W.S.H.C., Duluth) FJN, DSC, but see winter report. Apparent migrants last reported south 5/27 Hennepin PEB, 5/31 Anoka PEB. Peak count 4/7 St. Louis (**719** at W.S.H.C.; highest in count history) FJN, DSC. Also see Table 1.

Cooper's Hawk — Reported from 35 south and 21 north counties in all regions. Early north 3/16 Wadena PJB, 3/18 St. Louis (W.S.H.C., Duluth) FJN, DSC. Also see Table 1.

Northern Goshawk — Observed in four south and eight north counties; no reports from Southwest or Northwest. Late south 3/24 Olmsted DMA, 4/4 Dakota JPM. Also see Table 1.

Red-shouldered Hawk — Reported from 17 south and 13 north counties, though none in the Southwest. Early north 3/10 Crow Wing JSB. Unusual locations 3/19 Clay (near Glyndon) DPJ, RHO, 3/19 Clay (Moorhead) DWi, 3/20 **Red Lake** (Red Lake Falls) †PHS, JMJ, 5/20 Wilkin (2 near Kent) AXH, PHS. All other north reports: Aitkin, Becker, Beltrami, Cass, Mille Lacs, Morrison, St. Louis (total 4 at W.S.H.C., Duluth) FJN, DSC, Todd.

Broad-winged Hawk — Observed in 27 south and 21 north counties in all regions. Early south 4/13 Dakota CMB, LM, 4/14 Waseca JPS. Early north 4/12 Pine JMP, 4/16 St. Louis (W.S.H.C. in Duluth) FJN, DSC. Peak migration 5/6 St. Louis (record W.S.H.C. daily total of **9,206** included

Species	March	April	May	Totals	Peak/Date	Range
Turkey Vulture	3	575	162	740	93, 4/21	3/27–5/20
Osprey	0	94	110	204	47, 5/6	4/8–5/20
Bald Eagle	2046	723	90	2859	684, 3/28	3/1–5/20
Northern Harrier	1	32	2	35	5, 4/2,8	3/27–5/6
Sharp-shinned Hawk	19	1103	1676	2798	719, 5/6	3/17–5/21
Cooper's Hawk	4	16	18	38	12, 5/6	3/18–5/16
Northern Goshawk	6	4	0	10	2, 3/14	3/13–4/28
Red-shouldered Hawk	1	3	0	4	2, 4/2	3/28–4/3
Broad-winged Hawk	0	1920	13153	15703	9206, 5/6	4/16–5/21
Swainson's Hawk	0	1	3	4	singles	4/29-5/20
Red-tailed Hawk	77	2367	207	2651	783, 4/2	3/9–5/20
Rough-legged Hawk	6	118	21	145	25, 4/3	3/14–5/20
Golden Eagle	37	9	2	48	5, 3/14	3/5–5/20
American Kestrel	0	33	13	46	17, 4/18	4/3–5/20
Merlin	0	12	10	22	5, 4/18	4/2–5/7
Peregrine Falcon	0	1	6	7	2, 5/8	4/25–5/20
Totals	**2,200**	**7,011**	**15,474**	**24,686**		
Days	30	30	16	76		
Hours	144.75	166	93.5	404.25		

Table 1. Monthly and seasonal totals, peak flight and date, and range of occurrence for species at the West Skyline Hawk Count in Duluth, St. Louis County, Spring 2005.

several dark morphs) FJN, DSC. Also see Table 1.

Swainson's Hawk — Reported from 12 south and 3 north counties, mainly in southern and western regions. Early south 4/16 Rock (5) RMD, CFa, 4/17 Fillmore JWH. All north reports: 4/9 Grant SPM, 4/29 St. Louis (adult light morph at W.S.H.C., Duluth, 3 others reported there in May) FJN, DSC, 5/28 Traverse HFe.

Red-tailed Hawk — Observed in 81 counties statewide. Peak migration 4/2 St. Louis (783 at W.S.H.C. in Duluth) FJN, DSC.

Ferruginous Hawk — No reports.

Rough-legged Hawk — Seen in 17 south and 19 north counties. Late south 4/9 Isanti REH, 4/16 Sherburne ASc. Late north 5/21 St. Louis (2) m.obs., 5/25 Lake SPM. Peak migration 4/2 Roseau (**66**) PHS, JMJ.

Golden Eagle — Reported from five south and seven north counties in all regions except the Southwest and Southeast. South reports from Dakota, Meeker, Rice and Scott in March, then **5/17** Martin (Elm Creek) †PH. Late north (away from Duluth) 4/21 Cook SGu. Numbers down at W.S.H.C., Duluth, where last seen **5/20** FJN (Table 1).

American Kestrel — Reported from 49 south and 27 north counties. Early north (but see winter report) 3/6 Kanabec CAM and Wadena PJB, 3/11 Polk NGE. Numbers down at W.S.H.C., Duluth (Table 1).

Merlin — Reported from 11 south and 17 north counties, primarily in western and northern regions. Territorial birds noted in Polk (Crookston) and Red Lake (Red Lake Falls) in early March. Late south (away from the Twin Cities) 5/7 Stevens JEB, 5/10 Waseca JPS. Also see Table 1.

GYRFALCON — Adult gray morph in Dakota (Nininger Twp.) last reported **4/10** (***The Loon*** 77:171). Another adult gray morph 3/21 St. Louis (Virginia) †SLF.

Peregrine Falcon — Reported from 16 south and 15 north counties in all regions, but only Jackson in Southwest. Early south (away from known breeding areas) 3/14 Benton HHD. Early north 3/18 Lake JWL, 3/19 Crow Wing MRN. First county occurrence 5/8 **Norman** JEB, RBJ. Late south (away from known breeding areas) 5/10 Nicollet RMD, 5/15 Brown BTS. Also see Table 1.

Prairie Falcon — One at Western Prairie S.N.A., 4/3 Wilkin †JPE was likely the same individual seen nearby on 4/5 †DTT, SMT. Also see undocumented reports.

Yellow Rail — One captured in downtown St. Paul was turned in for rehabilitation **4/8** (record-early date) Ramsey *fide* AXH. Also reported 5/4 Aitkin (total of 7 during survey at Rice Lake N.W.R.) MMc, WEN, 5/6+ Cass (Swamp L.) BJU, RPR, 5/16 Polk (Tilden Twp.) NGE, 5/21 St. Louis (4, Sax-Zim Bog area) m.obs., 5/29 Lake of the Woods (along CR 80) MHK, 5/30 Polk (Dugdale W.M.A.) *fide* KRE, 5/31 Aitkin (8 near McGregor) ChM, KO.

Virginia Rail — Reported from 25 south and 17 north counties in all regions. Early south 4/12 Hennepin HCT, 4/13 Sherburne ASc. Early north **4/15** (ties record-early north) Clay *fide* JMJ, 4/20 Marshall JMJ. Numbers up at Manston W.M.A. and Rothsay W.M.A., Wilkin County, (AXH, PHS).

Sora — Reported from 33 south and 24 north counties, but only St. Louis in Northeast. Early south 4/9 Hennepin HCT, 4/10 Steele NFT. Early north 4/15 Marshall (Agassiz N.W.R.) MA, 4/24 Wadena PJB.

Common Moorhen — All reports: 5/15 Rice TFB, 5/17 **Kanabec** (Rum River S.F.) †BWF, HHD, MKr, CAS, JJS.

American Coot — Observed in 45 south and 18 north counties. Early north (overwintered in Otter Tail) 3/27 Todd BWF, 3/30 St. Louis SLF. Partial albino 5/2 Big Stone (near Thielke L.) SLF; pure white except normal coloration on front of face and flank patch.

Sandhill Crane — Reported from 25 south and 25 north counties in all regions. Early south 3/8 Sherburne HHD, 3/9 Houston JJS. Record-early north **3/6** Todd *fide* BWF, then 3/25 Wadena PJB, 3/26–31 in eight counties. Highest reported count 3/31 Polk (**4,000**) DLT.

Black-bellied Plover — Observed in only eight counties (16 last spring). All south reports: 4/28 Scott †CMB, LM, 5/16 Big Stone WCM. Early north 5/19 Beltrami JEB, RBJ, 5/20 Wilkin (6) AXH, PHS; also reported from Lake of the Woods (5), Mahnomen, Pennington, St. Louis. All counts single digits.

American Golden-Plover — Reported from 15 south but only 3 north counties. None in North-central, and only 5/4 (1), 5/13 (4) Olmsted PWP in Southeast, 5/13 Lake (1) JWL in Northeast, and 5/16 Polk (8) in Northwest. Early south (median 4/19) 3/31 Le Sueur KJB, 4/5 Pipestone KRE, 4/10 Lac Qui Parle (12) PCC, BR. Early north 4/17 Wilkin CRM. Late south 5/21 Nobles (59 in four flocks) BTS. Highest reported count 4/16 Jackson (180) DDM, BJM.

Semipalmated Plover — Reported from 20 south and 9 north counties in all regions. Early south 4/20 Dakota BRL, 4/24 Lac Qui Parle PCC. Early north 5/7 Grant JEB, 5/8 Traverse (20) PHS. Highest reported count 4/29 Dakota (65+) SWe.

Piping Plover — All reports: 5/4 Jackson (CR 2) ET, 5/5–6 **Winona** (Mud L.) DBz, m.obs., 5/6, 5/16, 5/19 Dakota (2 or 3 different birds at L. Byllesby) m.ob, 5/15 **Kandiyohi** (section 21, T117N R33W) RSF.

Killdeer — Reported from 83 counties statewide. One reported 3/2 Houston FZL possibly same as 2/24 (see winter report); early south 3/5 Nicollet RMD, 3/6 Freeborn AEB. Early north 3/21 Otter Tail ARo,

Black-necked Stilt, 24 April 2005, Malta Township, Big Stone County. Photo by Peder H. Svingen.

3/23–28 in 11 counties. Highest reported count 4/17 Big Stone (80) JWL, PHS.

BLACK-NECKED STILT — Two accepted records: adult male **4/21–24 Big Stone** (Centennial W.P.A.) †LWM, †PCC, ph. †PHS, 5/8–10 Steele (one at Spindler's Pond near Rice Lake S.P., same location where 3 found last spring) NFT, ph. KV.

American Avocet — Statewide total of 52 individuals in nine south and three north counties. Early south **4/10** Anoka (Carlos Avery W.M.A.) SHu, **4/11** Murray (19 at Lake Wilson) JT; also reported from Big Stone (max. 13 in Toqua Twp. on 4/30 DFN, plus 1–3 birds in 3 other locations), Dakota (1), Lac Qui Parle (1), Lincoln (1), Meeker (3), Nobles (1), Stearns (1). Early north 5/6 Cass (2 in Poplar Twp.) BJU, 5/7 Grant (2) JEB, RBJ; also seen 5/23 Polk (1) NGE.

Greater Yellowlegs — Reported from 26 south and 17 north counties in all regions. Early south 4/2 Meeker DMF, 4/5 Stevens LS. Early north 4/9 Mille Lacs ASc and Polk JMJ, 4/12 Aitkin KWR. Late south 5/29 Big Stone KJB, also see summer report. Highest reported count 5/1 Big Stone (29 on survey route) PCC, PHS.

Lesser Yellowlegs — Observed in 34 south and 21 north counties. Early south 4/2 Meeker DMF, 4/5 Steele KV. Early north 4/16 Aitkin KWR and Wilkin DPS, 4/17 Otter Tail CRM. Late south 5/29 Big Stone KJB, also see summer report. Highest reported counts 5/8 Dakota (500+ at L. Byllesby) SWe, 5/9 Polk (364 at Crookston W.T.P.) PHS.

Solitary Sandpiper — Reported from 25 south and 15 north counties in all regions. Early south (median 4/19) 4/16 Rock RMD, CFa, 4/29 Dakota JOt and Martin JJS. Early north (median 4/30) 5/7 Douglas SNo, 5/8 Crow Wing, Polk, Traverse. Late south 5/29 Houston PHS, also see summer report.

Willet — Total of 106+ individuals (244+ last spring) in 13 south and 10 north counties. Early south (median 4/24) 4/19 Rock (4) DBz, 4/24 Murray (3) JT. Early north (median 5/1) 5/5 Crow Wing (7) JSB and St. Louis (2) MTA, JWB. Late south 5/23 Rock PHS, 5/29 Grant KJB. Late north 5/30 Traverse KJB, 5/31 St. Louis JLR. Highest reported counts 5/6 St. Louis (15 at Morgan Park) JWB, DWa, 5/14 St. Louis (20 at Park Point, Duluth) JWL.

Spotted Sandpiper — Reported from 30 south and 24 north counties. Early south 4/17 Freeborn AEB, 4/19 Brown BTS, plus 10 additional counties by end of April. Early north 4/29 Clay and Polk JPE, 5/6–8 in six counties.

Upland Sandpiper — Reported from 10 south and 8 north counties, including Lake (5/28, JCG) and St. Louis in the Northeast. No reports from East-central or Southeast regions. Arrived late. Early south (median 4/26) 5/7 Big Stone, Jackson, Stevens. Early north (median 5/2) 5/6 Crow Wing JSB, 5/9 Norman JEB. Highest reported count 5/13 Big Stone (8 on survey route) PHS.

Long-billed Curlew, 16 April 2005, Fleming Township, Aitkin County. Photo by Kim and Cindy Risen.

Whimbrel — Only report: 5/24 St. Louis LS.

LONG-BILLED CURLEW — Second county record **4/16–18** Aitkin (Fleming Twp.) WEN, †CLR, ph. KWR; also documented †CMB, ph. †MLH, ph. JWL, †PHS.

Hudsonian Godwit — Total of 82+ individuals (347 last spring) in seven south and seven north counties. Early south (median 4/21) 4/24 Big Stone (1) PHS. Early north (median 5/2) **4/20** Aitkin (1) PHS *et al.*, 5/6 Cass (2) BJU. Late south 5/23 Rock (11) PHS, 5/25 Lac Qui Parle (1) PHS. Late north 5/30 Traverse (12) KJB, 5/31 Pennington (3) NAJ. Highest reported counts 5/19 Lac Qui Parle (15 at Borchardt Rosin W.M.A.) PHS, 5/27 Polk (15 at Crookston W.T.P.) PHS.

Marbled Godwit — Reported from 9 south and 13 north counties in all regions except the Southeast. Arrived several days earlier than normal (18-year median 4/13 south and north). Early south 4/9 Big Stone SPM, 4/10 Meeker DMF. Early north 4/8 Wilkin GLS, 4/9 Wilkin (20 at Rothsay W.M.A.) CMB. For the second consecutive spring, a large flock stopped over at Interstate Island in the Duluth harbor (75 birds, 5/21 St. Louis ph. PHS); according to RPR, they were probably part of the population breeding around Hudson Bay, Canada.

Ruddy Turnstone — Scarce (again) along the North Shore of Lake Superior. Early south 5/17 Lac Qui Parle PHS, 5/18–19 Dakota (max. 8) JPM; only other south reports from Big Stone, Kandiyohi (12). Observed in 12 north counties beginning 5/17 Crow Wing CRM *et al.*, 5/20 Wilkin PHS. Late south 5/29 Big Stone (5) KJB. Highest reported count 5/30 Polk (18 at Crookston W.T.P., also late north) KJB.

Red Knot — No reports.

Sanderling — Reported from five south counties beginning 5/8 Dakota SWe, 5/13 Big Stone (4) PHS. Observed in seven north counties beginning 5/8 Crow Wing KWR, 5/10 St. Louis MTA, PHS. Highest reported counts 5/29 Traverse (33 at Mud L.) KJB, 5/30 Polk (44 at Crookston W.T.P.) KJB.

Semipalmated Sandpiper — Reported from 20 south and 14 north counties in all regions. Early south (median 4/18) **4/5** Stearns LS, 4/9 Meeker DMF, 4/17 Big Stone JWL, PHS. Early north (median 5/4) 4/24 Traverse (2) PCC, PHS, 5/7–9 in four counties. Record-high spring count 5/30 Grant (**1,343** at Towner Slough) KJB; 1,190 at same location 5/28 KJB. Noteworthy tally 5/30 Big Stone (624) KJB.

Least Sandpiper — Reported from 24 south and 16 north counties. Early south (median 4/18) 4/6 Meeker DMF, 4/13 Dakota ADS. Early north (median 5/6) 5/5 St. Louis MTA, 5/7–9 in four counties. Late south 5/29 Big Stone KJB, 5/30 Steele NFT. Late north 5/30 Grant, Traverse and Polk (total of 22) KJB. Highest reported count 5/18 Traverse (335 at Mud L.) PHS.

White-rumped Sandpiper — Observed in 13 south and 9 north counties, primarily in western regions; only eastern reports from Dakota and St. Louis. Early south

(median 4/29) 5/6 Pope RBJ, 5/7–8 in four counties. Early north (median 5/13) 5/5 St. Louis MTA, 5/7 Grant JEB, 5/8 Traverse PHS. Highest reported counts 5/23 Rock (325 at Luverne) PHS, 5/29 Big Stone (254) KJB.

Baird's Sandpiper — Excellent showing in western regions for the second consecutive spring. Reported from 18 south and 8 north counties; none in the Northeast, and only Olmsted in Southeast, Aitkin in North-central. Early south 4/5 Cottonwood CRM, Hennepin DWK and Rock KRE, 4/6 Dakota JPM and Lyon KRE; also note early surge of 214 in Lac Qui Parle 4/10 PCC, BR. Early north (median 4/23) **4/3** Clay (12) PB, 4/24 Traverse (52) PCC, PHS. Late south 5/26 Olmsted PWP, 5/28 Sherburne SMC. Late north 5/30 Grant and Traverse KJB. Highest reported counts 4/24 Lac Qui Parle (315, including 220 at Salt L.) PCC, 5/1 Big Stone (**515** on survey route, record-high spring count) PCC, PHS.

Pectoral Sandpiper — Observed in 29 south and 13 north counties. Early south (median 4/1) 4/5 Cottonwood CRM and Stearns LS, 4/6 Dakota, Meeker, Steele. Early north (median 4/20) 4/9 Polk JMJ, 4/16 Aitkin KWR. Highest reported count 5/1 Big Stone (223) PCC, PHS.

Dunlin — Excellent showing in western regions for the second consecutive spring; reported from 22 south and 10 north counties. Early south (median 4/21) 4/30 Dakota JOt, ADS and Rock m.obs. Early north (median 5/10) 5/7 Grant JEB, 5/8 Traverse PHS. Highest reported counts 5/29 Big Stone (527) KJB, 5/30 Grant (560 at Towner Slough) and Traverse (375 at Mud L.) KJB. Counts in Grant ≥ 320 on four consecutive days in late May KJB.

Stilt Sandpiper — Observed in 12 south and 2 north counties. More reports than usual for the second consecutive spring. Early south (median 5/5) 4/28 Scott †CMB, 5/5–7 in three counties. Early north (median 5/15) 5/12 Polk PHS, 5/18 Traverse (3) PHS. Late south 5/29 Big Stone (12) KJB and Steele (1) KV. Late north 5/30 Grant (22) and Polk (2) KJB. Highest reported counts 5/19 Lac Qui Parle (87) PHS, 5/23 Rock (**121** at Luverne, second highest spring count) PHS, 5/27 Grant (37 at Towner Slough) KJB.

Buff-breasted Sandpiper — No documented reports. This species is only a casual spring migrant in Minnesota.

Short-billed Dowitcher — Reported from 16 south and 10 north counties in all regions. Early south 4/29–30 Dakota LS, ADS, 5/3 Waseca JEZ. Early north 5/8 Traverse PHS, 5/9 Polk PHS. Late south 5/29 Steele KV, also see summer report. Highest reported counts 5/16 Dakota (70 at L. Byllesby) JPM, 5/23 Rock (53 at Luverne) PHS.

Long-billed Dowitcher — Late and scarce. Reported from 13 south and 4 north counties, including north birds identified by call 5/8 Traverse (2) PHS, 5/17 St. Louis (1) PHS. Early south 4/30 Dakota SWe and Rock m.obs., 5/1 Big Stone (1) and Lac Qui Parle (4) PHS. Late south (vocalized) 5/19 Big Stone (1) and Lac Qui Parle (4) PHS. Highest reported count 5/8 Big Stone (30) PHS.

dowitcher, sp. — Unidentified dowitchers on several shorebird surveys, including 5/19 Big Stone (6) and Lac Qui Parle (38) PHS, 5/23 Rock (6) PHS.

Wilson's Snipe — Possibly overwintered in Hennepin, Scott and St. Louis (please see winter report). Reported from 30 south counties, including probable migrants 3/29 Meeker DMF, 4/1 Ramsey REH and Steele NFT. Observed in 23 north counties beginning 3/31 Otter Tail SPM and Wadena PJB, 4/5 Otter Tail LS and Pine JMP. Highest reported count 4/13 Kanabec (37) JMP.

American Woodcock — Observed in 20 south and 17 north counties in all regions. Early south 3/8 Sherburne HHD, 3/17 Dakota TEB. Early north 3/28 Carlton LAW,

3/30 Marshall (Agassiz N.W.R.) TDa. Highest reported count 4/1 St. Louis (4) SLF.

Wilson's Phalarope — Grand total of 1,743+ individuals found in 25 south and 16 north counties, and in all regions except the Northeast. Numbers down from last spring, but similar to Spring 2002. Early south 4/19 Rock (4) DBz, 4/23 Benton HHD. Early north 4/24 Marshall (Agassiz N.W.R.) JMJ, 5/6 Crow Wing JSB and Wilkin DTT, SMT. Highest reported counts 5/9 Polk (246 at Crookston W.T.P.) PHS, 5/15 Clay (260 at Barnesville W.T.P.) CMB, LM. Noteworthy counts 5/8 Traverse (172) PHS, 5/9 Pennington (181) PHS, ~5/10 Yellow Medicine (200) DDM, BJM.

Red-necked Phalarope — Total of 31+ individuals (4 reports lacked count data) in 7 south and 6 north counties. All reports from western regions except Brown, Meeker, Wright. Early south 5/7 Nobles JJS, ~5/10 Yellow Medicine DDM, BJM. Early north (median 5/15) 5/14 Clay DPJ, RHO. Late south 5/27 Wright DMF, 5/29 Big Stone (7) KJB. Last seen 5/30 Grant, Polk, Traverse and Wilkin KJB.

Parasitic Jaeger — Exceptional spring report 5/21–23 St. Louis (adult light morph with tail streamers, plus two light morphs lacking elongated central rectrices) ph. †JWL, †PHS. Record-high spring count.

Franklin's Gull — Reported from 23 south and 7 north counties, primarily in western regions; none in North-central or Northeast, and only Dakota in East-central, Olmsted in Southeast. Early south 4/5 Stearns and Stevens LS, 4/6 Lyon KRE. Early north 4/15 Marshall (Agassiz N.W.R.) MA, 4/16 Wilkin DPS. No significant counts away from nesting colonies; reported as scarce RBJ.

Little Gull — Only report: adult at Park Point, Duluth 5/13 St. Louis KRE, ph. JWL.

Bonaparte's Gull — Reported from 22 south and 17 north counties in all regions. Early south (median 4/4) 4/3 Yellow Medicine WCM, 4/5–9 in six counties. Early north (median 4/13) 4/4–5 Otter Tail DTT, SMT, LS, 4/9 Mille Lacs ASc, Traverse SPM and Wadena HHD. Highest reported count 5/13 St. Louis (flock of 1.400 counted by tens, with an additional 600+ estimated nearby) KRE; largest flock away from Duluth 4/17 Big Stone (450) PHS.

Ring-billed Gull — Reported from 75 counties statewide. Please see winter report for earliest migrants; additional arrivals 3/4 Washington TEB, 3/5 Cottonwood BRB, Goodhue BRL and Scott JEB. Early north (median 3/12) 3/6 Otter Tail SPM, early March St. Louis *fide* DRB.

CALIFORNIA GULL — Subadult (probably fourth-cycle) 5/7 Wilkin (Breckenridge W.T.P.) ph. †PHS.

Herring Gull — Reported from 26 south and 13 north counties statewide. Early south (but see winter report) 3/6 Freeborn AEB, Jackson DFN and Rice DAB, FVS, 3/7 Rice TFB. Early north (away from Lake Superior) 4/3 Wadena PJB, 4/5 St. Louis (1,960 in Virginia) SLF.

Thayer's Gull — Two were seen away from the North Shore of Lake Superior: 3/31–4/5 Dakota (first-cycle) ADS, JPM, 4/16 **Kanabec** (first-cycle at Mora) ph. JWL, PHS. Late north 5/1 St. Louis JCG, 5/9 Lake ph. JWL (possibly the same first-cycle bird at Stoney Point and Two Harbors).

Iceland Gull — Only report: **4/16 Kanabec** (first-cycle at Mora) ph. JWL, PHS.

Lesser Black-backed Gull — Record-high number of reports. A second-cycle bird at Pine Bend landfill 3/31 Dakota PEL may have lingered undetected until **5/31** Dakota (Black Dog L., record-late south) †ADS. Another (probably the same) was at Purgatory Creek in Eden Prairie **5/12–19** Hennepin DWK, †CMB, PEB. An adult at Mora landfill 4/16 **Kanabec** †CAM was followed by two third-

cycle birds **5/14** ph. †CAM. Finally, a second-cycle bird along the west shore of Mille Lacs L. furnished first county records **5/7–9 Crow Wing** and **Mille Lacs** ph. KWR, CLR, JSB *et al.*

Glaucous Gull — Only report: 5/11 St. Louis (first-cycle at Interstate Is., Duluth) MLH.

Great Black-backed Gull — One in its first plumage cycle 3/15 Dakota (Spring Lake P.R.) †CMB may have been the same individual frequenting various Twin Cities locations since early December (please see winter report).

Caspian Tern — Reported from 19 south and 11 north counties, primarily in central and eastern regions; only Clay in the Northwest and none in the Southwest. Early south 4/24 Freeborn AEB, 4/28 Winona JJS. Early north **4/17** Otter Tail DPS, 5/5 St. Louis MTA. Late south 5/29 Hennepin SWe, also see summer report. Unusual local concentration at Purgatory Creek in Eden Prairie, Hennepin 5/14 (**335**, PEB), 5/15 (**530**+) and 5/16 (**550**) SWe; the latter represents Minnesota's second-highest count.

Common Tern — Seen in 11 south and 13 north counties in all regions, but only Lyon in Southwest, Olmsted in Southeast, and St. Louis in Northeast. Excluding undocumented report 4/17 Steele (Forster's Tern normally arrives in mid-April), early south 5/6 Dakota SWe and Steele NFT, 5/9 Lyon DDM, BJM, 5/11 Rice DAB. Early north 5/5 St. Louis MTA, 5/6 Cass BJU, 5/9 Marshall (3 at Agassiz N.W.R.) †PHS. Late south 5/19 Dakota JPM and Hennepin ADS, 5/27 Sibley JOt. Most of the 800 *Sterna*, sp. on Mille Lacs L. 5/12 Crow Wing MRN were probably *hirundo*.

ARCTIC TERN — One adult 5/20–22 St. Louis (Park Point, Duluth) MLH, †PHS, m.obs.

Forster's Tern — Reported from 31 south and 18 north counties. Early south (median 4/10) 4/10 Freeborn AEB and Hennepin DWK, 4/15 Brown BTS; peak migration 4/24–30 (10 south counties). Early north (median 4/19) 4/17–18 Otter Tail SPM, RBJ, 4/24 Otter Tail DTT, SMT; peak migration 5/9–15 (9 north counties).

Black Tern — Reported from 28 south and 19 north counties, but only St. Louis in the Northeast. Early south 5/6 Cottonwood LBF, 5/7 Stearns STW. Early north 5/7 Clay DPJ, 5/13 St. Louis KRE, JWL. No significant counts.

Rock Pigeon — Statewide.

Eurasian Collared-Dove — Discovered at new locations 4/16+ **Jackson** (Heron Lake) DDM, BJM (single bird in April, two pair including female on nest 5/23 ph. †PHS), 5/28+ lac Qui Parle (Walter Twp., 2) BJU. On nest 5/8 Houston (Caledonia) FZL and 5/14 Dakota (Farmington) PEB; also reported from known south locations 4/21–30 Chippewa (2 at Milan) DBz, ph. MLH, 4/23 Lac Qui Parle (Marietta) FAE *et al.*, 5/29 Swift (2 at Benson) HFe. Though probably correctly identified, photographs were inconclusive for one seen 4/27–28 Winona CA. All north reports were from known locations where previously documented: 3/17+ Grant (4 at Herman) SPM, m.obs., 4/9+ Traverse (4 at Wheaton) SPM, ph. PHS.

WHITE-WINGED DOVE — Seventh state record 5/7–8 **Dakota** (Empire Twp.) ph. BSe (***The Loon*** 77:171).

Mourning Dove — Reported statewide.

Black-billed Cuckoo — Reported from 10 south counties beginning 5/9 Ramsey BRL, 5/18 Rice TFB. Early north 5/15 Otter Tail DTT, SMT, 5/17 Kanabec CFa; also observed in Douglas, St. Louis.

Yellow-billed Cuckoo — Reported from nine south counties beginning 5/21 Hennepin HCT (18-year median 5/15). All north reports: 5/17 Kanabec CFa, 5/30 Lake of the Woods MHK.

Eastern Screech-Owl — All reports south: Big Stone, Brown, Freeborn, Hennepin, Houston, Lac Qui Parle, Murray, Ramsey, Rice (gray morph), Rock. Only north report: found dead 3/27 **Cass** (section 22, T137N R32W).

Great Horned Owl — Seen in 37 counties statewide.

Snowy Owl — All south reports: 3/3 Dodge KV, mid-March Lac Qui Parle *fide* JMJ. March reports north in Aitkin (2) and Kittson, then 5/1 Roseau (section 34, T161N R35W) JBi.

Northern Hawk Owl — Largest documented invasion in state history (***The Loon*** 77:132–140). Pairs lingered into April in St. Louis (4 locations) and one at the Koochiching/Lake of the Woods county line 5/11 may have moved three miles east by early June, but none were known to nest.

BURROWING OWL — One faithfully but fruitlessly attended a burrow 4/30–5/14 Lac Qui Parle (Hantho Twp.) ph. MLH *et al.* The landowner first noted this bird in mid-April *fide* PHS.

Barred Owl — Observed in 20 south and 15 north counties as far southwest as Cottonwood and Jackson. Highest reported count 5/29 Houston (**11** in Houston Twp.) AXH, PHS.

Great Gray Owl — Largest irruption in state history; please see articles in this and future issues of ***The Loon*** for details. Lingered through late May in Aitkin, Lake, Mahnomen, Pine, St. Louis; also see summer report for June records, including one in Hennepin!

Long-eared Owl — March reports south in Dakota and Lac Qui Parle, followed by 4/3–5 **Pope** (Walden Twp.) DDM, BJM, LS, 4/16 Rock m.obs., 5/29 Houston (3) AXH, PHS. Early north 3/19 Lake of the Woods JMJ, 3/25 Aitkin KWR; also observed in Lake, Polk, St. Louis. One found dead 4/23 St. Louis (US 169 at Buhl) SLF.

Short-eared Owl — Statewide total of 34 individuals observed in four south and seven north counties; only reports from eastern regions 4/6 St. Louis ALE, 5/8 St. Louis FJN. Migrants mostly indistinguishable from birds reported in winter. Potential early south migrants mid-March Lac Qui Parle BJU *fide* JMJ, 3/30 Waseca JEZ; also seen 4/22 Swift SMC, 4/23 Meeker DMF. All other north reports: Clay (2), Marshall (4 locations), Otter Tail, Polk (4 locations), Roseau (2), Wilkin (up to 11 birds at Rothsay W.M.A. for the season).

Boreal Owl — Largest irruption in state history detected by banding along the North Shore of Lake Superior in late fall and multiple sightings in Aitkin, Lake, and St. Louis during winter season; high mortality beginning mid-January; details will be presented in a future issue of ***The Loon***. Unusual location 3/8 Polk (Fertile) NGE. One heard singing along Stony River F.R. 4/3 Lake MTA, MLH.

Northern Saw-whet Owl — March reports south in Anoka, Dakota, Hennepin, Lac Qui Parle and Rice, then 4/30 Houston KAK. Early north 3/19 Lake JWL, 4/1 Polk PHS; also reported from Cass, Cook, Hubbard, St. Louis, Todd.

Common Nighthawk — Reported from 25 south and 17 north counties. Early south 5/8 Washington DFN, 5/9 Brown BRB. Early north 5/16 Mille Lacs ASc, 5/17 Clay RHO and Otter Tail DTT, SMT.

Whip-poor-will — Reported from six south counties beginning 5/7 Dakota SWe and **Nobles** JJS, 5/9 Sherburne PLJ. Exceptional location and second-earliest north date **4/15 Wilkin** (300th Ave, 0.5 miles N of 210th St, Tanberg Twp.) CRM *et al.* Next north arrival not until 5/10 Carlton MSS; also reported from Lake of the Woods, Marshall, St. Louis, Todd.

Chimney Swift — Observed in 40 south and 26 north counties. Peak migration

up to two weeks later than normal. Early south 5/5 in five counties, 5/6–8 in ten more. Early north 5/7 Grant JEB and Wilkin PHS, 5/14 in three counties.

Ruby-throated Hummingbird — Seen in 28 south and 18 north counties. Early south 5/7 Rice DAB, 5/8 in five counties. Early north 5/7 Wadena PJB, 5/9 in three counties.

Belted Kingfisher — Reported from 69 counties. Early north (but also see winter report) 3/11 Polk NGE, 3/21 Clay BWF.

Red-headed Woodpecker — Observed in 29 south and 13 north counties as far north as Kittson, Wadena, St. Louis. About two dozen successfully overwintered south in Anoka (Cedar Creek) JLH; 3/16 Otter Tail probably overwintered north (*fide* JMJ). Early north 5/9 Norman JEB, RBJ, 5/10 Clay RHO.

Red-bellied Woodpecker — Observed in 60 counties as far north as Pennington and Polk in the Northwest, Beltrami and Cass in the North-central, and Carlton and St. Louis (Duluth) in the Northeast.

Yellow-bellied Sapsucker — Seen in 36 south and 27 north counties. Early south 3/27 Freeborn AEB, 3/31 Carver RMD and Waseca REH; peak migration 4/4–10 (12 counties). Early north 3/31 Grant SPM, 4/4 Mille Lacs ASc; peak migration 4/9–16 (10 counties).

Downy Woodpecker — Statewide.

Hairy Woodpecker — Statewide.

American Three-toed Woodpecker — All reports: through 3/25 St. Louis (McDavitt Rd) m.obs., 5/28 Lake (female near Isabella) DAG, JWL.

Black-backed Woodpecker — Unusual location 5/6 Wadena BJU. Many reports from St. Louis, including up to 5 birds along McDavitt Rd in Sax-Zim Bog; also reported from Carlton, Lake, Lake of the Woods.

Northern Flicker — Observed in 48 south and 29 north counties. Early north 3/12 Clay (overwintered?) RHO, 3/31 Otter Tail SPM; peak migration 4/4–8 in 12 counties. Highest reported count 4/10 Wadena (43) PJB.

Pileated Woodpecker — Reported from 56 counties in all regions, but only Yellow Medicine in Southwest.

Olive-sided Flycatcher — Found in 12 north and 20 south counties. Early south 5/5 Scott RBW, 5/8 Meeker DMF, 5/15 Rice TFB. Early north 5/17 Kanabec JJS, HHD, 5/18 Aitkin KWR (median 5/14). Late south 5/31 Anoka PEB; also see summer report.

Eastern Wood-Pewee — Early south 5/8 Meeker DMF, 5/10 Hennepin KAR (median 5/4). Early north 5/9 Mille Lacs ASc, near the median 5/12, but then none until 5/21 Becker JEB.

Yellow-bellied Flycatcher — Early south 5/17 Fillmore NBO, 5/20 Hennepin HCT. Also reported with details from Lincoln and Pipestone (PHS), Dakota (JPM), Scott (**13** on 5/28 in Murphy-Hanrehan P.R., BAF) and Cottonwood (BRB). Early north 5/20 Wilkin PHS. **Note:** During spring and fall migration, undocumented records of silent *Empidonax* flycatchers are not published in this report. Please be sure to indicate calling or singing birds on the seasonal report form.

Acadian Flycatcher — Early south 5/26 Dakota JPM, 5/29 Houston PHS. Reported as early as 5/18, but without details.

Alder Flycatcher — Early south 5/17 Redwood BRB, 5/20 Waseca JPS, 5/24 Pipestone PHS. Additional reports with details from Big Stone and Houston (PHS), Dakota (JPM), Hennepin (HCT), Cottonwood (BRB), and Anoka (PEB). Only north reports with details 5/24 Pine JMP, 5/29 Pennington BTS.

Willow Flycatcher — Early south 5/8 Fillmore NBO, 5/21 Dakota PEB, 5/28 Hennepin HCT. Additional reports with details from Houston (PHS) and Anoka (PEB).

Least Flycatcher — Early south 5/5 Fillmore NBO, 5/9 Hennepin PEB, 5/10 Waseca JPS. Early north 5/9 Douglas GLS, 5/14 Pine JMP. Additional documented reports from Dakota (JPM), Cottonwood and Redwood (BRB), Renville (LBF), Anoka (PEB), Otter Tail and Clay (GLS), Lake and Cook (DFN).

Eastern Phoebe — Reported from 79% of both north and south counties. Early south **3/5** Nicollet RMD, 3/8 Sherburne HHD both preceded recent median (3/22). Early north 4/3 Aitkin KWR, Douglas SPM and Hubbard MAW (median 3/29).

SAY'S PHOEBE — A pair found at Felton Prairie 5/15 Clay †CMB *et al*. lingered through at least 7/2 (ph. JJB, †PCC, ph. JPM, ph. †PHS, †DTT, SMT).

Great Crested Flycatcher — Early south 4/27 Houston OWB, 5/6 Olmsted OWB, Rice DAB, Scott WCM and Steele NFT (median 5/2). Early north 5/6 Hubbard BJU, 5/7 Grant JEB, 5/9 Kanabec and Pine JMP (median 5/8).

Western Kingbird — Early south 5/7 Jackson HHD, LS, KRE (median 5/8), then no additional reports until 5/16 Big Stone WCM. High count 10 on 5/20 (Wilkin, AXH, PHS). Early north 5/14 Otter Tail DTT, SMT, 5/17 Wilkin PHS (median 5/11). Away from the western third of the state, only found in Clearwater, Meeker, Sherburne and Anoka (5/26 ABi).

Eastern Kingbird — Found in 65% of north and 70% of south counties. Early south arrivals much later than recent median 4/26, but uniformly across the state: 5/6 Cottonwood HHD, Meeker DMF and Watonwan LBF, and in four more counties 5/7. Excluding undocumented reports from early April, early north 5/6 Cass BJU, 5/8 Aitkin SLF (median 5/5).

Loggerhead Shrike — Statewide total of 31+ birds in 16 counties (5 reports lacked location and count data). Reported from 13 south counties beginning 3/30 Rice TFB, 3/31 Dakota WMS; also seen in Fillmore (2), Freeborn (no data), Hennepin (4/1, Three Rivers Park), Kandiyohi, Lac Qui Parle, Le Sueur (no data), Olmsted (no data), Rock (2), Sherburne (no data), Steele (2), Wabasha (2). North reports included Clay, where as many as four were at Felton Prairie beginning 4/23 (CMN, PHS), 5/15 Morrison (McDougal Nature Conservancy) BWF, HHD, and 5/16 **St. Louis** (Ely) BET.

Northern Shrike — Found in every region, including 16 north and 7 south counties. Late south 4/1 Carver KTP, 4/2 Sherburne LS (median 4/5); an additional late May sighting lacked details. Late north 4/2 Lake of the Woods †PHS, JMJ, 4/3 Pennington †PHS, 4/9 Lake JWL, 4/16 St. Louis SLF.

Bell's Vireo — Early south 5/14 Scott JOt, 5/20 Waseca JPS (median 5/15). Also found in Dakota (Murphy-Hanrehan and Cliff Fen) and Wabasha (McCarthy Lakes W.M.A.).

Yellow-throated Vireo — Early south 5/6 Meeker DMF and Scott WCM, 5/7 Dakota, Goodhue, Hennepin. Early north 5/14 Clay DPJ, 5/15 Morrision HHD, 5/16 Cass, Crow Wing, Mille Lacs. Both arrivals five days later than recent medians.

Blue-headed Vireo — Early south 5/5 Freeborn AEB, Hennepin DCZ and Rice TFB (median 4/28). Early north 5/6 Cass BJU, 5/7 Pine JWL, 5/9 in four more counties (median 5/5). Late south 5/29 Dakota ADS, 5/30 Murray NED (median 5/29).

Warbling Vireo — Reported from every region, though fewest observations in the Northeast. Early south 5/5 Waseca JJS, HHD, then five additional counties

on 5/6. Early north 5/8 Otter Tail DTT, SMT, followed a week later by 5/15 Morrison HHD. High count 5/29 Houston (10 at Beaver Creek Valley S.P.) PHS.

Philadelphia Vireo — Early south 5/5 Scott RBW, 5/6 Martin RBW, 5/8 Meeker DMF (median 5/7). Early north 5/14 Pine JMP, 5/18 Clay RHO (median 5/14). Record-high count **15** at Hole-in-the-Mountain C.P., 5/24 Lincoln PHS. Late south 5/28 Sherburne RBJ, 5/30 Ramsey REH (median 5/30).

Red-eyed Vireo — Early south 5/5 Meeker DMF, 5/8 Houston FZL (median 5/6). Early north 5/16 Mille Lacs ASc, 5/17 St. Louis SES (median 5/10). At least **150** (previous spring high count 40) found at Hole-in-the-Mountain C.P., 5/24 Lincoln PHS. Four of the five common vireo species were first found south on the same date — a Thursday, not even a weekend!

Gray Jay — Reported from the boreal region of the state.

Blue Jay — Found throughout the state and season.

Black-billed Magpie — Reported from 7 of 10 Northwest and 7 of 10 North-central counties, plus traditional locations in St. Louis. Unusual report 4/8 **Cook** (Sawbill Trail) CJT.

American Crow — Noted in all but three counties.

Common Raven — Most reports were from the northern third of the state, including 9 of 10 Northwest counties. Also found in Mille Lacs, Sherburne, Kanabec, Pine, and Anoka (3/15 Linwood Twp., BRL).

Horned Lark — Found north and south throughout the period, except no Northeast reports. High counts: 500 in Brown (3/20, BRB), 125 in Dakota (3/18, JPE).

Purple Martin — Early south 4/2 Freeborn AEB, 4/3 Washington DFN (median 4/5). Early north 4/8 Otter Tail SPM, 4/16 Clay DPS, Hubbard MAW and Wilkin CRM (median 4/12).

Tree Swallow — Early south 3/26 Winona DFN, 3/27 Freeborn AEB (median 3/20). Early north 4/2 Cass MRN, 4/3 Douglas SPM, and Wadena PJB.

Northern Rough-winged Swallow — Early south 4/9 Scott RBJ, 4/11 Fillmore NBO, 4/14 Hennepin HCT (median 4/12). All April north reports: 4/23 St. Louis SLF, 4/24 Kanabec CAM (median 4/20). High count 67 in Fillmore (5/14 NBO).

Bank Swallow — Early south 4/10 Hennepin DWK, 4/14 Dakota JPM and Freeborn AEB (median 4/17). Early north 4/28 St. Louis SLF, 5/7 Douglas JEB, 5/8 Wadena PJB (median 5/1).

Cliff Swallow — Early south 4/13 Dakota ADS, 4/16 Meeker DMF. All April reports north: 4/21 Otter Tail DTT, SMT, 4/27 St. Louis SLF (median 4/25). Record-high spring count 5/26 Pennington (**3,200** at Thief River Falls W.T.P.) RPR.

Barn Swallow — Early south 4/6 Meeker DMF, 4/7 Sherburne HHD (median 4/12). Early north 4/4 St. Louis SLF, 4/16 Aitkin ASc (median 4/20).

Black-capped Chickadee — Found throughout the state.

Boreal Chickadee — Reported from Beltrami, Cass, St. Louis.

Tufted Titmouse — South reports throughout the season, concentrated in the Southeast. Also reported from Washington (3 miles west of L. Elmo) 4/4–9 DPS and Hennepin (Baker Park) 4/14 *fide* AXH.

Red-breasted Nuthatch — Reported from 23 north and 26 south counties throughout the season. Last south report 5/23 Freeborn AEB.

White-breasted Nuthatch — Found in all regions, throughout the season.

Brown Creeper — Found in 16 north and 28 south counties. Early north migrants not separable from wintering birds; first reported 3/1 Kanabec BLA, 3/6 St. Louis MLH.

ROCK WREN — One reported from rock pile #6002 at Felton Prairie in Clay, where a pair bred last year. First seen 5/10 JEB, RBJ; documented through end of season and into August †CMB, ph. JJB, †PCC, †PHS, †DTT, †SMT.

Carolina Wren — One individual reported sporadically throughout the season in Hennepin (Old Cedar Ave. Bridge). Only other report: 3/6 Dakota BBB.

House Wren — Found in a majority of counties in each region. First south reports were right on schedule: 4/17 Blue Earth ChH and Rice TFB, 4/18 Fillmore and Olmsted (median 4/18). Early north 5/5 Otter Tail DTT, SMT, and St. Louis MTA, 5/6 Kanabec BLA (median 4/29).

Winter Wren — Not reported from the western third of the state. Early south 3/29 Rice TFB, 3/30 Hennepin DCZ, 3/31 Scott JEB. Early north 4/6 Clay RHO, 4/7 Hubbard MAW. High count **20** in St. Louis (4/17 Normanna and Lakewood Twps.) TPW. Only May reports south were 5/10 Dakota ADS and Hennepin JOt.

Sedge Wren — Early south 4/30 Fillmore NBO and Rice TFB (median 4/27). Early north 5/7 Beltrami BJU and Norman JEB, 5/8 Red Lake JMJ and St. Louis SES (median 5/3).

Marsh Wren — Early south 4/24 Meeker DMF, 4/26 Waseca JEZ, 4/30 Rock HHD (median 4/26). Early north 5/7 Beltrami BJU and Norman JEB, 5/8 Otter Tail DTT, SMT (median 5/4). Also notable was one at the Embarrass Rice Paddies in St. Louis (5/28, SES).

Northern Wheatear, 30 May 2005, Grand Marais, Cook County. Photo by Gail and Sid Stivland.

Golden-crowned Kinglet — Early south 3/5 Nicollet RMD (probably overwintered), 3/20 Meeker DMF, 3/25 Olmsted JJS (median 3/25). Early north 3/25 Beltrami SC, 3/30 Clay PBB, 4/3 Wadena PJB. Late south (away from known breeding locations) 4/17 Fillmore JWH, 4/18 Wabasha JWH (median 5/6).

Ruby-crowned Kinglet — Early south **3/5** Nicollet RMD (over-wintering?), 3/27 Freeborn AEB, 3/28 Meeker DMF (median 3/26). Early north 4/3 Douglas SPM, 4/4 Mille Lacs ASc, 4/5 Aitkin, Becker, Lake. Late south 5/21 Olmsted JWH, 5/24 Rock PHS.

Blue-gray Gnatcatcher — Early south **4/11** (record early) Brown BTS, 4/15 Rice TFB. Early north 5/6 Otter Tail MO, 5/7 Grant JEB. Most northerly reports were 5/16 Clay DPJ and 5/18 Aitkin KWR. Unusual location 5/7 Jackson (Robertson C.P.) KRE *et al.*

NORTHERN WHEATEAR — Establishing the first spring and third state record was a female photographed by Gail and

Sid Stivland near the U.S. Coast Guard Station in Grand Marais, 5/30 **Cook** (***The Loon*** 77:258).

Eastern Bluebird — Reported from the majority of counties in all regions. South reports throughout the season. Early north 3/24 Kanabec BLA, 3/26 Wadena PJB, 3/27 Lake and Todd. Only the Northwest region did not have a March report; first seen there 4/4 Kittson.

Mountain Bluebird — Three reports: **3/12** (ties second earliest north) Wilkin (male) BJU, 3/15 Dakota (Hastings, along CR 42 near 132nd St.) *fide* AXH, 4/9 **Meeker** DMF.

Townsend's Solitaire — Two reports: 3/6 Ramsey AXH, 3/26–28 Sherburne (overwintered at Ann L. Campground) REH, ASc.

Veery — No reports from the Southwest and only Douglas in the West-central; in all other regions, seen in a majority of counties. Early south 5/6 Meeker DMF, 5/7 Olmsted LAV, 5/9 Hennepin OLJ (median 5/1). Early north 5/9 St. Louis MTA, 5/15 Morrison JJS, HHD (median 5/8).

Gray-cheeked Thrush — Found in all regions. Early south 5/4 Steele KV, 5/6 Freeborn, Martin, Meeker, Rice. Early north 5/10 Clay JEB, RBJ, GLS, 5/11 Otter Tail JEB. Late south 5/30 Meeker DMF and Ramsey REH. Late north 5/27 Clay LS, 5/29 Polk KRE.

Swainson's Thrush — Also reported from all regions. Early south 5/4 Mower HHD, 5/5 Freeborn, Rice, Waseca. Early north 5/5 Clay RHO, 5/6 Cass BJU. Highest reported count 20 (5/20 Hennepin PEB). Observed south through the end of the season. An undocumented mid-April report south was quite possibly the next species (see ***The Loon*** 67:44–45).

Hermit Thrush — Seen in all regions. Record early (overwintered?) **3/14** Hennepin CRM. More typical early south reports 4/1 Rice TFB, 4/3 Carver WCM (median 3/29). Early north 4/4 Otter Tail *fide* JMJ, 4/7 Mille Lacs ASc, 4/8 Morrison and St. Louis. Late south 5/22 Hennepin CRM and Washington (Falls Creek S.N.A.) DFN (median 5/14).

Wood Thrush — Absent from the Northwest region. Early south 5/6 Meeker DMF and Steele NFT, 5/7 Freeborn, Jackson, Rice (median 5/1). Early north 5/9 Kanabec BLA and Mille Lacs ASc, 5/14 Aitkin KWR (median 5/8). Undocumented mid-April report south (see ***The Loon*** 67:44–45). High count **8** at Beaver Creek Valley S.P. in Houston (5/29, PHS).

American Robin — Reported from all but two south and one north county. Early north 3/21 Clay BWF, 3/23 Otter Tail DTT, SMT, with many more reports over the next few days suggesting a significant influx during the last week of March. Highest total 150+ in Cottonwood (3/26, BRB).

Varied Thrush — One discovered during the winter season near Sibley S.P. in Kandiyohi lingered through 3/24 *fide* RJF. Another was seen only on 3/23 Crow Wing (Deerwood Twp.) JSB.

Gray Catbird — Early south 4/30 Houston DPS, 5/5 Wabasha JLU, 5/6 Meeker, Rice, Steele and Watonwan (median 4/27). Early north 5/5 Polk *fide* JMJ, 5/9 Kanabec CAM and Mille Lacs ASc (median 5/8). Highest total **20** in Nicollet (5/17, ChH).

Northern Mockingbird — A veritable invasion across the state! At least 13 or 14 individuals reported south and 14–16 north. Early south 4/10 Murray *fide* AXH, 4/17 Mower (Austin) JEM, 4/17–18 Brown (Flandrau S.P.) JSS, BTS. Early north 3/31 Beltrami BJU, 5/10–22 Crow Wing (2) JSB, 5/14 Clay (north of Blazing Star Prairie) RHO, DPJ. Additional south reports in chronological order from Olmsted, Swift, Stearns, Nicollet, Redwood, Hennepin (2), Brown (second location), Scott, Ramsey, Lac Qui Parle. Additional north reports from Marshall, Becker, Clay (Gooseberry

Park), Cass, Crow Wing (2 birds, seven miles away from the first sighting in this county), Lake, and from five different locations in St. Louis between 5/21 and 5/27.

Brown Thrasher — Reported from 24 north and 45 south counties. Early south 4/10 Martin PH and Watonwan DLB, 4/11 Cottonwood and Fillmore (median 4/14). Early north 4/19 Pine JMP, 4/21 Otter Tail DTT, SMT, St. Louis LAW (median 4/25).

European Starling — Found statewide throughout the period.

American Pipit — Observed in every region except the North-central. Early south 3/31 Lyon BRL, then none until 4/24 Big Stone PHS and Meeker DMF (median 4/16). Early north 5/7 Grant JEB, 5/8 Crow Wing JSB, 5/9 Lake JWL and Red Lake JEB (median 4/27). Late south 5/15 Hennepin HCT, 5/16 Big Stone WCM (median 5/15). Late north 5/15 Clay JMJ and Polk JMJ (median 5/23). High counts **60** at Crow-Hassan P. R. Hennepin (5/15, HCT).

Bohemian Waxwing — No south reports. North reports from Douglas, Polk (3/26 at Gully Fen), Red Lake, Becker, Crow Wing, Pine, St. Louis, Lake. Highest totals included 500 in Pine (3/14, BBr), and several reports from the W.S.H.C. in Duluth: 3/16 (300+), 3/23 (725) and 4/2 (450+) FJN *et al.* Last reported 4/15 St. Louis JWL.

Cedar Waxwing — Reported statewide throughout the period. High count 1,000+ in Cottonwood (3/6, BRB).

Blue-winged Warbler — Early south 5/5 Fillmore NBO, 5/6 Anoka JLH, Rice DAB and Scott WCM. Unusual location 5/7 **Jackson** (Robertson C.P.) KRE *et al.* MAJ and DCT noted this species' gradual displacement of the Golden-winged Warbler in Stearns. In support of this observed expansion were two north reports: **5/7 Beltrami** (Pine Tree C.P., record-early north) BJU, 5/15 Morrison (Charles Lindberg S.P.) JJS, BWF, HHD.

Golden-winged Warbler — Found in every region but the Southwest. Early south 5/6 Rice TFB, 5/7 Ramsey SWe, 5/8 Brown, Goodhue, Washington. Early north 5/6 Hubbard BJU, 5/9 Carlton JWL and Marshall PHS. At Agassiz N.W.R. in Marshall, PHS found a perfectly normal-looking male repeatedly delivering the song of a Blue-winged Warbler. "Lawrence's Warbler" 5/19 Scott (Murphy-Hanrehan P.R.) RBW.

Tennessee Warbler — Reported from 27 north and 35 south counties, in all regions of the state. Early south 5/4 Meeker DMF, 5/5 Fillmore NBO and Freeborn AEB, 5/6 in five additional counties. Early north 5/8 Kanabec CAM, 5/10 Clay JEB and Otter Tail RBJ. High counts 100+ at Hole-in-the-Mountain C.P. in Lincoln (5/24, PHS) and 85 in Fillmore (5/17, NBO). Late south 5/30 Hennepin, Sherburne, Steele.

Orange-crowned Warbler — Three early south reports preceded the median (4/21): **4/9** (record early) Meeker DMF, 4/15 Hennepin JOt, 4/17 Fillmore JWH. Two north reports in April: 4/21 St. Louis LAW, 4/25 Crow Wing JSB. High count 20 at Hole-in-the-Mountain C.P. in Lincoln (5/24, PHS). Late south 5/20 Hennepin PEB, 5/24 Lincoln, Pipestone and Rock PHS.

Nashville Warbler — Reported from 31 south and 19 north counties in all regions. Early south 4/24 Meeker DMF, 5/5 Fillmore NBO, Freeborn AEB and Hennepin DCZ (median 4/26). Early north 5/6 Cass BJU and Pine JMP, 5/8 Carlton LAW and St. Louis ALE (median 5/3). Late south 5/24 Lincoln and Rock PHS, 5/29 Houston PHS.

Northern Parula — First found five days later than median south (5/1): 5/6 Meeker DMF and Rice TFB, 5/7 Blue Earth, Freeborn, **Jackson** (the only report from the western third of the state) and Ramsey. Early north 5/6 Hubbard BJU, 5/8 Kanabec CAM were timely (median 5/7). Late south 5/30 Scott BAF.

Yellow Warbler — Reported from 27 north and 40 south counties statewide. Early south 4/28 Winona JJS, 5/1 Freeborn AEB (median 4/27). Early north 4/27 Hubbard MAW, 5/6 Otter Tail MO (median 5/5).

Chestnut-sided Warbler — Found in all regions. Early birds arrived within one day of recent medians. Early south 5/6 Steele NFT, 5/7 Dakota ADS, 5/8 in five more counties. Early north 5/7 Beltrami PBD, 5/8 St. Louis SES.

Magnolia Warbler — Found in 17 north and 28 south counties, representing all regions. Early south 5/7 Stearns STW, 5/8 Goodhue JWH, DAB. Early north 5/5 St. Louis FJN, 5/6 Cass BJU, 5/9 Carlton JWL. Late south 5/30 Scott BAF.

Cape May Warbler — No reports from the West-central or Southwest regions, and only two from the Central and one from the South-central. Early south 5/7 Goodhue PEB, 5/8 Dakota SWe, ADS and Hennepin KTP (median 5/6). Early north 5/16 Itasca DFN, 5/17 Kanabec JJS, HHD. Late south 5/21 Dakota JOt and Olmsted PWP, JWH (median 5/22).

Black-throated Blue Warbler — Four south reports: 5/15 Meeker (Litchfield N.C.) DMF, 5/16 Dakota (male in Eagan) DHo, 5/17 **Martin** (Cedar Lake C.P.) PH, 5/24 **Lincoln** (Hole-in-the-Mountain C.P.) PHS. All north reports were from the Northeast: **5/7** (second earliest north) St. Louis SES, 5/21 St. Louis (Park Point) *fide* JWL and Cook (8 singing on Moose Mountain near Lutsen) MWS, 5/22 Carlton LAW, plus three reports from Lake: 5/27 Tettegouche S.P. DFN, 5/28 Stoney Loop Rd. (F.R. 103) JWL, 5/29 Trapper's Lake Rd. (F.R. 369) JWL.

Yellow-rumped Warbler — Reported from most counties. Early arrivals within two days of medians. Early south 4/3 Carver and Renville WCM. Early north 4/6 Clay BWF, RHO, 4/9 Becker, Mille Lacs, Traverse and Wadena. High count 200+ in Crow Wing (4/28, JSB). Late south 5/20 Anoka JLH and Dakota LS, 5/21 Stearns HHD, RPR. Female "Audubon's" Warbler documented 5/12 Dakota (Eagan) †ADS.

Black-throated Green Warbler — Early south 5/6 Freeborn AEB, Hennepin PEB, Meeker DMF and Rice TFB (median 4/29). Early north 5/8 Carlton LAW and Kanabec CAM, 5/9 Marshall and St. Louis (median 5/4). Late south 5/24 Lincoln, Pipestone and Rock PHS (median 5/30).

Blackburnian Warbler — Found in every region, though only one report from the West-central. Early south 5/6 Blue Earth ChH and Freeborn AEB, 5/8 in six additional counties. Early north 5/9 Pine JMP, 5/15 Lake JWL, 5/16 Mille Lacs and St. Louis. High count 25 in Lincoln (5/24, PHS). Late south 5/24 Meeker LBF, Lincoln, Pipestone, and Rock PHS.

YELLOW-THROATED WARBLER — Only accepted record: 5/15 **Morrison** (Belle Plaine C.P.) †BWF *et al.*

Pine Warbler — All but four reports were from the East-central, Northeast or North-central. Early south 4/14 Ramsey DS, 4/17 Washington DFN, 4/18 Ramsey REH, 4/23 Sherburne HHD; all preceded recent median (4/25). Early north **4/16** Cass DEn, 4/20 Clearwater BAF and Hubbard MAW, 4/22 Crow Wing JSB.

Palm Warbler — Found in every region. Second earliest south **4/5** Ramsey †TAN, then more typical reports 4/20 Hennepin DWK and Olmsted LAV (median 4/22). Early north **4/18** (ties second earliest north) Clay RBJ, 5/5 Cass MRN, Otter Tail DTT, SMT and St. Louis MTA. Late south 5/19 Hennepin PEB and Rice DAB, 5/20 Olmsted JWH.

Bay-breasted Warbler — Reported from 9 north and 17 south counties. Early arrivals within one day of medians. Early south 5/8 Goodhue DCZ, 5/9 Ramsey BRL and Sherburne PLJ. Early north 5/14 Pine JMP, 5/17 Kanabec HHD, CAM and

St. Louis ALE. Late south 5/24 Lincoln PHS, 5/28 Brown JSS (median 5/24).

Blackpoll Warbler — Found in 16 north and 30 south counties. Early south 5/5 Wright KTP, Fillmore NBO and Rice TFB. Early north 5/6 Cass BJU, 5/7 Beltrami BJU (median 5/9). High count 25 in Lincoln (5/24, PHS). Late south 5/30 Rice DAB; also see summer report.

Cerulean Warbler — Early south 5/6 Scott WCM, 5/7 Olmsted LAV (median 5/8). Also reported from Rice, Nicollet, Brown, Meeker (5/21 Darwin-Dassel Park, DMF), Stearns (5/21, RPR, HHD), Houston, Fillmore, Dakota, Chisago (5/21 along CR 16, 1.0 mile S of CR 71, ABi, REH), and Anoka (5/29 at Carlos Avery W.M.A., JHi).

Black-and-white Warbler — Reported from 23 north and 32 south counties. Early south 4/24 Meeker DMF, then none until 5/4 Mower HHD, 5/5 Dakota, Fillmore, Freeborn, Rice. Early north 5/6 Pine JMP, 5/7 Clay DPJ, St. Louis SES.

American Redstart — Found in most counties within each region. Early south 5/5 Olmsted LAV and Rice TFB. Early north 5/8 Hubbard MAW and Otter Tail DTT, SMT. Both early arrivals within two days of recent medians. High count **200+** during fall-out at Hole-in-the-Mountain C.P. in Lincoln (5/24, PHS).

Prothonotary Warbler — Early south 5/11 Anoka (Kordiak Park in Columbia Heights) *fide* MLH, 5/13 Houston FZL, 5/14 Hennepin HCT and Ramsey REH, followed by reports from Houston, Dakota, Hennepin, Meeker (5/21, DMF), and **Watonwan** (5/31, BRB). Only north report: 5/16 **Cass** (Schoolcraft S.P.) RBJ.

WORM-EATING WARBLER — A record-early individual was netted, banded, and photographed at Warner N.C. **4/15** Washington MP, ph. KM, *fide* PWS.

Ovenbird — Early south 5/4 Mower HHD and Stearns DCT, MAJ, 5/5 Hennepin DCZ (median 4/30). Early north 5/6 Pine JMP, 5/8 Aitkin KWR, 5/9 Carlton, Crow Wing, Mille Lacs, Norman, Polk (median 5/4).

Northern Waterthrush — Found in all regions. Early south **4/16** Hennepin OLJ, then none until 4/28 Brown BTS, 5/5 Fillmore, Freeborn, Meeker, Rice (median 4/26). Early north 5/5 Clay RHO, 5/7 Beltrami BJU, 5/8 Kanabec, St. Louis and Wadena (median 5/4). Late south (away from known breeding locations) 5/24 Lincoln, Pipestone, and Rock PHS.

Louisiana Waterthrush — Early south (median 4/24) 4/9 Winona PWP, 4/14 Houston (4) OWB, 4/17 Fillmore (2) JWH, 4/21 Winona JJS; also reported from Chisago (5/14 JJS, HHD), Olmsted, Rice, Waseca, Washington (Falls Creek S.N.A.). Only north report 5/10–15 **Clay** (Felton Prairie) †RHO, BWF, JMJ, SAS, †PHS, DPJ (***The Loon*** 77:259).

Kentucky Warbler — Sixth consecutive year at Williams C.P. near Mankato 5/11+ Blue Earth m.obs. Also reported 5/19 Dakota (Schaar's Bluff) JPM, 5/30 Scott (Murphy-Hanrehan P.R.) BAF.

Connecticut Warbler — Reported from nine north and seven south counties. Early south 5/15 Meeker DMF, 5/17 Big Stone and Lac Qui Parle PHS, 5/19 Hennepin CMB. Early north (median 5/17) 5/10 St. Louis DAG, 5/19 Itasca RBJ. Late south 5/29 Scott BAF, 5/30 Hennepin HCT (but also see summer report).

Mourning Warbler — Reported from 19 south and 12 north counties. Early south 5/11 Freeborn AEB, 5/14 Meeker DMF, 5/15 Hennepin DF, then frequent reports through 5/29; also see summer report. Early north **5/7** (second earliest date) Beltrami BJU; otherwise, frequent reports starting 5/17. Highest reported count 5/29 Houston (**6**) PHS.

Common Yellowthroat — Found in 39 south and 28 north counties. Early south 5/5 Freeborn AEB, 5/6 Meeker DMF,

LeSueur DPS, Rice DAB. Early north 5/7 Beltrami BJU, 5/9 Mille Lacs ASc and St. Louis MTA, 5/10 Clay DPJ and Pine JMP.

Hooded Warbler — Away from Twin Cities: 5/10 **Waseca** (Courthouse Park) †JPS, 5/21 Meeker (Litchfield N.C.) DMF. All other reports 5/8–14 Hennepin (Wood Lake) m.obs., 5/15+ Scott (Murphy-Hanrehan P.R.) DFN, PHS, 5/17 Dakota (Lebanon Hills) JPM.

Wilson's Warbler — Observed in 25 south and 15 north counties. Early south 5/5 Freeborn AEB, 5/7 Jackson LS, Meeker DMF and Dakota ADS. Early north 5/14 Clay RHO, DPJ, 5/17 Kanabec HHD. Late south 5/27 Fillmore NBO. Highest reported count 5/24 Lincoln (15) PHS.

Canada Warbler — Found in 17 south and 10 north counties, and in all but two regions. Early south 5/13 Fillmore DFN, then numerous reports 5/17 and 5/19. Early north 5/18 St. Louis ALE, followed by numerous reports 5/21. Both south and north arrivals five days behind median. Late south (but see summer report) 5/28 Scott BAF. Highest reported count 5/28 Scott (7) BAF.

Yellow-breasted Chat — No reports.

Summer Tanager — Nine documented records, all pertaining to first-spring males except as noted: 4/30 Hennepin (adult male at Coon Rapids Dam) †JMS, 5/7–10 Steele (Owatonna) ph. NFT, 5/8 Goodhue (Hok-si-la Park) CH, JWH, †DCZ, 5/8 Hennepin (Richfield, a few blocks west of Wood Lake N.C.) ph. AB, 5/9–14 Hennepin (Wood Lake N.C., same as 5/8?) †CMB *et al*., ph. SBM, 5/11–16 Wabasha (East Indian Creek) †SK, RLE *et al*., 5/17 Washington (age/sex unspecified, banded at Warner N.C.) MP, 5/20 Mower (Grand Meadow W.T.P.) †SLF, 5/21+ Dakota (adult male at Lebanon Hills, third consecutive year at this location) †JPM. Also see undocumented reports.

Scarlet Tanager — Observed in 26 south and 16 north counties in all regions. Early south 5/6 Wantowan LBF, 5/7 Goodhue PEB, 5/8 Houston FZL and Goodhue JWH. Early north 5/17 Kanabec HHD, 5/18 Wadena PJB and Kanabec CAM. Highest reported count 5/19 Fillmore (6) NBO.

Western Tanager — Documented 5/10 Waseca (male at Senn-Rich W.M.A., second county record) †JPS, 5/12–15 Beltrami (immature male at Bemidji, third county record) ES, †JMJ, †PHS, m.obs., 5/13 Todd (male east of Long Prairie, second county record) ph. BWF, 5/13–14 Olmsted (male at Oronoco) ph. GEc, 5/14 Pine (male at Duxbury, second county record) ph. TFA. Also see undocumented reports.

Spotted Towhee — Only report: 5/8 **Renville** (Olivia) ph. CSH. An apparent hybrid 4/16 Pipestone RMD, MTA, CFa, delivered a Spotted Towhee song, but exhibited an extensive white patch at the base of its primaries.

Eastern Towhee — Reported from 27 south and 10 north counties and remarkably, in all regions. Early south 4/10 Freeborn AEB, 4/13 Rice TFB, 4/14 Goodhue MPa. Early north 5/6 Hubbard BJU, 5/7 Clay RHO, 5/10 Otter Tail SPM; also reported from Kittson, Marshall, Becker, Clearwater, Wadena, St. Louis, Kanabec.

American Tree Sparrow — Found in 33 south and 15 north counties. Late south 4/9 Isanti REH, an astonishing 22 days prior to the median (5/1). Late north 4/30 Wadena PJB, nine days prior to that median (5/9). Highest reported count 3/20 Cottonwood (~**500**) BRB.

Chipping Sparrow — Reported from all but eight south and five north counties. Excluding undocumented report 3/5 Nicollet (21 days prior to the median arrival and within one day of the record-early date), early south 3/25 Lac Qui Parle FAE, only March report. Early north **4/3** Polk NGE, 4/5 Hubbard RCS and Clay RHO. Highest reported count 5/14 Big Stone (100) JMJ.

Clay-colored Sparrow — Reported from 26 south and 26 north counties. Early south 4/6 (recent median 4/21) Stearns DCT, then no reports until 5/4. Early north 5/3 (median 4/27) Beltrami BJU, followed by numerous reports after 5/5. Highest reported count 5/14 Pine (**32**) JMP.

Field Sparrow — Observed in 35 south and 8 north counties, and in all regions except the Northeast. Early south (median 3/30) 4/5 Olmstead LAV, 4/7 Brown BRB and Hennepin LS. Early north (median 4/23) 4/20 Otter Tail DTT, SMT, then no reports until 5/5.

Vesper Sparrow — Reported from 38 south and 22 north counties in all regions. Early south 3/26 Meeker DMF, 3/28 Dakota JPM, 3/30 Dakota BRL. Early north 4/9 Traverse SPM, Wilkin JOt, and Clay GLS. Two reports from St. Louis: 4/19 SLF and 5/1 SES. Three reports from Lake: 4/18, 5/12, 5/23 JWL. Highest reported count 4/16 Rock (**30**) CFa, MTA, RMD.

Lark Sparrow — Reported from ten south and seven north counties, including 5/19 Yellow Medicine WCM. First county occurrence 5/7 **Mille Lacs** (west shore of Mille Lacs L.) ph. KWR; remainder of north reports from Northwest region. Arrived within two days of recent medians south (4/23) and north (5/4). Early south 4/21, 4/25 Wabasha JJS, LS. Early north 5/5 Polk EEF. Highest reported count 5/29 Washington (**6**) AWJ.

LARK BUNTING — Two accepted records: adult female 5/26 St. Louis (Ely) BET, †PHS and adult male 5/27–29 Lake (Castle Danger) ph. LL.

Savannah Sparrow — Reported from 41 south and 29 north counties. Early south 4/6 Meeker DMF and Sherburne ASc, 4/7 Brown BTS and Rice TFB. Early north 4/9 Clay GLS and Traverse SPM.

Grasshopper Sparrow — Early south **4/10** (record-early by four days) Rice FVS, 4/18 Wabasha JWH. Early north 4/23 Clay CMN, followed by eight more north counties after 5/6: Marshall, Polk, Pennington, Wadena, Morrison, Mille Lacs, Kanabec, Pine.

Henslow's Sparrow — Record-early south **4/17–18** Scott (2 seen and heard at Murphy-Hanrehan P.R.) RBW, †CMB, m.obs., **4/18** Wabasha (2 singing at Weaver Dunes) DBz, CH, JWH; also arrived earlier than normal (median 5/16) 4/25 Winona (singing at Great River Bluffs S.P.) SHo. Additional documented reports 5/15 Meeker (Litchfield N.C.) †DMF, 5/15–24 Lac Qui Parle (2 singing at Plover Prairie) WCM, †PHS, 5/16 Fillmore (Hvoslef W.M.A.) †NBO, 5/21+ Ramsey (max. 4 at Arden Hills Army Training Site, digital recording) †JPS *et al.*, 5/29 Houston (**12** in Houston Twp.) AXH, †PHS. The latter count equaled the state record of 12 at Great River Bluffs (formerly O.L. Kipp) S.P., Winona County, Summer 2000 (***The Loon*** 73:31). Reported without details from Hennepin (2 locations), and Rice.

Le Conte's Sparrow — A mere three south reports: 5/3 Rice TFB (median 4/23), 5/5 Blue Earth HHD, 5/15 & 5/18 Lac Qui Parle WCM. Reported from 16 north counties. Early north 5/4 St. Louis TPW, 5/6 Wilkin MO, 5/7 Beltrami BJU.

Nelson's Sharp-tailed Sparrow — All reports: record-early **5/7** Beltrami BJU, then 5/19 Clay PBB, 5/20 Wilkin AXH, PHS, 5/29 Aitkin KWR, 5/30 Polk m.obs.

Fox Sparrow — Reported from 28 south and 14 north counties in all regions. Early south (3/8 Sherburne HHD probably overwintered) 3/21 Steele KV, 3/23 Rice TFB, 3/24 Houston FZL. Early north 4/1 Kanabec CAM and Crow Wing JSB, 4/2 St. Louis ALE; numerous reports 4/5–10, indicating peak migration. Late south 4/16 Pipestone MTA, CFa, RMD, 13 days ahead of the median (4/29). Late north 5/16 Cass JEB.

Song Sparrow — Reported from all but seven south and three north counties. See

winter report for late February reports south; likely early south migrants 3/24 Rice TFB, 3/25 Steele NFT. Early north 3/29 Otter Tail ARo, 4/2 Kanabec BLA. Highest reported count 5/14 Pine (23) JMP.

Lincoln's Sparrow — Observed in 23 south and 13 north counties, down from the previous spring. Early south 4/16 Rock MTA, RMD, CFa, 4/24 Meeker DMF, 4/25 Rice TFB. Early north 4/20 Otter Tail RJo, then no reports until 5/6. Late south 5/20 Brown JSS, 5/20 Ramsey REH.

Swamp Sparrow — Reported from 38 south and 26 north counties. Early south (but see winter report) 3/20 Hennepin JOt, 3/27 Freeborn AEB. Early north 4/13 St. Louis ALE and Otter Tail DTT, SMT.

White-throated Sparrow — Reported from 39 south and 27 north counties in all regions. Overwintered north and south. Late south 5/20 Hennepin DCZ, 5/17 Nicollet ChH. Highest reported count 4/30 Houston (**1,000**) DPS.

Harris's Sparrow — Observed in 32 south and 16 north counties in all regions. Early south (no reports of overwintering) 3/27 Martin LBF, 4/13 Brown BTS; peak migration 5/5–14. Early north 4/20 Otter Tail RJo, followed by frequent reports starting 5/5. Late south 5/15 Mower RCK, 5/17 Fillmore NBO. Late north 5/20 Wilkin PHS, 5/21 St. Louis m.obs.

White-crowned Sparrow — Reported from 26 south and 16 north counties in all regions. Early south 5/1 Freeborn AEB, 5/3 Washington DPS; peak migration 5/6–7. Early north (also see winter report) 4/15 Marshall DVE, eight days ahead of the median (4/23). Late south 5/20 Brown JSS and Ramsey NSp. Late north 5/20 St. Louis TPW, 5/22 Lake JWL.

Dark-eyed Junco — Reported from 38 south and 23 north counties in all regions. Late south 5/14 Washington DPS, 5/19 Fillmore NBO. "Oregon" race documented 3/31 Dakota †ADS. Highest reported count 4/3 Beltrami (340) PJB.

Lapland Longspur — Observed in 15 south and 5 north counties. Late south 5/7 Stevens JEB, 5/8 Dakota ADS. Late north 4/23 Clay CMN, an astonishing 26 days prior to the median (5/19)! Highest reported count 3/18 Dakota (450) JPE.

Smith's Longspur — Male reported without details in flock of longspurs 5/7 **Kandiyohi** (East Lake Lillian Twp.) RSF.

Chestnut-collared Longspur — Reported 4/16+ Clay (Felton Prairie) BWF, m.obs.

Snow Bunting — Observed in ten north and six south counties. Late south 3/20 Brown (40) BRB. Late north 4/6 Clay BWF, 4/23 Aitkin WCM, 17 days prior to the median.

Northern Cardinal — Reported from 30 south and 17 north counties in all regions. Northern extent as follows: Clay and Becker in Northwest, Hubband and Cass in North-central, St. Louis and Lake in Northeast.

Rose-breasted Grosbeak — Reported from 39 south and 27 north counties in all regions. Early south 5/5 in five counties, then numerous reports through 5/10, indicating a fast and heavy movement. Similar phenology north: arrived 5/2 Crow Wing JSB, then 5/7 in five counties, followed by frequent reports through 5/10. Highest reported count 5/14 Pine (8) JMP.

BLACK-HEADED GROSBEAK — Two accepted records: 5/24 Rock (adult male near Luverne) †PHS (***The Loon*** 77:258–259) and 5/29+ **Marshall** (adult male near Newfolden) †MBr; also documented by †PCC, †JMJ, †SAS.

Blue Grosbeak — Observed 5/20 Brown BTS, 5/21 Rock NED, 5/24 Rock PHS.

LAZULI BUNTING — Two accepted records: 5/13 **Steele** (male at Owatonna) ph. NFT, 5/18 **Meeker** (male in Greenleaf

Twp.) †DMF.

Indigo Bunting — Reported from 31 south and 13 north counties in all regions. Early south **4/20** (earliest ever) Rice DAB, then no reports until 5/6 Freeborn AEB. Early north 5/17 Kanabec HHD, Otter Tail PL and Polk EEF.

Dickcissel — Five reports from four south counties: 5/3 Steele NFT, 5/23 Rock PHS, 5/29 Houston PHS and Murray NED, 5/30 Steele (3) NFT.

Bobolink — Found in 35 south and 24 north counties in all regions. Early south 5/1 Lac Qui Parle PHS. Early north **4/24** (third earliest) Marshall DMy. Highest reported count 5/14 Pine (27) JMP.

Red-winged Blackbird — Reported from 75 counties. Please see winter report for early south migrants. Probable early north migrants 3/6 Otter Tail SPM, 3/10 Traverse and Otter Tail DTT, SMT, 3/13 Todd BWF. Highest reported count 3/29 Cottonwood (600) BRB.

Eastern Meadowlark — Reported from 35 south and 12 north counties in all regions except the Northwest. Early south 3/16 Fillmore NBO, 3/20 Steele KV. Early north 4/1 Carlton LAW, 4/2 Carlton JWL. Highest reported count 4/2 Sherburne (**16**) ASc.

Western Meadowlark — Reported from 39 south and 21 north counties, and in all regions except the Northeast. Early south 3/15 Freeborn AEB, 3/24 Chippewa RBJ. Early north 3/20 Clay DPJ and Wadena PJB. Highest reported count 4/10 Polk (**55**) EEF.

Yellow-headed Blackbird — Observed in 38 south and 19 north counties. Early south 3/25 Lac Qui Parle FAE, 4/8 Nicollet BTS. Early north 4/9 Grant SPM. Three Northeast reports: 5/13 Lake JWL, 5/14 St. Louis ALE, 5/21 St. Louis m.obs.

Rusty Blackbird — Reported from 22 south and 6 north counties in all regions except the Northwest. Early south (none reported as overwintering) 3/6 Hennepin DWK, 3/23 Nicollet RMD, 3/26 Meeker DMF. Early north 4/3 Wadena PJB (16 days past the recent median of 3/18), 4/5 Otter Tail LS. Late south 4/25 Waseca JPS, 5/4 Brown BTS. Late north 5/1 Carlton JWL, 5/3 Otter Tail ARo. Highest reported count 4/10–12 Aitkin (100+) JSB, KWR.

Brewer's Blackbird — Seen in 23 north and 15 south counties, and in all regions except the Southwest. Early south 3/27 Olmstead DMA, 3/29 Meeker DMF. Early north 4/4, 4/5 Mille Lacs ASc.

Common Grackle — Reported from 78 counties. Early south migrants not distinguished from overwintering birds. Early north 3/11 Otter Tail DTT, SMT. Highest reported count 4/1 Steele (100) NFT.

Great-tailed Grackle — Documented 4/5 Jackson (male at Heron Lake) ph. BRB, 4/16 Rock (five at Hills W.T.P.) †MTA, RMD, CFa, 5/23 Rock (male and 2 females at Hills) †PHS; also reported from usual location in Jackson (near Grovers Lake) beginning 4/4 CRM *et al.* Undocumented reports from Lyon, Martin, Stearns.

Great-tailed/Boat-tailed Grackle — A long-tailed grackle with glossy plumage 4/30 Meeker (section 15, Darwin Twp.) was larger than nearby Common Grackles and was probably a Great-tailed, but iris color, head shape, and vocalizations were not described.

Brown-headed Cowbird — Reported from 67 counties. Early south (but see winter report) 3/9 Winona JJS, 3/24 Olmstead DMA. Early north 4/4 Mille Lacs ASc, 4/5 Otter Tail LS and Pine JMP. Highest reported count 5/14 Big Stone (100) and Lac Qui Parle (100) JMJ.

Orchard Oriole — Observed in 24 south and 6 north counties, as far north as Marshall. Early south 5/8 Goodhue DCZ, JWH, 5/12 Steele NFT. Early north 5/18

Traverse PHS and Clay RHO.

Baltimore Oriole — Reported from 39 south and 26 north counties. Early south 4/28 Carver RBJ, then numerous reports after 5/5. Early north 5/7 Otter Tail DTT, SMT, then daily reports. Highest reported count 5/17 Clay (20) MEB.

GRAY-CROWNED ROSY-FINCH — One in Pine (please see winter report) lingered at a feeder near Hinckley through early March (***The Loon*** 77:182–183).

Pine Grosbeak — No south reports. Late north 3/17 St. Louis ALE, 20 days prior to the median (4/6). Also reported from Aitkin, Becker, Hubbard, Koochiching, Lake, Lake of the Woods.

Purple Finch — Reported from 23 south and 19 north counties. Late south 5/20 Fillmore NBO. Highest reported count 4/28 Fillmore (35 at feeders) NBO.

House Finch — Reported statewide.

Red Crossbill — Nine reports from six north counties. All reports outside of the Northeast region: 3/12 Becker and Clay BJU, 3/20 Wadena (11) PJB.

White-winged Crossbill — Only one report! A single male actively calling and displaying 3/13 St. Louis (Duluth) MTA.

Common Redpoll — Reported from 21 north and 16 south counties, and in all regions except the Southwest. Late south 4/7 Isanti ASc, 4/10 Sherburne PLJ. Frequent reports north through early April, then late north 4/24 St. Louis ALE, 5/16 Mille Lacs ASc, HHD (median 5/4). Highest reported count 4/1 Crow Wing (50–100) JSB.

Hoary Redpoll — Two documented reports: 3/12 St. Louis †MTA, 3/23 Aitkin †KWR. Reported without details from Crow Wing and Lake.

Pine Siskin — An excellent year with numbers up significantly south and north, including reports from 28 south counties and 23 north counties. Late south 5/27 Dodge KV, 5/30 Hennepin SMC.

American Goldfinch — Reported statewide.

Evening Grosbeak — Reported from seven north counties, as far south as Aitkin and as far west as Becker (only report from Northwest).

House Sparrow — Reported throughout the state.

EURASIAN TREE SPARROW — Fifth state record 4/16 **Cook** (Schroeder) ph. †CJT.

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LBF	Linda B. Felker
LL	LeRoger Lind
LLB	Larry & Linda Born
LM	Leslie Marcus
LMC	Linda M. Cooper
LME	Laura M. Erickson
LS	Linda Sparling
LWM	Leo Wexler-Mann
MA	Margaret Anderson
MAJ	Murdoch A. Johnson
MAW	Marlene A. Weber
MBr	Mary Broten
MC	Mike Chrun
MEB	Mel & Elaine Bennefeld
MLH	Mike Hendrickson
MHK	Martin H. Kehoe
MJC	Mary Jo Christopherson
MJF	Merrill J. Frydendall
MKr	Mary Kroll
MLB	Maya L. Bolduan
MMc	Michelle McDowell
MME	Molly M. Evans
MO	Mark Otnes
MOc	Mark Ochs
MP	Missy Patty
MPa	Mark Palas
MRN	Michael R. North
MSS	Mark Sparky Stensaas
MTA	Tom Auer
MWS	Mike W. Steffes
NAJ	Nancy A. Jackson
NBO	Nancy B. Overcott
NED	Nelvina E. De Kam
NFT	Nels F. Thompson
NGE	Nathaniel G. Emery
NSp	Nancy Sparrow
OLJ	Oscar L. Johnson
OWB	Bill Bruins
PBB	Patrick Beauzay
PBD	Pat & Bob Dewenter
PBo	Phyllis Bofferding
PCC	Philip C. Chu
PEB	Paul E. Budde
PEJ	Paul E. Jantscher
PEL	Paul E. Lehman
PH	Paul Hertzel
PHS	Peder H. Svingen
PJ	Per Johansson
PJB	Paul J. Binek
PJR	Pat J. Rice
PL	Pam Linder
PLJ	Paul L. Johnson
PME	Paul M. Egeland
PWP	Paul W. Pedersen
PWS	Paul W. Smithson
RAE	Ron A. Erpelding
RBJ	Robert B. Janssen
RBW	Bob Williams
RCK	Rose C. Kneeskern
RCS	Rolf C. Smeby
REH	Robert E. Holtz
RHO	Robert H. O'Connor
RJo	Roland Jordahl
RJS	Roger J. Schroeder
RL	Robin LaFortune
RLE	Robert L. Ekblad
RMD	Robert M. Dunlap
RNS	Richard N. Smaby
RP	Rich Pemble
RPl	Ron Plinske
RPR	Robert P. Russell, Jr.
RSF	Randy S. Frederickson
RWS	Robert W. Schroeder
SAS	Shelley A. Steva
SBM	Scott B. Meyer
SC	Shawn Conrad
SES	Steven E. Schon
SGu	Suzanne Gucciardo
SHo	Steve Houdek
SHu	Susan Hult
SID	Sue Durrant

SK	Steve Kreofsky
SLF	Steven L. Falkowski
SLL	Sharon L. Lind
SMc	Sue McDonnell
SMC	Scott M. Clark
SMT	Sandy M. Thimgan
SNo	Sherri Norland
SPM	Steven P. Millard
SPS	Steven P. Stucker
STW	Sylvia T. Winkelman
SWe	Steve Weston
SWi	Susan Wiste
TAN	Tom A. Nelson
TAT	Tom A. Tustison
TDa	Terry Dahl
TEB	Tom & Elizabeth Bell
TFA	Todd F. Anderson
TFB	Tom F. Boevers
TPB	Terry P. Brashear
TPW	Terry P. Wiens
WAB	William A. Blum
WCM	William C. Marengo
WEN	Warren E. Nelson
WMS	William M. Stauffer
WOS	William O. Stjern

C.P.	County Park
C.R.	County Road
m.obs.	many observers
N.W.F.R.	National Wildlife & Fish Refuge
N.W.R.	National Wildlife Refuge
P.R.	Park Reserve
S.N.A.	Scientific & Natural Area
S.P.	State Park
W.M.A.	Wildlife Management Area
W.P.A.	Waterfowl Production Area
W.S.H.C.	West Skyline Hawk Count
W.T.P.	Wastewater Treatment Ponds

Birding by Hindsight

A Second Look at Behavior

Kim R. Eckert

While it would be tempting — and probably more entertaining — to discuss the behavior of some birders, I doubt such an article would be all that enlightening. So, let's look at the behavior of birds instead. The idea here is that paying attention to what a bird is actually doing, and where and when it's happening, can be enormously helpful when finding and identifying many species.

As experienced birders are well aware, and as some beginners may struggle to understand, correct identifications involve much more than matching the colors and patterns of a bird in the field to a picture in the book. It is very useful — even critical in many situations — to consider factors like habitat, range, season, relative abundance, and size/shape. (Sorting through all this, by the way, is something that eventually comes naturally, something second-nature that seasoned observers may not consciously think about.) Accordingly, if you aren't already doing so, it's high time to include bird behavior in this list of considerations.

Tail waggers

Mention the subject of bird behavior, and the first birds that might come to mind are those which characteristically wag their tails, or at least slowly pump them. Kestrels, Spotted Sandpipers, phoebes, Hermit Thrushes, pipits, Palm and other warblers are mostly familiar birds with such a curious habit that they don't take long to catch the attention of beginning birders. And this is a good thing, becoming aware that bird ID involves more than just plumage.

Eventually, the novice might even become aware of a finer point of identification-by-behavior. If you find a pipit, notice its constant tail wagging, and wonder if it might be a stray Sprague's. You'll know it's an American Pipit once you learn the Sprague's doesn't pump its tail.

But there's also this unrelated tail-wagging caveat: I've seen many birders miscall a Solitary Sandpiper as a Spotted. Why? They know how the relatively widespread Spotted Sandpiper acts and assume the less familiar sandpiper (a Solitary) bobbing its tail in front of them must also be a Spotted. When in doubt, try to see the Solitary's unique tail pattern, and take note of the habitat: Spotteds prefer shorelines in more open areas; Solitarys like muddy, quiet, wooded streams and ponds.

Be aware as well that Spotteds can stand around and bob away on rocks in rushing streams — just like dippers! I have to suspect, then, that at least some of the American Dippers reported here over the years by less experienced birders (and hasn't almost every dipper report come from a beginner?) might actually refer to Spotted Sandpipers. I've seen other short-tailed, slate-gray birds also stand in rocky streams, by the way: i.e., juvenile catbirds and juvenile grackles. And lots of birds bathe, while dark ducklings plunge underwater. In other words, the American Dipper may be unique, but its behavior is not.

Nearly as familiar as tail-wagging birds are those which typically cock their tails: e.g., Ruddy Ducks and wrens. Be sure to note, however, that I sometimes see other diving ducks (Ring-neckeds, scaup, scoters, and goldeneyes come to mind) with Ruddy-like rear-end profiles. Why they do this, I don't know. Other unrelated birds have a similar habit of elevating their tails, which can assist the ID process: Wilson's Warblers often do this, and cowbirds feeding on the ground will typically lean forward with a tails-up profile.

Flight

I think there's an old song lyric saying something like fish gotta swim and birds gotta fly. Indeed, what could be more characteristic about bird behavior than flight? And there are certainly numerous and useful differences in how birds fly.

Some examples: geese, pelicans, and cormorants in V-formation; the sudden twists and turns of a Long-tailed Duck flock; hump-backed loons; the rapid, direct, and un-owl-like flight of Great Horned Owls; Chimney Swifts which never seem to land; undulating woodpeckers and goldfinches; Gray Jays with unsteady, accipiter-like flaps and glides; the flapping of crows vs. the rowing strokes of ravens (and ravens often "kettle" in thermals; crows typically don't); Horned Larks and Sprague's Pipits with hesitating stair-step ascents and drop-like-a-rock descents; slow, gliding, and un-swallow-like Purple Martins; and the Eastern Meadowlark's flapping, allegedly stiffer than the Western's (so I'm told, anyway — I've yet to master this difference).

There are some catches, however, in relying too heavily on flight behavior. Years ago I saw a bird circle and fan its tail high over Hawk Ridge, acting entirely like an Anhinga; as I learned later, though, cormorants can ride thermals just like Anhingas. Most birders know that Great Blue and other herons/egrets fly with a fold in their necks, unlike the Sandhill Crane; but Great Blues often fly with a straight neck for short distances, and thus get miscalled as cranes. The stiff, shallow flapping of Spotted Sandpipers is normally a very distinctive field mark, but occasionally and curiously a Spotted will fly by like a nor-

mal shorebird and cause confusion.

The flight style of jaegers is especially difficult to use. For one thing, darker immature gulls will aggressively chase other gulls and then appear quite jaeger-like. For another, you need to be cautious when considering flight style to specifically identify jaegers: e.g., Long-taileds and Parasitics can fly just as heavily and as slowly as any Pomarine when not in pursuit of something.

Probably no other group of birds involves flight style in ID considerations more than raptors. Along with their shape, the manner of flight of diurnal raptors (vultures included) is often more useful than plumage when identifying them.

A few less-familiar examples: Black Vultures flap more rapidly than any Turkey Vulture can; Rough-legged Hawks and Golden Eagles often flap with a quick upstroke, brief pause, and slower downstroke (reminiscent of a crane or Short-eared Owl); a Merlin's flight is typically fast, direct, and purposeful, while kestrels tend to meander more; and if a raptor pauses to catch and eat dragonflies in flight, you may well have found a Mississippi Kite — but make sure it's not a Merlin or kestrel, which can do the same thing.

But there are problems when identifying raptors by flight. For example, the oft-mentioned dihedral profile of a Turkey Vulture, Northern Harrier, or Swainson's Hawk is overrated: just about any buteo can soar with uptilted wings. Similarly, don't be surprised if that fourth-state-record Black Vulture you discover assumes a dihedral wing profile (despite field-guide claims to the contrary, they do this all the time). Don't assume a hovering raptor has to be a Rough-legged or kestrel: pretty much any raptor species can hover as it hunts. And start weaning yourself from the notion of how fast a falcon is: Peregrines, Prairies, and Gyrs circle slowly and at leisure all the time as they migrate or search for prey.

Perching preferences

But birds cannot remain airborne forever, not even Chimney Swifts. Accordingly, there are some places that various species tend to favor when not in aerial mode which can assist you in locating or identifying them.

Looking for Harlequin or Long-tailed ducks on Lake Superior? Be aware that Harlequins typically and inconspicuously hug the shoreline and offshore rocks; conversely, Long-taileds are usually far from shore (and notice how those in a flock tend to dive and surface simultaneously). If looking for a Gyrfalcon, I'd cover locales frequented by waterfowl, gallinaceous birds, or pigeons (i.e., their favored prey).

Good luck trying to find a Western Sandpiper in Minnesota, but it might help to know they tend to forage in deeper water than Semis or Leasts. And try not to be too surprised or confused if that unfamiliar shorebird standing on shore turns out to be one of the phalaropes: they're not always spinning around in water.

Some land bird examples: Don't assume an owl in a barn or other structure has to be a Barn Owl: Great Horneds sit in barns all the time, and I once saw a Burrowing Owl inside a shed. While any flycatcher can choose high and exposed perches, Olive-sideds seem to favor the most conspicuous limbs. If birding northern Minnesota in winter, don't expect to find a Mourning Dove, Blue Jay, junco, goldfinch, or Evening Grosbeak unless you're near a feeder. Looking around cattle often helps if you want to add a magpie to your trip list, and a field spread with the cattle's manure will attract Gray Partridge and Snow Buntings. True to their name, Rock Wrens really do prefer rocks, along with rubble piles, dirt mounds and pits (and they can be quite shy, quiet, and hard to find under those rocks).

Feeding behavior

Where birds tend to be, of course, is often related to finding food, and the manner in which they feed is often characteristic. Many birders know how eiders, Harlequins, and Long-tailed Ducks spread their wings as they dive. So do some scoters,

of course, but apparently not all of them. I was surprised to learn recently that Sibley's field guide claims that only Surfs and White-wingeds do this, but not Blacks: I had always assumed all three did.

Speaking of diving birds, cormorants ride low in the water, dive more often than many birders think, and are frequently mistaken for loons. This is especially disconcerting when searching for the rare Red-throated Loon, since cormorants also swim with uptilted bills. (Be aware as well that Pacific Loons can also do this at times.)

Other water bird examples: Unlike typical herons and egrets, a Snowy Egret is often less patient and actively chases after food, suggesting the Reddish Egret. Stilt Sandpipers probe vertically with relatively long bills and thus resemble dowitchers; however, their probing is less deliberate as they walk around more. Terns will dive directly into water, unlike gulls; conversely, gulls swim all the time, but I've only rarely seen terns do so.

Up north in the coniferous forest, Black-backed and American Three-toed woodpeckers quietly scale bark off conifers, so look for flaking tree trunks to find these highly sought species (in winter, bark lying on top of snow can indicate their recent presence). In this same region, you probably won't find Boreal Chickadees routinely visible along a road or at bird feeders; they mostly forage quietly in the interior of conifers and only infrequently visit some feeders providing suet. (Curiously, I've never heard of either of those two woodpeckers coming to suet.)

Temporal considerations

Birders of all levels of experience know that time of day and time of year are important behavior variables. Land birds are obviously more active and vocal in the morning, and many territorial passerines will mostly quit singing and become difficult to find after 8:00 or 9:00 in the morning and after late June. Owls may be generally nocturnal (with screech-owls, Long-eareds, Borealis, and saw-whets especially unlikely to be active before dark), but Northern Hawk Owls always hunt at midday, and all the other owl species are frequently out after dawn or before dusk.

Another nocturnal bird, the Whip-poor-will, is especially vocal for a short time just after sunset and will then fall silent for long periods after that. Woodcocks display and vocalize for several minutes after dusk and before dawn, but they are silent in the hours in between. This activity, by the way, mostly ceases after mid-May, so this sought-after bird can be especially hard to find from June on. The same is mostly true for most owls and displaying gallinaceous birds: by late May, you'll have a harder time hearing and locating them.

Especially curious is the Sharp-tailed Grouse in winter. At this time of year, you'll want to be out right at dawn to have the best chance of finding Spruce Grouse in the road, and Ruffed Grouse come out mostly at dawn and dusk to visit feeders or feed on aspen and alder catkins. But you don't need to get up before dawn to look for Sharp-taileds: for some reason they often come out more to forage up in the tamaracks and alders around 9:00 or so.

Skulkers

There are several species known for their shy nature and skulking behavior which renders them relatively difficult to find. Bitterns, rails (especially Yellow and Black), non-singing Sedge and Marsh wrens, Sprague's Pipits, *Oporornis* warblers, *Ammodramus* sparrows, and migrant longspurs might come to mind first. (I could almost include Yellow-bellied Sapsucker among these, since it flies low, tends to appear suddenly and silently, and proceeds to land inconspicuously in the shadows.)

Some skulkers exhibit behaviors which can make them easier to view. In general, learn their songs. For example, a singing Sedge Wren, Connecticut Warbler, or Le Conte's Sparrow is typically perched up somewhere and in view. More specifically, that unseen Sprague's Pipit or Henslow's Sparrow you flush from the grass will of-

ten perch in view and look around for a few seconds after it lands before disappearing again. So follow them in flight and pay close and quick attention to where they land. This strategy doesn't really work, though, with Lapland Longspur flocks in western Minnesota, but in fall along the North Shore of Lake Superior longspurs are curiously quite visible along roadsides and edges of parking lots.

Becoming aware of species which exhibit such shy behavior can often assist you in reaching accurate identifications. For example, if you're out by day on a marsh boardwalk and think you've spotted a Yellow or Black rail out in the open, take a second look before making such an ID: more likely you're looking at a juvenile Sora (which is brown and buffy like a Yellow) or a rail chick (all are small and black). And think twice before claiming to routinely see some Connecticuts feeding among a wave of warblers or Nelson's Sharp-taileds in the open along a roadside with other sparrows.

Peregrinations

Once I learned long ago that peregrine means traveling, often in the sense of wandering widely, Peregrine Falcon has been one of my favorite bird names. At the same time, though, some of those species with a tendency to peregrinations have not been among my favorite birds. Sought-after Minnesota specialties like Northern Goshawk and Northern Shrike, given to wandering around in winter, are hard to find for visiting birders since there's no particular place to start looking. Bohemian (another word with wandering connotations) Waxwings are just as difficult. They travel in large flocks which don't take long to clean out a neighborhood's food supply and disappear for parts unknown.

In spring, finding displaying Sharp-tailed Grouse can be a similar challenge. Unlike prairie-chicken leks, which typically remain at the same site for years, for reasons unknown many Sharp-tailed leks will relocate after a year, or even move on a weekly or sometimes day-to-day basis.

Peregrination also includes migration, of course, and it helps to be aware as you encounter migrant flocks that some species tend not to occur as much during migration: e.g., Golden-winged and Pine warblers, Lark Sparrow, Eastern Meadowlark, Brewer's Blackbird, and Orchard Oriole. These have an odd tendency to just show up where they breed and later disappear for the winter with relatively few sightings in spring or fall. Accordingly, there are some ID implications: I suspect that many migrant Pine Warbler reports actually refer to Blackpolls or Baybreasteds, that most migrant meadowlarks are Westerns, and that Rusty Blackbirds outnumber migrant Brewer's.

Vocalizations

During migration or winter, many birders are used to seeing some species down low to the ground, often under heavy cover. Some examples of these include Winter Wren, thrushes, Ovenbird, waterthrushes, Connecticut and Mourning warblers, and most sparrows. These same birders, then, may be surprised to find these birds singing away on territory well above the ground, like a Winter Wren or Northern Waterthrush atop a 50-foot spruce, or a singing male Ovenbird or Connecticut Warbler 30 feet up in an aspen. (The higher the singer, the farther the song carries, and thus better for attracting a mate and defending territory.)

The ultimate in singing "perch" heights is reached by Sprague's Pipits, singing on territory in aerial displays 100 feet or more above ground. Horned Larks similarly sing in flight, and I have even seen birds like Common Yellowthroats and Nelson's Sharp-tailed Sparrows launch themselves perhaps 20 feet or so above the marsh to sing before dropping back to earth.

Turning to ventriloquial singers, especially owls and nightjars, look for most of them in your spotlight closer than you think they are. The one notable exception is Yellow Rail: what may sound like a bird tapping away in the dark almost at your feet, will probably turn out to be some 100 feet away.

Finally, some observations on bird behavior in response to recordings:

• Some species tend to ignore recordings. There are exceptions, but I've typically had little or no response from Yellow Rails, both cuckoos, Great Gray and Long-eared owls, Winter and Marsh wrens, and Red Crossbills (Whitewingeds, though, are responsive).

• Male Spruce Grouse can sometimes be attracted by recordings of female vocalizations, especially in spring and early summer; playbacks tend to be useless at other times of year.

• Barred Owl recordings can be as effective as screech-owl calls in attracting small birds (and don't be surprised if these owls come in by day as you play their calls).

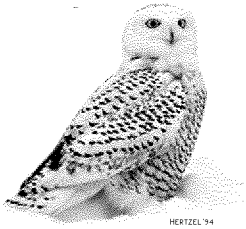
• Want to call in Black-backed or American Three-toed woodpeckers? Playing recordings of their drumming is more effective than playing call notes. This can work any time of year, although they tend to respond more in winter on milder days.

• Many Boreal Chickadees will respond by approaching only briefly before withdrawing, and no amount of playback will get them back. Redpolls can also be shy around recorders; after they initially come in, redpolls often will fly off if the recorder is not turned off.

• Many birds will silently come in to recordings; so, if the bird you seek stops singing, that's the time to pay attention — it does not mean the bird you're after is gone.

There is much more one could say about the varied behaviors of such a wide range of birds — this essay certainly has not attempted to include everything relevant to this broad subject. But at least it might remind birders to take a second look at the behaviors of other species and take them into consideration when trying to find and identify them. (And remember, as you do so, please try to behave yourselves!)

1921 W. Kent Rd., Duluth, MN 55812.



BOOK REVIEWS

HANDBOOK OF THE BIRDS OF THE WORLD, VOL. 9: Cotingas to Pipits and Wagtails. J. del Hoyo, A. Elliott, and D. Christie, editors. 2004. Lynx Edicions. 863 pp. $205. Reviewed by Kevin Winker.

This and previous volumes are available from Lynx Edicions, c/o Mail Management Group, Inc., 81 North Forest Avenue, Rockville Centre, New York 11570, or through the internet (www.hbw.com); inquiries can be sent by email (lynx@hbw.com).

This, the second passerine volume in the series, concludes the suboscines and begins the oscines. It includes the largest family of birds in the world — the Tyrannidae — as well as some of the smallest. Fully 29 authors have written the accounts for the nine families included. These families are

three in the suborder Tyranni: the Cotingidae (cotingas), Pipridae (manakins), and Tyrannidae (tyrant flycatchers); one family of just three species in the suborder Acanthisittae: Acanthisittidae (New Zealand wrens); two small families of two species each in the suborder Menurae: Atrichornithidae (scrub-birds) and Menuridae (lyrebirds); and the first three families of the world's largest suborder of birds, the oscine passerines: Alaudidae (larks), Hirundinidae (swallows), and Motacillidae (wagtails).

As with previous volumes, this one is large, heavy, and authoritative. It has 78 color plates painted by 10 artists, 440 photographs, 809 distribution maps, and about 6,000 references cited (51 pages of the latter).

The Foreword is a seven-page treatment of "Ornithological Nomenclature," by Richard C. Banks, one of the world's most noted authorities on this subject. A brief history of the trinomial and its use for naming subspecies is useful here, as is the relationship of trinomials and "group" names to formal naming practices. Banks also discusses specimen types and the negative aspects of naming forms without preserving a scientific voucher specimen. Interestingly, during the period 1970–2000 approximately 3.1 valid new species of birds have been described per year, a value not very different from estimates for the period 1938–1990. About 37 new subspecies of birds also have been apparently been described annually from 1970–2000. Following the Foreword is a novel inclusion for a reference work of this type: the description of a new tribe of the Tyrannidae (Contopini), by John Fitzpatrick.

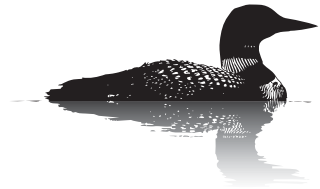
Each family is introduced by a detailed overview that is authoritative, comprehensive, and well-illustrated with color photographs. My perennial complaint has been the style of the citations (there is none in the traditional sense of scientific literature) and these achieve new lows in this volume, with nothing more than a "General Bibliography" of just 55 references at the end of the 82-page introduction to the Tyrannidae, marring through editorial fiat what would otherwise have been the best review of the family to date. It is unfortunate that the richness of the primary literature credited for these magnificent volumes is made so difficult to access by a lack of in-text citations, which would make these volumes so much more valuable as an entry point into the science of birds.

As with previous volumes, the photographs and plates are in general excellent. Although I am not well-qualified to remark upon artwork, I did find some of the plates appearing rather pale (e.g., Plate 17, elaenias, and Plate 33, *Contopus* and *Mitrephanes*) or perhaps a little rich in color and detail (e.g., Plate 23, *Leptopogon* to *Inezia* flycatchers, and Plate 49, *Pachyramphus* becards). I admit, however, that in the latter cases I do not consider these plates too rich, for it is this type of striking appearance in these plates that resonates with me most about how these birds appear to me in person. In going through the volume, many photographs struck me, but perhaps my favorites were the Grassveld Pipit (*Anthus cinnamomeus*, p. 691) captured so well in the strikingly upright posture typical of so many pipits, the White Wagtail (*Motacilla alba*) perched in *Phragmites* (p. 706), and the Yellow Wagtail (*Motacilla flava*) perched on an old thistle seed head with red flowers in the background (p. 726). The latter two admirably combine bird behavior with art, adding profoundly to the highly engrossing nature of the book.

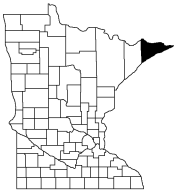
The editors and authors are to be commended for continuing to produce works of such excellent quality. My small comments on what I perceive as imperfections perhaps only accentuate the fact that while the world has probably not yet seen the perfect bird book, we are not likely to get much closer any time soon. I recommend this volume, as the others in the series, to every serious ornithologist.

University of Alaska Museum, 907 Yukon Drive, Fairbanks, AK 99775.

Notes of Interest

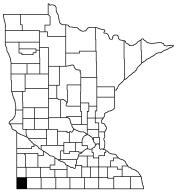


A SPRING NORTHERN WHEATEAR — A group of us drove to Grand Marais, Cook County, for dinner on Monday, 30 May 2005. After dinner, we drove around to see what we could find. We visitied the parking lot on the south or lake side of the Grand Marais coast guard station to look for ducks or other birds around the breakwater and Artist's Point. Seeing very little of interest, we started back toward town. As we drove past the coast guard station, we noticed a bird on the rocks to our right, roughly northeast of us. We backed up slowly so we would not disturb it. The bird did not move. We realized we had the camera and started taking pictures. Still, the bird did not seem about to move, so we got out of the car and took more pictures. We all were attempting to identify the bird this entire time. None of us could come up with an ID. We continued to observe the bird for 10–15 minutes. It only moved from one rock to a nearby rock, two feet from the original one and did not sing. Eventually, we left and returned to Lutsen.



When we got home, we dug out as many references as we could. We looked at Peterson, Sibley, Janssen, Audubon, and several other guides and references. We were basically stumped. We ruled out a variety of species on the basis of size and behavior. We were pretty much in limbo until we forwarded the photographs to Anthony Hertzel who identified it as a Northern Wheatear. **Sid and Gail Stivland, Lutsen, MN.**

BLACK-HEADED GROSBEAK IN ROCK COUNTY — At about 7:00 A.M. on 24 May 2005, I found a male Black-headed Grosbeak (*Pheucticus melanocephalus*) just east of the gravel pits near Luverne, Rock County. I had stopped in an area of cottonwood, ash, willow, dogwood, and other shrubs adjacent to a seasonal creek in order to look and listen for passerines, and suddenly heard a loud commotion on the north side of the road. I spotted two male grosbeaks chasing a female. One of the males had bright orange-buff underparts that caught my eye; I focused on it with my binoculars as it crossed the road in front of me and noted that its under-wings flashed yellow. All three birds landed in the shrubs and saplings on the south side of the road, and I had good looks at them for about a minute before they resumed squabbling and flew back across the road. The female appeared to be a typical Rose-breasted Grosbeak (*P. ludovicianus*). After they flew back across the road and disappeared, I continued listening and looking for about ½ hour but never refound the Black-headed.



Its bill was conical, very large, and grayish overall (not pale pink like the Rose-breasted's bill). The upper mandible was darker than the lower mandible. Its eyes were dark and its legs were dark gray. Its crown, face, and auriculars were black. Its hindnape and neck-sides were orange-buff. The throat was not seen. There were thick, black streaks on its back. The scapulars and upper wing-coverts were black, except for two wing-bars formed by whitish tips on the median and greater coverts, and a white patch on the base of its folded primaries. Its rump was orange-buff like the underparts. Its tail was blackish in color and squared in shape. The breast, belly, and flanks were orange-buff. Its under tail-coverts were not seen.

I saw the bird for only a few seconds in flight, but had good looks when it perched in a shrub less than 20 yards southwest of my position. Its facial pattern, presence of back streaking, and color of its under-wings and underparts eliminated hybrid Rose-breasted X Black-headed Grosbeak which is well-documented in the literature (West 1962, Anderson and Daugherty 1974, Kroodsma 1974, Phillips 1994, Hill 1995). However, its behavior towards the female Rose-breasted suggested the possibility of future hybrid progeny!

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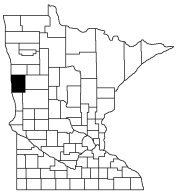
Peder H. Svingen, 2602 E. 4th Street, Duluth, MN 55812.

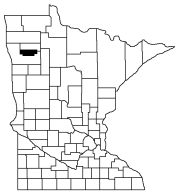
LOUISIANA WATERTHRUSH IN CLAY COUNTY — On 10 May 2005, I drove to the Felton Prairie in Clay County after receiving a second-hand report of a possible Baird's Sparrow. I failed to find the sparrow at the designated location but saw a Louisiana Waterthrush at a different Felton Prairie site soon thereafter. The bird, a first county record, was in the wet woods along the gravel road branching left from the east end of county road 108, an area some Minnesota birders may recognize as the most dependable Clay County site for Loggerhead Shrike.



What made me give the bird a close look was that it was much lighter below than the typical Northern Waterthrush, and its supercilium was much bolder. Eventually, the bird came within about 30 feet of me, giving me excellent looks at its bright pink legs and the buff flank wash just above the legs. The supercilium remained wide behind the eye, its throat was clear of any streaking except for the light malar marks, and where a Northern Waterthrush would be slightly yellowish below, this bird was white. Its bill, dark overall but with a hint of red at the base of the lower mandible, was comparatively long and stocky, and the bird bobbed in a more deliberate way than I'm used to with Northern Waterthrush. Also, its body appeared plumper, with the rump and tail seemingly raised a bit during its bobbing. The chip note it gave seemed a little less emphatic than the Northern's, as the field guides suggest, but I don't have a good enough ear or enough knowledge of waterthrush vocalizations to feel especially confident about that. A Northern Waterthrush appeared for a moment between my sightings of the Louisiana, which helped in making comparisons, even though I didn't see the two birds side by side. The difference between the bold black streaks of the Northern and the much sparser and lighter (and rather brownish) streaks of the Louisiana was especially striking. The white versus yellowish breast color was very obvious too, and the pinkish color of the Northern's legs was much duller than the almost reddish-pink of the Louisiana's.

As I was watching the bird, Fargo birder Rick Gjervold drove up and watched it with me, and on the following day, Ben Fritchman and Doug Johnson refound it. The last sighting that I'm aware of occurred on the 15th, when Jeanie Joppru and Shelley Steva saw the bird. **Bob O'Connor, 1625 3rd Street S., Moorhead, MN 56560-4176.**

EURASIAN WIGEON IN RED LAKE COUNTY — On Sunday, 8 May 2005, I went



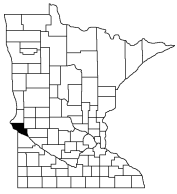
down to Red Lake Falls to see if any species could be found to increase my Red Lake County list. After birding in several other places in the county I found myself about 12:30 P.M. at the Red Lake Falls wastewater treatment ponds which have yielded interesting species before. I scanned the feeding ducks and geese on the near cell, and finding several of interest, I carried in my scope and set up to go through them. I found several American Wigeons and at first, dismissed them as all the same, but as I walked out, something about one of them kept coming back to me. It had a red head! That set me to thinking about the Eurasian Wigeon, which I had never seen, so I checked on the differences between the two species by consulting *The Sibley Guide to Birds*. I knew I had to go back to the bird and get a complete description. Leaving the reference in the van, I went back to the pond and began to search for the bird again.

In short order, I relocated the bird. It was swimming with American Wigeons, and it was immediately obvious that this bird was different. There was a median crown stripe that was definitely yellow, not whitish like that of the American Wigeon. The crown stripe seemed to come to a sort of point on top of the head. The rest of the head was the same red as that of the Redheads that were also swimming nearby. The red of the head went down to the top of the breast which appeared to be a reddish buff color. The sides of the bird were a grayish brown, and the back appeared a similar color in the bright sunlight. When the sun disappeared later in the afternoon, these parts of the bird looked light gray, and the breast lost a little of its reddish appearance. Undertail coverts were black, with a white stripe in front of that. The bill was lighter with a dark tip. Its size was similar to that of the American Wigeon and the Redheads. Its behavior was similar to that of the American Wigeons; all were feeding actively by upending and bringing up large pieces of algae or other vegetable matter. This bird was oblivious to the other birds nearby, and to my presence.

After a few minutes, I returned to the car to write up some more notes. At that time I called Shelley Steva, who immediately drove down from Thief River Falls to see the bird. I also alerted Peder Svingen, who was doing a shorebird survey in Big Stone County. He decided to come to see the bird, so I hung around the area to keep an eye on it. Peder arrived shortly before 6:00 P.M., and was able to photograph the bird and confirmed that it was indeed a male Eurasian Wigeon. When we got an opportunity to do some research, we learned that this species had not been seen in northwestern Minnesota for almost thirty years — it was a lifer for me also. What a wonderful day!

According to the *Checklist of the Birds of Minnesota* (MOURC 2004), about ¾ of the 25 accepted records of the Eurasian Wigeon are from spring. The four previous records in northwestern Minnesota are as follows: adult male at Twin Lakes, Kittson County, 5 June 1929 (*Wilson Bulletin* 42:59); adult male and female at Agassiz N.W.R., Marshall County, 31 May 1942 (***The Loon*** 32:36); adult male at Agassiz N.W.R., 15–22 June 1954 (***The Loon*** 27:140); and adult male at Blackduck Lake, Beltrami County, 14 May 1976 (MOU files). **Jeanie M. Joppru, 16269 160th Street NE, Thief River Falls, MN 56701.**

POSSIBLE BLUE-WINGED TEAL X NORTHERN SHOVELER HYBRID IN BIG



STONE COUNTY — On 1 May 2005 at Thielke Lake in Big Stone County the authors observed an unfamiliar duck — with an outsized bill and dark head, like a male Northern Shoveler, but with a body that appeared, at a glance, to be mostly rusty. Because of the duck's unusual appearance it was studied more carefully, and this was facilitated by close proximity (distance varied from 30 to 50 yards), favorable lighting (cloud cover in excess of 80%), and telescope views at up to 60x.

Probable hybrid Northern Shoveler X Blue-winged Teal, 1 May 2005, Thielke Lake, Big Stone County. Photo by Peder H. Svingen.

The duck was suspected to be a male Blue-winged Teal X Northern Shoveler hybrid because it was, in many respects, intermediate between males of those two species.

(1) In bulk of body it was obviously smaller than two adjacent male Northern Shovelers, but larger than one nearby male Blue-winged Teal.

(2) When seen alone, its bill appeared very long and spatulate, and thus shoveler-like; however, direct comparison to two male shovelers showed the bill to be not as large as in that species — neither as long nor as deep, proportionally speaking.

(3) The foreface, forehead, and crown of the bird in question were blackish, whereas the rest of its head, together with its upper neck, were a glossy dark green; the dark green did not appear to extend as far down the neck as in the nearby male shovelers. Separating the black of the anterior cheeks and anterior lores from the dark green of the posterior cheeks and posterior lores was a narrow, vertical, dirty whitish line that could be described as a faint remnant of the Blue-winged Teal's white foreface-crescent.

(4) The underbody of the possible hybrid showed flanks that were largely rufous and unmarked, like those of a shoveler; however, most of the underbody areas that are white in a shoveler — the lower neck, the breast, and the lateralmost flanks — were, in Blue-winged Teal fashion, a light vinaceous brown with fine black spotting.

(5) The tail was dingy whitish, dingier than the whitish tail of a shoveler but paler than the gray-brown tail of a Blue-winged Teal.

(6) The long, pointed scapulars were black, each with a longitudinal buff-white stripe. The corresponding feathers are black with a pure white stripe in the shoveler and black with a buff stripe in the teal.

Males of the Northern Shoveler and Blue-winged Teal share some characteristics, and not surprisingly the possible hybrid showed those as well. Like males of both the shoveler and the teal, the bird in question had black upper and under tail-coverts, and it had a white "hip patch" along the waterline just in front of the black of the under tail-coverts. Like males of both species the bird had a black bill. And like both it showed, at rest, a little pale gray-tinged blue in the area where the folded forewing should be.

Finally, the irises of the bird were yellow and the legs were either orange or yellow-

orange — similar to those of a Northern Shoveler, but different from the dark irises and yellowish legs, respectively, of a Blue-winged Teal.

For the most part, the possible hybrid swam and foraged. Foraging was accomplished by placing the bill and, sometimes, foreface down into the water; "tipping up" was never observed.

The bird usually ignored other ducks, with a single exception. On that occasion it was in close proximity to two male Northern Shovelers; the shovelers were displaying by pumping their heads up and down, and the bird in question performed a similar display. However, its display was arguably more leisurely than in the shovelers, with the up-and-down pumping of the head seeming a little slower.

Blue-winged Teal × Northern Shoveler hybrids were first reported over a century ago (Suchetet 1897), and from then until now there have been a minimum of seven more reports (Deane 1905, Childs 1952, Parkes 1958, Hall and Harris 1968, Palmer 1976, Gillham and Gillham 1996, Kemp 2000); in addition, Martz (1964:292) observed a male shoveler that had formed a "loose pair bond" with a female Blue-winged. The present report is apparently the first of its kind for Minnesota, though one of the previous reports is from Illinois (Deane 1905), and Martz (1964) made his observations in North Dakota. **Philip C. Chu, Department of Biology, St. John's University, Collegeville, MN 56321, and Peder H. Svingen, 2602 East 4th Street, Duluth, MN 55812.**

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Corrections to *The Loon*

Volume 76

Page 211: Change location for Northern Mockingbird 1 May 2004 from Winona (Whitewater W.M.A.) to Wabasha (Weaver Dunes) JPS.

Volume 77

Page 92: Delete Western Kingbird 10/31 (second latest statewide) Lake JPM.

Pages 140–168: Totals for the St. Paul Northeast Suburban and the St. Paul North CBCs are switched in the *The Season* and throughout the tables in the CBC summary article.

Index to *The Loon*, Volume 77

Compiled by Anthony X. Hertzel and Nancy Hertzel

Index to Authors

This index lists the names of authors found in the 2005 issues of *The Loon*.

Index to Species

This index lists the names of species found in the 2005 issues of *The Loon*.

In This Issue

Purpose of the M.O.U.

The purpose of the MOU is the promotion of a broad program of conservation and natural history study, primarily in the field of ornithology.

To achieve this objective, the Union urges and promotes interest in field studies and observation of birds by individual members and affiliated bird clubs. We publish a quarterly journal, *The Loon*, and a newsletter, *Minnesota Birding*; we conduct field trips; we encourage and sponsor the preservation of natural areas; and we hold seminars where research reports, unusual observations, and conservation discussions are presented.

We are supported by dues from members, affiliated clubs, and special gifts. Any or all aspects of the MOU program could be expanded significantly with gifts, memorials, or bequests willed to the organization.

Suggestions to Authors

The Loon is a peer-reviewed journal on the birds of Minnesota published quarterly by the Minnesota Ornithologists' Union. The Editor welcomes submissions of articles, Notes of Interest, color slides, and photographs. All submissions should be typed, double-spaced, and single-sided. Notes of Interest should be less than two full pages. Photographs should be no smaller than 5"x7". Whenever possible, please include a digital copy of your submission in any standard format on floppy disk, CD, or via e-mail. Digital documents may be e-mailed to the Editor of ***The Loon*** — see inside front cover for contact information. Club information and other announcements of general interest should be sent to the Editor of our newsletter *Minnesota Birding* — see inside front cover for contact information. Bird sighting reports for each season should be sent to the Editor of "The Seasonal Report" — see "Key to The Seasonal Report" for contact information.

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