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Club News



Gift Aid

All members with a UK mailing address who have not completed a Gift Aid form will find one enclosed with this issue of *Cotinga*. If you pay UK tax, please return this to the Club as the NBC can then claim the equivalent of 28% of the value of your subscription from the UK tax authorities. The Club would be grateful if members who have *Cotinga* sent to an address outside the UK, but pay UK tax, could request a copy of this form.

Donations

We would like to acknowledge the following members who have made separate donations since the publication of *Cotinga* 20: M. J. Billington, Dr R. C. Brace, Matthew Cassetta, Barry Cooper, Bernard Couronne, Phillip J. Crabill, Howard Creber, Christian Dietzen, Allan Drewitt, James Fritzhand, John P. Gee, Tony Gibbs, Chris Gooddie, John M. Green, Douglas A. Gross, Marc Guyt, Laurel Hanna, Philip Harrison, Wilfred Holtz, Suann C. Hosie, Gary Howard, Dr Johan Ingels, Sonia Jupp, Douglas Napier, Dr Clive Peat, Vincent Pelletier, Richard D. Ranft, J. H. Ribot, P. W. Richardson, Peter Ryley, Martin Searle, Eric R. Shaw, Stewart Smith, Jens Thalund, Alan Thomas, Renan Valega, Dennis Vrettos, Bob Watts, Hans Westerlaken, Stewart White, Christian Widmann, J. L. R. Williams, Tim Woodward.

Payments

Due to increasing bank charges, the Club is now only able to accept US\$ cheques drawn on banks with a US address. If payments are made by international money order, Canadian dollar cheques or US\$ cheques drawn on a Canadian bank, please add the equivalent of UK£5 to cover bank charges. Payment can alternatively be made by credit card.

UK Data Protection Act 1998

Members should note that the Club is subject to the Data Protection Act 1998. The Club informs members that it holds certain information on them on the Club's mailing database. This information—name and address details—is deemed 'personal data' under the Act. This information may, in limited circumstances, be disclosed to others for the benefit of the Club.

Club Administration

Please note that the Club's UK and US addresses are for mail forwarding only and that no Club officers are based at either address. Although NBC shares the same address as the Ornithological Society of the Middle East in the UK, members are requested to refrain from sending mail addressed to both organisations in the same envelope as this causes administrative difficulties. NBC would like to record its grateful thanks to both the Royal Society for the Protection of Birds and the American Birding Association for their continued and much-valued assistance in this respect.

Sponsored Members

Some Sponsoring Members have nominated a recipient for their sponsorship, but others have not. In this latter case, the Sponsoring Member category permits the Club to enrol members from the region otherwise unable to afford membership. Recipients of Sponsored Membership through the Club are determined by Council, although all Club members are invited to suggest candidates. Members sponsoring specified members are asked to inform the Secretary if they wish to terminate the sponsorship. It would be helpful if Sponsoring Members could inform the recipient if they intend to sponsor them the following year.

Secure Payments over the Web

The Club can now offer secure credit payment via our website (www.neotropicalbirdclub.org). Any member wishing to make credit card payments is advised to use this method.

Change of Address

All members are requested to inform the Club if they change their address. Due to the costs involved, the Club is unable to supply replacement copies of *Cotinga* if not notified of a change of address. In such cases the member will have to purchase the missing issue(s).

Club Merchandise

The Club has the following items for sale:

- T-shirts—available in either grey or bleached cotton (pale cream). M, L and XL, featuring Banded Cotinga (as featured on the cover of *Cotinga* 12) design.
- Field T-shirts—available in dark green or navy blue with Club logo on chest.

- Stickers—either window or surface types.
- Lapel badges.

All items are available from the Club address. Please state clearly which colours and sizes you require. More details can be found on the Club's website. Please note that we have limited quantities of some items so it would be helpful to include a second choice with your order. Badges and stickers can be sent post free if mailed with copies of *Cotinga* or other merchandise.

Encourage a friend to join

Due to an encouraging increase in the number of papers submitted to *Cotinga*, Council wishes to increase the number of pages in each issue. Unfortunately, this is likely to require an increase in subscription rates for 2005, but if the number of Club members can be increased any such increase can be kept minimal. We, therefore, request all members to encourage their friends and colleagues to join the Club.

New NBC Checklist for Venezuela

Council are pleased to announce the publication of the Club's Venezuela Checklist. Following the style of the Trinidad & Tobago checklist, all species in Hilty (2003) are listed in a 56-page, 15-column format, and it aims to encourage visiting birdwatchers to keep structured notes that can be easily photocopied and sent to the relevant recording authority. The list is the second in a series of lists for Neotropical countries that the Club plans to produce in the next few years. The list sells for UK£5 or US\$8 per copy, plus postage (UK: £1; Europe UK£1.50; Rest of World UK£2/US\$3) and can be obtained from the Sales Officer at the Club address. The Trinidad and Tobago list is still available, UK£4 or US\$6, with postage rates as above.

Trip Reports

The Club has an archive of trip reports generously provided by members and over the next few months it is anticipated that many of these titles will be downloadable from the Club's website <http://www.neotropicalbirdclub.org>. Recently NBC was given the rights to the highly regarded trip reports produced by the late Bruce Forrester. The following titles are available directly from the Club. If members wish to purchase these or any of the reports listed on the Club website please write to one of the usual addresses. Please note that postage (A or B) is additional.

Birding Venezuela 1995	UK£11/US\$16.50–A
Birding Costa Rica 1996	UK£11/US\$16.50–A
Birding Bolivia 1997	UK£13/US\$21–B

Birding Ecuador 1998–99	UK£20/US\$30–B
Birding Peru 2000	UK£15/US\$22.50–B
Birding Dominican Republic & Puerto Rico 1999	UK£5/US\$7.50–A

Postage rates

UK	Rate A–UK£1, Rate B–UK£2
Europe	Rate A–UK£2.50, Rate B–UK£4
RoW	Rate A–US\$5, Rate B–US\$8 (or sterling equivalent)

Corporate Members

NBC wishes to thank the following Corporate Members for 2004: Birdquest, Bird Songs International, Canopy Tower, Limosa, Lynx Edicions, Subbuteo, Sunbird, Swarovski, Travelling Naturalist and Wildwings.

Help Wanted

Council Members—NBC is run by a small team of volunteers and is always looking for members who would be willing to join Council or volunteer their time in other ways. Meetings take place 3–4 times per year and are generally held a 20-minute train ride from central London. The current Council have a wide range of professional backgrounds (being a professional ornithologist is certainly not a prerequisite!). So, if you share a fascination for Neotropical birds and would be willing to help the Club, please contact one of the officers, either by e-mail or via the Club's UK mailing address.

Merchandising Officer—NBC is urgently seeking someone to administer sales. The role includes dealing with mail-order enquiries, developing new merchandise, organising the promotion of new and current stock, and preferably being able to attend the AGM and the UK Bird Fair.

Speakers—NBC is always looking for speakers for future AGMs; volunteers would be greatly appreciated.

Rutland—the Rutland Bird Fair is one of the Club's most important fundraising events (see below) and Council would be grateful for any help and assistance to run the stand.

E-mail addresses

Secretary	secretary@neotropicalbirdclub.org
Treasurer	treasurer@neotropicalbirdclub.org
Chair	chair@neotropicalbirdclub.org
Membership	membership@neotropicalbirdclub.org

2004 AGM

The Club AGM will be held on 30 May 2004 at Cley Village Hall, Cley, Norfolk, UK. Details are included with this issue.

Bird Fair 2003

Once again the Club was represented at the Rutland Bird Fair, which proved a useful opportunity to distribute *Cotinga* 20 and recruit new members. As usual, the prizes in the Club's

raffle were some of the best on offer at the Fair, with prizes including a trip for two to Canopy Tower, in Panama, and a pair of Swarovski EL binoculars. The Club is grateful to Swarovski Optik, Wildwings, Canopy Tower, Limosa, Traveling Naturalist and Lynx Edicions for generously assisting the Club by providing prizes, and to Carl Zeiss for providing a bursary towards the cost of the stand.



Figure 1. Chris Collins (NBC Treasurer, at left) and John Brinkley (Swarovski Optik, UK) drawing the 2003 NBC Bird Fair raffle (Tim Loseby)



Figure 2. Duncan Macdonald (at left), winner of the 2003 NBC Bird Fair raffle, receiving his prize from José Soto of Canopy Tower (Panama), with Chris Collins (at right) (Tim Loseby)

Advertise with NBC in *Cotinga*

Black-and-white advertising rates:

Full page	\$165	£100	14.5 x 20.5	cm
Half page	\$100	£60	14.5 x 10	cm
Quarter page	\$65	£40	7 x 10	cm

Colour advertising is also available in conjunction with fully acknowledged colour sponsorship. Space is also available for short classified advertisements at \$5 (£3) per line (average 6 words) with boxed entries (minimum 2cm²) at \$16 (£10) per cm², \$2 (£1) extra per insertion. Copy deadlines are 15 December (February issue) and 15 June (August issue). Please post early to avoid disappointment.

All advertisements must be sent prepaid (cheques made payable to the Neotropical Bird Club) as camera-ready copy or film to:

Advertising Officer, The Neotropical Bird Club,
c/o The Lodge, Sandy, Bedfordshire, SG19 2DL, UK

Neotropical Bird Club Conservation Awards

New Awards • Nuevos Premios • Novos Prêmios

Council is delighted to announce two new Conservation Awards. Other potentially suitable applications remain under consideration, and successful candidates will be announced in the next *Cotinga*. Council continues to seek collaborative ventures with co-sponsors—to the benefit of bird conservation in the Neotropics.

El Consejo se complace en anunciar dos nuevos Premios de Conservación. Otras solicitudes potencialmente apropiadas están siendo consideradas, y los candidatos exitosos serán anunciados en la próxima *Cotinga*. El Consejo continúa procurando colaboraciones con copatrocinadores, para el beneficio de la conservación en el Neotrópico.

Surveys to rediscover Cuban Poorwill *Siphonorhis daiquiri* and Double-striped Thick-knee *Burhinus bistriatus* in south-east Cuba

Council has made a Conservation Award of US\$1,000 to William Suárez, of the Museo Nacional de Historia Natural de Cuba, to fund surveys seeking to rediscover the Cuban Poorwill *Siphonorhis daiquiri* in arid south-east Cuba. The species was described by Storrs Olson in 1985 from fossil evidence and is unknown in life. However, William has previously predicted that it might still be extant (*Cotinga* 14: 66–68), and will conduct nocturnal field work in the vast unexplored deserts of south-east Guantánamo province. If successful, this would be one of the most dramatic avian rediscoveries ever. William will also seek to prove the continued existence of *Burhinus bistriatus*, which is still known from adjacent Hispaniola.

Búsquedas del *Siphonorhis daiquiri* y del *Burhinus bistriatus* en el sudeste de Cuba

El Consejo otorgó un Premio de Conservación a US\$1.000 a William Suárez, del Museo Nacional de Historia Natural de Cuba, para apoyar búsquedas para redescubrir al *Siphonorhis daiquiri* en el sudeste árido de Cuba. La especie fue descrita por Storrs Olson en 1985, con base en evidencia fósil, y es desconocida en vida. De todas maneras, William ya ha predicho que puede aún existir en vida (*Cotinga* 14: 66–68), y llevará a cabo trabajos de campo nocturnos en los vastos desiertos que no han sido explorados en el sudeste de la provincia de

Guantánamo. Si tiene éxito, ésta será uno de los redescubrimientos ornitológicos más dramáticos que hayan habido. William también intentará probar la existencia de *Burhinus bistriatus*, que aún se conoce de la vecina Hispaniola.

Assessment of the status of Chestnut-bellied Hummingbird *Amazilia castaneiventris* in Colombia

Council has given a Conservation Award of US\$1,000 to José Oswaldo Cortes Herrera and Efrén Armando Briceño Buitrago, students at the Universidad Distrital in Bogotá, to conduct surveys for the Critically Endangered Chestnut-bellied Hummingbird *Amazilia castaneiventris* in Soatá, Boyacá. Oswaldo and Efrén intend to assess the species' status in the Cañón del Río Chicamocha and Sogamoso, to map and describe its habitat, to assess its ecological requirements and to determine human threats to its existence.

Evaluación del estatus de *Amazilia castaneiventris* en Colombia

El Consejo otorgó un Premio de Conservación de US\$1.000 a José Oswaldo Cortes Herrera y Efrén Armando Briceño Buitrago, para llevar a cabo búsquedas de *Amazilia castaneiventris*, una especie Críticamente Amenazada, en Soatá, Boyacá. Oswaldo y Efrén pretenden estimar el estatus de la especie en el Cañón del río Chicamocha y Sogamoso, para mapear y describir su hábitat, evaluar sus requerimientos ecológicos y determinar amenazas humanas a su existencia.

Updates • Novedades • Actualidades

Status and distribution of Pampas Meadowlark *Sturnella defilippii* in northern Uruguay

In 2003, NBC sponsored Adrián Azpiroz to conduct field surveys for the Vulnerable Pampas Meadowlark *Sturnella defilippii* in open grasslands of Uruguay. The Neotropical Grassland Conservancy also provided funds. Formerly common throughout most of Uruguay, the species is now restricted to eastern dpto. Salto. Adrián's field work clarified the species' status. His discovery of seven nests provided evidence of only the second currently known breeding population (the other is in southern Buenos Aires province, Argentina). The environmental education component of Adrián's work was also

successful: inhabitants of Arerunguá and Vera towns showed real interest in learning about grassland bird conservation issues, even providing very valuable information on localities for *S. defilippii*.

Estatus y distribución de la Loica Pampeana *Sturnella defilippii* en el norte de Uruguay

En 2003, el CAN y Neotropical Grassland Conservancy patrocinaron a Adrián Azpiroz para llevar a cabo un estudio de campo enfocado en la Loica Pampeana *Sturnella defilippii*, una especie Vulnerable. A pesar de tratarse de un ave común en la mayor parte de Uruguay en el pasado, la especie está actualmente restringida al este del departamento de Salto. El trabajo de Adrián ha aclarado el estatus de la especie. El descubrimiento de siete nidos confirma la existencia de una segunda población reproductiva (la única otra conocida se encuentra en el sur de la provincia de Buenos Aires, Argentina). El componente de educación ambiental del trabajo de Adrián también fue exitoso: los habitantes de los pueblos de Arerunguá y Vera mostraron un gran interés en los problemas de conservación de las aves de pastizal, e incluso proporcionaron información muy valiosa sobre sitios donde encontrar a *S. defilippii*.

Tumaco Seedeater *Sporophila insulata* in Colombia

In 2002, NBC and the Royal Society for Protection of Birds Small Projects Fund gave a joint Conservation Award to Juan Carlos de las Casas Serrano, of the Universidad Nacional de Colombia, to evaluate the taxonomic validity of the Critically Endangered taxon, Tumaco Seedeater *Sporophila insulata*, using genetic and morphological methods. Juan Carlos has now completed his field work and laboratory analysis. He presented his work to the VII Neotropical Ornithology Congress and to the XVI Meeting of Colombian Ornithology. Sequencing the mitochondrial genes cytochrome *b* (922 bp) and the control region (1104–1107 bp) of 12 males of *insulata*, seven Chestnut-throated Seedeater *S. telasco* and six Ruddy-breasted Seedeater *S. minuta*, Juan Carlos found that the phylogenetic trees of neighbour-joining and parsimony indicated that *insulata* was grouped with *telasco*. The results of morphometric analyses are less clear, but coloration analysis and the variability in the size of the red rump of *insulata* (previously unreported), complement the molecular data.

Taking these results, Juan Carlos concluded that *insulata* is an invalid taxon (if accepted, this would mean that the list of globally threatened species is one shorter!), corresponding instead to hybrids between female *S. telasco* and male *S. minuta*. One problem remains: captured individuals from Naranjo probably correspond to *minuta* but possibly to an undescribed subspecies. Juan Carlos has

subsequently established a NGO (Corporación Sentido Natural), which aims to conduct further useful research targeted at conservation priorities.

El Espiguero de Tumaco *Sporophila insulata* en Colombia

En 2002, El Fondo para Proyectos Pequeños del CAN y RSPB otorgaron un Premio de Conservación en conjunto a Juan Carlos de las Casas Serrano, de la Universidad Nacional de Colombia, para evaluar la validez taxonómica del Semillero de Tumaco *Sporophila insulata*, un taxón críticamente amenazado, usando métodos moleculares y morfológicos. Juan Carlos ya ha finalizado su proyecto, y lo presentó en el VII Congreso de Ornitología Neotropical y el XVI Encuentro Nacional de Ornitología Colombiana. Secuenciando los genes mitocondriales Citocromo-b (922 pb) y la Región Control (1104–1107 pb) de 12 machos de *insulata*, siete Espigueros Golicastaños *S. telasco* y seis Semilleros Menudos *S. minuta*, Juan Carlos encontró que los árboles filogenéticos con atracción de vecinanza (neighbour-joining) agruparon a *insulata* con *telasco*. Los resultados de los análisis morfométricos no fueron claros, pero el análisis de coloración y la variabilidad en el tamaño de la banda rojiza de la rabadilla de *insulata* (aspecto antes no reportado), complementan los datos moleculares.

Juan Carlos concluyó, tomando estos resultados en conjunto, que *insulata* no es un taxón válido (si ésto es aceptado, significaría que la lista de especies globalmente amenazadas tendría una menos!), y corresponde a híbridos entre hembras *telasco* x machos *minuta*. Aún queda un problema: los individuos capturados en El Naranjo corresponden a *minuta* pero posiblemente a una subespecie no descrita. Desde entonces Juan Carlos creó una ONG llamada Corporación Sentido Natural, proponiéndose hacer más investigación enfocada a prioridades de conservación.

James Lowen

E-mail: awards@neotropicalbirdclub.org.

Neotropical News



West Nile Virus update

The disease is now firmly established in North America at least. As well as northern and eastern Mexico, and the Dominican Republic, it has now been recorded in Jamaica, Guadeloupe and El Salvador, and further spread in the Neotropics is inevitable. On the plus side, a vaccine has been developed for horses, which could be used on the more threatened bird species with captive breeding programmes, such as Californian Condor *Gymnogyps californicus*. In 2002, at least 284 humans, 4,300 horses, numerous alligators and hundreds of thousands of birds died following infection, and although 2003 figures are reduced for humans and horses, this may be the result of greater awareness and the horse vaccine. It is thought that some bird species will remain largely unaffected, others will develop immunity and their populations will recover, whilst others will suffer further population declines. Tests for infection do not prove that the virus is the cause of death and, in any case, some birds may recover, but the Corvidae have undoubtedly been especially affected in the USA. It is hard to avoid the bias towards urban and large birds in determining interspecific differences in the virus' importance, but high infection rates have been found in raptors (note concern for Ridgway's Hawk *Buteo ridgwayi*, *Cotinga* 20: 12).

- National Audubon Society, 21 December 2003
www.audubon.org/bird/wnv
- *World Birdwatch* 25 (3): 12 (September 2003)

CARIBBEAN

Caribbean Endemic Bird Festival

In April 2003, events were held throughout the Caribbean as part of the month-long annual Caribbean Endemic Bird Festival, which was launched by the Society for the Study and Conservation of Caribbean Birds (SCSCB). The festival highlights the international importance of conservation on Caribbean islands and last year focused on birds, forests and trees.

- *World Birdwatch* 25 (2): 7 (June 2003)

BERMUDA

Bermuda Petrel breeding success . . . but then Hurricane Fabian struck

Seventy nesting pairs of the Endangered Bermuda Petrel *Pterodroma cahow* produced a record 40 fledglings in 2003 due to intensive conservation efforts. However, the strongest winds to hit Bermuda since 1899 caused significant damage to the Castle Islands Nature Reserve, where the four colonies are located, and many nest sites were destroyed. Although the hurricane struck in the non-breeding season, the petrels display high breeding site fidelity so the breeding of affected pairs may be disrupted despite the efforts being made to repair the artificial burrows.

- *World Birdwatch* 25 (4): 2 (December 2003)

PUERTO RICO

New protected area

Control of the eastern end of Vieques Island has been transferred from the US Navy to the Fish & Wildlife Service for management as a wildlife refuge.

- *World Birdwatch* 25 (3): 3 (September 2003)

MIDDLE AMERICA

MEXICO

Imperial Woodpecker feared extinct

Searches of an isolated pine forest in Durango, from which local reports of Imperial Woodpecker *Campephilus imperialis* came in 1996, have failed to find any evidence that the species occurs in the area.

- *World Birdwatch* 25 (4): 4 (December 2003)

SOUTH AMERICA

BRAZIL

Amazon deforestation

The Brazilian National Space Research Institute's annual survey has revealed that deforestation in the Brazilian Amazon has reached the highest rates since 1994–95, with 25,500 km² felled in the period July 2001–June 2002, which is well above the average for the previous six years (18,000 km² per year). It is thought that about one-third of land cleared is later abandoned and underused.

- *The Environment Post* (9 July 2003)

Iguaçu National Park threatened

In 2001, following a long legal battle and political struggle, the Brazilian government closed an illegal road through Iguaçu National Park, which facilitates the access of plant collectors and hunters. Two years later, hundreds of local people took action to reopen the road and poaching of protected flora and fauna has restarted, threatening, among other birds, Black-fronted Piping-guan *Pipile jacutinga*. Contact Marcelo Oliveira, Iguaçu National Park biologist (bio.pr@ibama.gov.br).

- Marcelo Oliveira *in litt.* December 2003

Two 'Criticals' depend on Paraná decision

The BirdLife Brazil Program is assisting IBAMA (the Federal Environmental Agency) through a proposal for the establishment of new boundaries for the Saint Hilaire/Lange National Park in Paraná. The 25,000-ha park currently mostly covers montane Atlantic Forest and the new proposal will add mangroves, lowland forests and freshwater swamps, located in one of the highest priority Important Bird Areas in Brazil, APA de Guaratuba. These highly threatened areas form some of the largest remaining habitats for Marsh Antwren *Stymphalornis acutirostris* and Kaempfer's Tody-tyrant *Hemitriccus kaempferi*, neither of which is currently protected in any federal conservation unit.

- *World Birdwatch* 25 (2): 2 (June 2003)

NGOs buy Atlantic forest

BirdLife International and the Instituto de Estudos Sócio-ambientais do Sul da Bahia have bought over 251 ha in the Atlantic Forest region, in one of Brazil's highest priority Important Bird Areas, through grants from the Clothworkers Foundation and the Garfield Foundation. The area, in the Serra das Lontras, is home to nine globally threatened bird species, including the recently described Pink-legged Graveteiro *Acrobatornis fonsecai* (Vulnerable) and Bahia Tyrannulet *Phylloscartes beckeri* (Endangered). The creation and management of a private nature reserve result from extensive collaboration between NGOs and government, and funding from the British Birdwatching Fair in 1999, the Rainforest Action Fund, the Global Conservation Fund and the Dutch government. Habitats include primary and secondary forest, shade-grown cacao plantations and pastures, most of which will be allowed to regenerate, but a small area will continue to be harvested for organic cacao as a demonstration

of environmentally sensitive forest management.

- *World Birdwatch* 25 (2): 5 (June 2003)

Parks razed

Fires, possibly started deliberately, have devastated some of the last strongholds of the Critically Endangered Brazilian Merganser *Mergus octosetaceus*, Serra de Canastra National Park (Minas Gerais) and Jalapão State Park (Tocantins).

- *World Birdwatch* 25 (4): 5 (December 2003)

Study of Alagoas Curassow genetics

Work proving the validity of Alagoas species *Mitu mitu* (Extinct in the Wild) as a species has also shown that captive birds hatched after 1990 show a significant degree of hybridisation with Razor-billed Curassow *M. tuberosa*.

- *World Birdwatch* 25 (3): 5 (September 2003)

COLOMBIA

Major funding for Proyecto Hapalopsittaca

Continuation of Proyecto Hapalopsittaca's work on Fuertes's Parrot *Hapalopsittaca fuertesi*, which the team rediscovered in 2002, has received a major boost through being awarded the BP Consolidation Award of US\$75,000. Other threatened species that will be targeted include Rusty-faced Parrot *H. amazonica*, Golden-plumed Parakeet *Leptosittaca branickii*, Yellow-eared Parrot *Ognorhynchus icterotis*, Rufous-fronted Parakeet *Bolborhynchus ferrugineifrons* and Brown-breasted Parakeet *Pyrrhura calliptera*. The BP Conservation Programme has grown tremendously since its inception in 1985, not least this year with Conservation International and Wildlife Conservation Society joining the organising partnership of BP, BirdLife International and Flora and Fauna International.

- *World Birdwatch* 25 (3): 6 (September 2003)

GUYANA

Red Siskin population discovered

A population of Red Siskins *Carduelis cucullata* that may number several thousand birds has been discovered in southern Guyana, almost 1,000 km from any previously known site. The species was until recently considered restricted to Venezuela and a small area in eastern Colombia, where its population has declined to tiny numbers at isolated sites, despite once being common, affording it Endangered status. Much of the Guianan population is on land with conservation-minded owners and trapping for the cagebird trade (the main cause of the Venezuelan decline) is said not to affect this species in Guyana. The American Bird Conservancy, Conservation International, the American Federation of Aviculturalists and National Aviary have launched a combined effort to keep it that way.

- *Auk* 120 (2): 290–298 (June 2003)

PERU

New plan to save Lake Chinchaycocha, Peru

An Action Plan to restore Lake Chinchaycocha's ecosystem has been approved and is being implemented to protect the flightless Junín Grebe *Podiceps taczanowskii*, a Critically Endangered species endemic to the lake. Nearby mining activities and an associated hydroelectric plant have polluted the lake and affected water levels causing the grebe's breeding and feeding areas to dry out. Decontamination, appropriate management of water levels, monitoring of the environment, management of any development projects and management of Junín National Reserve form the basis of a plan to be overseen by a multi-stakeholder regulatory body.

- *World Birdwatch* 25 (2): 6 (June 2003)

First description of the nest and vocalisations of the Peruvian Antpitta *Grallaricula peruviana* with a northward range extension

Harold F. Greeney, Erin C. Hannelly and Mitch Lysinger

Cotinga 21 (2004): 14–17

Grallaricula peruviana es un pájaro muy raro, sólo conocido por pocos especímenes y por ninguna observación en su hábitat natural. Encontramos el primer nido de este pájaro raro en el nordeste del Ecuador, casi 200 km al norte de su distribución conocida. El nido es parecido a otros del mismo género. Los dos sexos comparten la atención del pichón. La alimentación del pichón incluye insectos acuáticos. La vocalización de los adultos es parecido a la de *G. flavirostris* en el este del Ecuador.



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The genus *Grallaricula* comprises eight species of small, elusive antpittas distributed from Central America and montane Venezuela, on both Andean slopes, south to Bolivia. All are poorly known and a few have extremely restricted and patchy distributions. One such, Peruvian Antpitta *G. peruviana*, was previously known only from several localities in north-east Peru and south-east Ecuador. Ridgely & Tudor¹⁰ reported it as 'seemingly unknown in life', while BirdLife International¹ afforded it Near-Threatened status, and it was unknown from Ecuador until 1984 when a specimen was collected in the Cordillera Cutucú³. The only other reports are: one observed briefly by Bret Whitney (pers. comm.) on the Gualacio–Limón road, Morona-Santiago province, in 1990 and two mist-netted in Podocarpus National Park in 1992^{7,8}. In November 2000, Leis Navarrete first reported a bird thought to be this species at Cabañas San Isidro. *G. peruviana* was subsequently confirmed to occur at this locality when a nest was found there in September 2002. Here we describe the nest, habitat, adult plumage of both sexes, and first known vocalisations of the Peruvian Antpitta, and confirm its presence in north-east Ecuador, nearly 240 km north of its previously known range.

Study site

On 29 September 2002 a nest containing a single nestling was found on the private reserve of Cabañas San Isidro, 3 km west of the town of Cosanga, Napo province, eastern Ecuador, and located near the Yanayacu Biological Station (00°35'S 77°53'W). The reserve land has several owners and adjoins the protected forests of the Antisana and Sumaco National Parks.

Nest description

We discovered the nest at 15h00. The nestling was bare with its eyes slitted but closed, and was estimated to be 1–2 days old (Fig. 1). The nest was a broad, shallow cup constructed of moss, lined with

dark rootlets and built atop a loose platform of 1–5 mm-diameter, 10–20 cm-long, sticks. The nest was circular with an internal diameter of 60 mm and external diameter of 135 mm, an inside egg cup diameter of 85 mm, and a cup depth of 45 mm (Fig. 2). The structure was precariously saddled across a 15 mm-diameter, horizontal branch of a small *Palichorea* sp. (Rubiaceae) sapling. No other branches or material supported the nest other than several 2 mm-diameter climbing fern petioles running along the branch. The nest was 1.6 m above ground and located in a depression caused by drainage into a stream 2.5 m away. The depression was 2–3 m deep, 3 m wide at its opening to the stream, and narrowed to an abrupt ending 4.5 m from the stream. The nest was situated at a point where the depression was c.2.5 m wide. The depression was oriented almost due north at 15–20°, well shaded, and throughout the day received sun only briefly through small gaps in the forest canopy. The nest itself was covered directly from above by a single narrow-bladed fern leaf crossing the centre of the nest, c.10 cm above the rim. Above that, within 1.5 m, leaves of the same *Palichorea* sp., as well as a single leaf from a nearby *Geonoma* sp. (Aracaceae) palm, shaded the nest. The nest was observed and videotaped. Adult and nestling activity was videotaped from dusk until dawn for over 100 hours until 13 October. A full analysis of these data is currently in preparation.

Topographically, the nest was at c.2,050 m elevation in a relatively level area, by Andean standards, spreading roughly 2.5 km west of the río Cosanga. The area immediately around the nest was quite flat, but frequently cut by small stream drainages 3–40 m deep. The section of stream along which the nest was situated sloped gently on either side. Understorey vegetation in the vicinity was dominated by *Piper* spp. (Piperaceae), ferns (Pteridophyta), various Rubiaceae, *Acalepha* sp. (Euphorbiaceae), *Asplundia* sp. (Cyclanthaceae), *Geonoma* sp. (Aracaceae), *Cestrum* spp.

Taxonomic Round-up



A new species of *Micrastur*

Andrew Whittaker has recently described the Cryptic Forest-falcon *Micrastur mintoni*, which exhibits subtle but consistent morphological differences from several other congeners (principally Lined Forest-falcon *M. gilvicolis*, Plumbeous Forest-falcon *M. plumbeus* and Barred Forest-falcon *M. ruficollis*) and also possesses a divergent vocal repertoire from known species. Indeed, vocalisations provided the key to the discovery of the new species, which ranges from north-east Amazonian Brazil to extreme north-east Bolivia, with an outlying (and perhaps taxonomically distinct population in the Brazilian Atlantic Forest), when Whittaker tape-recorded an unfamiliar *Micrastur* vocalisation. His research led to the discovery of several specimens of the undescribed form (hence the English name, Cryptic), including three from Bahia and Espírito Santo, in eastern Brazil, where the species has apparently not been recorded since the 1930s, despite recent searches using playback. The new species is fully described and also illustrated by a colour frontispiece, by Paul Greenfield, and colour photographs of specimens and a live bird, at Alta Floresta, Mato Grosso (Brazil).

- Whittaker, A. (2002) A new species of forest-falcon (Falconidae: *Micrastur*) from southeastern Amazonia and the Atlantic rainforests of Brazil. *Wilson Bull.* 114: 421–445.

Pygmy Antwrens unravelled

The prodigious Islers continue to publish the results of their ongoing studies into antbird taxonomy. They have recently turned the spotlight on the Pygmy Antwren *Myrmotherula brachyura* and, based on analysis of vocal characters, revealed that the form *ignota* from the Chocó region

should not be considered a subspecies of *brachyura*, as traditionally classified, but a species-level taxon. However, its voice is indistinguishable from that of the Short-billed Antwren *M. obscura* from Amazonia. Thus, the Islers consider *ignota* and *obscura* as conspecific, with *ignota* having priority over *obscura* for the species name.

- Isler, M. P. & Isler, P. R. (2003) Species limits in the Pygmy Antwren (*Myrmotherula brachyura*) complex (Aves: Passeriformes: Thamnophilidae): 1. The taxonomic status of *Myrmotherula brachyura ignota*. *Proc. Biol. Soc. Wash.* 116: 23–28.

More on St Kitts Bullfinch

Orlando Garrido and Jim Wiley have now published their detailed findings concerning the taxonomic position of the St Kitts Bullfinch *Loxigilla portoricensis grandis* (reported in *Cotinga* 18: 15), which they recommend should henceforth be regarded as a species based on substantially larger mensural data and consistently different plumage colour and pattern. Unfortunately, St Kitts Bullfinch may already be extinct, although the authors postulate, as others have done, that the form may survive on Mt. Misery.

- Garrido, O. H. & Wiley, J. W. (2003) The taxonomic status of the Puerto Rican Bullfinch (*Loxigilla portoricensis*) (Emberizidae) in Puerto Rico and St. Kitts. *Orn. Neotrop.* 14: 91–98.

Redescribing the extinct in Cuba . . .

Cuba like many insular nations once harboured several of what would now be considered bizarre avian forms. One of these was a condor, *Gymnogyps varonai*, for which new fossil material has recently become available, leading William Suárez and Steven Emslie

to redescribe this long-extinct species.

- Suárez, W. & Emslie, S. D. (2003) New fossil material with a redescription of the extinct condor *Gymnogyps varonai* (Arredondo, 1971) from the Quaternary of Cuba (Aves: Vulturidae). *Proc. Biol. Soc. Wash.* 116: 29–37.

...and a 'new' penguin from Peru

Skulls and post-cranial elements from late Miocene and early Pliocene deposits recovered at Pisco, on the south-central coast of Peru, have been used to describe a new *Spheniscus* (*S. urbinai*) penguin. The 'new' species was characterised by a large size and several other unique skeletal attributes.

- Stucchi, M. (2002) Una nueva especie de *Spheniscus* (Aves: Spheniscidae) de la formación Pisco, Perú. *Bol. Soc. Geológica del Perú* 94: 17–24.

Another new bird from the Atlantic Forest

J. M. C. da Silva and co-workers have recently described a new pygmy-owl in the *Glaucidium minutissimum* complex. Having studied the only two specimens from Pernambuco, Brazil, in museum collections and compared recordings of the voice of this population, the authors describe the Pernambuco Pygmy-owl *Glaucidium mooreorum*, which they consider to have been 'discovered on the brink of extinction'. The new species differs subtly from its closest relatives, Amazonian Pygmy-owl *G. hardyi* and Brazilian Pygmy-owl *G. minutissimum*, in the shade of brown colorations of the crown, back and flanks, but also in body proportions (having a longer tail and wing chord) and vocalisations. The region where the new species was found, the Pernambuco Centre, is characterised by high

endemism, and it is proposed that the new species be classified as Critically Endangered.

- Silva, J. M. C., Coelho, G. & Gonzaga, L. P. (2002) Discovered on the brink of extinction: a new species of pygmy-owl (Strigidae: *Glaucidium*) from Atlantic Forest of northeastern Brazil. *Ararajuba* 10: 122–130.

New perspectives in relationships among cracids

In his doctoral thesis, Luís Fábio Silveira used osteological characters and cladistic analysis to examine the phylogenetic relationships of the cracids. He studied 441 individuals from 69 species and his results demonstrate that the Cracidae are monophyletic and are a sister group of the Phasianidae. The results also indicate that the Cracidae are probably composed of two subfamilies, Cracinae (*Nothocrax*, *Pauxi* and *Crax*) and Penelopinae (*Oreophasis*, *Penelopina*, *Aburria*, *Penelope*, *Ortalis* and *Chamaepetes*). The genera *Mitu* and *Pipile* appear to be synonyms of *Pauxi* and *Aburria*, respectively.

- Silveira, L. F. (2003) Filogenia dos Cracidae (Aves: Galliformes), com base em caracteres osteológicos. Resumo de tese. *Atualidades Orn.* 112: 2.

Buteo phylogeny

In a recent study, DNA sequences of the mitochondrial *nd6* gene were used to infer phylogenetic relationships within the genus *Buteo* and closely related genera. The molecular dataset implied a Neotropical origin for *Buteo*. The genus, as currently defined, was found not to be monophyletic, due to the positions of Grey-lined Hawk *Asturina nitida*, Black-chested Buzzard-eagle *Geranoaetus melanoleucus*, Roadside Hawk *Buteo magnirostris* and White-rumped Hawk *B. leucorrhous*. The authors of the study therefore suggest that *A. nitida* and *G. melanoleucus* be included in *Buteo*, *B. leucorrhous* be transferred to *Percnohierax* (which clustered with *Parabuteo* in this study), and *B. magnirostris* be placed in *Rupornis*.

- Riesing, M. J., Kruckenhauser, L., Gamauf, A. & Haring, E. (2003) Molecular phylogeny of the genus *Buteo* (Aves: Accipitridae) based on mitochondrial marker sequences. *Mol. Phyl. & Evol.* 27: 328–342.

A new phylogeny for the suboscines

Recent molecular systematic work has suggested major changes in the family-level arrangement of the Furnarioidea, a branch of the suboscine passerines that contains ovenbirds, woodcreepers, antbirds, antpittas, tapaculos and gnateaters. Analysing more than 3,000 base pairs from the cytochrome-*b* mitochondrial gene, and of *c-myc*, *RAG-1* and myoglobin genes, from the nucleus, Irestedt and colleagues propose the new classification to be: Family Melanopareiidae (with *Melanopareia* and *Teledromas*) Family Thamnophilidae Family Conopophagidae Family Grallariidae (with *Grallaria*, *Hyllopezus*, *Myrmothera* and *Grallaricula*) Family Rhinocryptidae (all tapaculos except for the Melanopareiidae) Family Formicariidae (with *Formicarius* and *Chamaeza*) Family Furnariidae (with subfamilies Sclerurinae, leaf-tossers, Dendrocolaptinae, woodcreepers, and Furnariinae, all other ovenbirds).

- Irestedt, M., Fjeldså, J., Johansson, U. S. & Ericson, P. G. P. (2002) Systematic relationships and biogeography of the tracheophone suboscines (Aves: Passeriformes). *Mol. Phyl. & Evol.* 23: 499–512.

A new subspecies of Mountain Velvetbreast

Schuchmann *et al.* have recently reviewed the taxonomy and biogeography of the monospecific genus *Lafresnaya*, the Mountain Velvetbreast *L. lafresnayi*, which occurs from western Venezuela south to southern Peru. The authors name a population from the Cordillera Central of Colombia as a new subspecies, *L. l.*

longirostris, which is marked by its distinctly longer bill than other

forms. Whilst they suggest that the race *orestes*, from north-east Peru, which has been generally considered invalid, is sufficiently distinct to warrant recognition, another form of dubious validity, *tamae* from south-west Venezuela, is deemed by the present authors to be a synonym of *L. l. greenewalti*.

- Schuchmann, K.-L., Weller, A.-A. & Wulfmeyer, E. (2003) Biogeography and taxonomy of *Lafresnaya* (Trochilidae), with a new subspecies from Colombia. *Orn. Neotrop.* 14: 157–171.

Chordeiles vielliardi is a *Nyctiprogne*

Work undertaken since the mid-1990s in the São Francisco Valley of Minas Gerais and Bahia, Brazil, has demonstrated that the recently described *Chordeiles vielliardi* should be assigned to the genus *Nyctiprogne*, based on a broad range of characteristics, including morphological, ecological and vocal, but has confirmed that *vielliardi* warrants species rank. The misallocation of generic status in *vielliardi*, due to a lack of analysis of vocal characteristics, is reminiscent of the problems that surrounded correct attribution of two Middle American Caprimulgidae, *Nyctiphrynus yucatanicus* and *Caprimulgus badius*. The authors recommend the English name of Plain-tailed Nighthawk for *Nyctiprogne vielliardi*, in preference to the previously employed Bahian Nighthawk and Caatinga Nighthawk, neither of which are appropriate. The suggested Portuguese name, Bacurau-do-São-Francisco, draws attention to the region's remarkable avifauna.

- Whitney, B. M., Pacheco, J. F., Fonseca, P. S. M., Webster, R. E., Kirwan, G. M. & Mazar Barnett, J. (2003) Reassignment of *Chordeiles vielliardi* Lencioni-Neto, 1994, to *Nyctiprogne* Bonaparte, 1854, with comments on the latter genus and some presumably related chordeilines (Aves: Caprimulgidae). *Bull. Brit. Orn. Club* 123: 103–112.

Munchique Wood-wren—the answer to a long-standing mystery

As long ago as 1978, Steve Hilty realised that the ‘grey-breasted’ wood-wrens in western Cauca and Nariño departments sang quite differently from adjacent populations of the widespread Grey-breasted Wood-wren *H. leucophrys*, but until very recently no follow-up research had been conducted. These birds have now been described as the Munchique Wood-wren *Henicorhina negreti*, which is endemic to the Munchique massif of the western Andes of Colombia, and appears to be the first new bird species to be described in a solely online journal (located at www.ornitologiacolombia.org). Munchique Wood-wren is closely related to Grey-breasted Wood-wren but, in contrast, *H. negreti* appears to be restricted to a narrow band of extremely wet, stunted cloud forest on the upper Pacific slope; it is abruptly replaced in taller forest at lower elevations by *H. l. brunneiceps* and on the drier east slope by *H. l. leucophrys*. Munchique Wood-wren differs from adjacent forms of *H. leucophrys* in its distinctly barred abdomen, dark juvenile plumage, relatively short tail and longer tarsi. Its song is also very different, and the adjacent forms of *H. leucophrys* do not respond to playback of the vocalisations of the new wren, as the latter fails to respond to songs of *H. l. leucophrys* or *H. l. brunneiceps*, strongly suggesting that reproductive isolation has occurred. Given possible threats to *H. negreti* through forest clearance and global climate, the species’ authors suggest that it be accorded Critically Endangered status.

- Salaman, P., Coopmans, P., Donegan, T. M., Mulligan, M., Cortés, A., Hilty, S. L. & Ortega, L. A. (2003) A new species of wood-wren (Troglodytidae: *Henicorhina*) from the western Andes of Colombia. *Orn. Colombiana* 1: 4–21.

New bird species discovered in Venezuela

Blue Seed-eaters *Amaurospiza* (Emberizidae) are rare, little-known finches which occur locally in southern Mexico, Central and South America, almost always in association with bamboo. Prior to 2003, two species were known: Blue Seed-eater *A. concolor*, from southern Mexico to western Ecuador, and Blackish-blue Seed-eater *A. moesta*, from south-east Brazil. A new species, the Carrizal Blue-black Seed-eater *A. carrizalensis*, has recently been described from south-east Venezuela. The species is named after the small islet where it was discovered which is also the local name for the bamboo that constitutes its habitat. During 2001, researchers Miguel Lentino and Robin Restall from the Phelps Ornithological Collection took part in a biological survey along the río Caroní, north and downstream of the Guri Dam, part of the world’s largest hydroelectric project. One of the expeditions was to Isla Carrizal, a large uninhabited island thickly covered with groves of spiny *Guadua latifolia* (carrizal) and *Ripidocladus* sp. bamboos and semi-deciduous forest. On two occasions, three specimens (two males and a female) of an unknown blue seed-eater were collected. These were the first records for an *Amaurospiza* for north-east South America. Subsequent examination proved the specimens to constitute an undescribed species, which is characterised by a larger bill than congeners and small differences in plumage. Like other *Amaurospiza*, the male is blue-grey, whilst the female is warm brownish yellow. The male has indigo-blue shoulders. The discovery came as a surprise to the researchers, because the río Caroní had been relatively well surveyed and no other *Amaurospiza* species had been recorded from Venezuela, nor were they expected. The finch had eluded discovery because of its impenetrable spiny bamboo habitat and its presence on an uninhabited islet.

The new seed-eater came to light because a Venezuelan electricity company commissioned a study of local wildlife before commencing work on the new Caruache Dam across the río Caroní. Isla Carrizal was already scheduled for deforestation and has now been cleared, but researchers believe that the species is likely to be found at other sites, and hope that funding will be found for new surveys of its bamboo habitat.

- Lentino, M. & Restall, R. (2003) A new species of *Amaurospiza* Blue Seed-eater from Venezuela. *Auk* 120: 600–606.

Great Pampa-finch is two species

Great Pampa-Finch *Embernagra platensis* occurs across southern South America, from south-east Brazil to Bolivia and northern Argentina, and is represented by four subspecies belonging to two groups in allopatry: nominate *E. p. platensis* in the east, and (2) *E. p. olivascens*, *E. p. gossei* and *E. p. catamarcanus* in the west. A recent study of morphological variation within the complex discovered that the structure and coloration of the bill were the most diagnostic traits separating the two groups. Given the absence of intermediate specimens and lack of clinal variation in bill coloration within each form, it seems that intergradation either does not occur or is perhaps restricted to a narrow and undiscovered contact zone. The author of the study, Floyd Hayes, tentatively proposes to recognise two species: monotypic Great Pampa-Finch *E. platensis* (also known as Red-billed Pampa-finch) and polytypic Olive Pampa-Finch *E. olivascens*.

- Hayes, F. E. (2003) Geographic variation in the Great Pampa-finch *Embernagra platensis* complex: evidence for two species. *Ardeola* 50: 223–235.

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Nest description

We discovered the nest at 15h00. The nestling was bare with its eyes slitted but closed, and was estimated to be 1–2 days old (Fig. 1). The nest was a broad, shallow cup constructed of moss, lined with

dark rootlets and built atop a loose platform of 1–5 mm-diameter, 10–20 cm-long, sticks. The nest was circular with an internal diameter of 60 mm and external diameter of 135 mm, an inside egg cup diameter of 85 mm, and a cup depth of 45 mm (Fig. 2). The structure was precariously saddled across a 15 mm-diameter, horizontal branch of a small *Palichorea* sp. (Rubiaceae) sapling. No other branches or material supported the nest other than several 2 mm-diameter climbing fern petioles running along the branch. The nest was 1.6 m above ground and located in a depression caused by drainage into a stream 2.5 m away. The depression was 2–3 m deep, 3 m wide at its opening to the stream, and narrowed to an abrupt ending 4.5 m from the stream. The nest was situated at a point where the depression was c.2.5 m wide. The depression was oriented almost due north at 15–20°, well shaded, and throughout the day received sun only briefly through small gaps in the forest canopy. The nest itself was covered directly from above by a single narrow-bladed fern leaf crossing the centre of the nest, c.10 cm above the rim. Above that, within 1.5 m, leaves of the same *Palichorea* sp., as well as a single leaf from a nearby *Geonoma* sp. (Aracaceae) palm, shaded the nest. The nest was observed and videotaped. Adult and nestling activity was videotaped from dusk until dawn for over 100 hours until 13 October. A full analysis of these data is currently in preparation.

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(Solanaceae), and various herbaceous Gesneriaceae and Urticaceae. The canopy was dominated by *Miconia* sp., *Meriania* sp. (Melastomataceae), *Nectandra* sp. (Lauraceae), *Solanum* sp. (Solanaceae) and *Vismia* sp. (Clusiaceae). The overall environment and physical situation was very similar to that recently described from a nest of Bicoloured Antvireo *Dysithamnus occidentalis* from the same area⁴ and for nests of Ochre-breasted Antpitta *G. flavirostris* seen around Volcán Sumaco (HFG unpubl.).

On 30 September a dead branch, laden with epiphytes and connected to the base of the branch supporting the nest, broke and hung below the nest. Subsequently, on 3 October, a brief but heavy rain shower saturated the dead branch and tipped the nest to a 45° angle. On 11 October the nestling, now well-grown and covered in thick red-brown down (Fig. 2), fell from the nest while begging in the presence of an adult. It was discovered the following morning, apparently healthy, on the ground 2 m from the nest. After being replaced into the nest, it remained and was fed by the adults for one hour. Then, while apparently attempting to move to a less precarious position along the branch, the nestling again fell to the ground. It survived at least six hours until dark while continuing to be fed by the adults. The following morning it was found dead 1 m from the nest. From these observations we estimate the nestling period to be 16–17 days.

Vocalisations and adult behaviour

Both adults fed and brooded the nestling. Initially, the adults flushed before the observer was in sight of the nest. Eventually, however, they became more tolerant and would permit several observers to stand quietly, less than 10 m away and in clear view. Their approaches and exits to and from the nest were very inconspicuous and almost invariably from below, using the shelter of a nearby embankment. Even under careful observation, adults were rarely glimpsed more than 2 m from the nest. When alarmed, both sexes would slightly flair the crown feathers. When brooding, both sexes were constantly vigilant and appeared to hunt and retrieve prey from this position. Prey items appeared to include a prevalence of aquatic insects.

Adults in the vicinity of the nest uttered a soft, muted *seeep* call. This was similar to the call made by *G. flavirostris* around its nest at a nearby site, but perhaps a bit sharper (HFG unpubl.). Additionally, when on the ground, the nestling gave repeated, loud scratchy distress calls. On one occasion, when observers were near the nestling, the male approached, moving 2–3 m above ground, giving a repeated, piercing *seeeeup!* alarm note. The call was startlingly loud and resembled in tone the calls given by many soaring raptors.

Adult plumage descriptions

Few recent field guides that include *G. peruviana* provide sufficient detail on the plumage characteristics for swift, reliable separation of the sexes. Here, we review these and point to the most important characteristics that should enable future observers to readily distinguish the sexes under typical field conditions. The observed pair was not sexed, but following Ridgely & Tudor¹⁰, we assume the individual having bolder breast patterning and a more extensive and richer rufous crown to have been the male. Many hours of observation and video were used to create the following descriptions, but it should be borne in mind that only one pair was observed and some characters may vary.

Male. Head: crown rich orange-rufous, extending just onto upper nape, in some lights appearing to be separated from the brown cheeks by a narrow buffy stripe; front and back of eye rimmed with broad, incomplete whitish eye-ring, giving separated effect above and below eye; cheeks brown, similar to mantle; faint rufous-cream highlights on pre-loral area extend from either side of bill base to forecrown, giving indistinct tufted effect. **Throat:** white malar stripe extends to upper chest with blackish-brown submalar stripes starting at bill base, gradually broadening and terminating on throat-sides well above upper chest; central throat white, broadly bordered by submalar stripes. **Breast and belly:** white, upward-curving crescent on upper chest extends to below ear-coverts and cleanly divides throat and malar marks from chest scalloping; almost entire breast down to mid/lower belly blackish, narrowly scalloped white, the only exception being the central breast where there is a roughly 1.5 cm diameter patch which is whiter with narrow black scalloping; white on black scalloping becomes finer on the belly and abruptly gives way to cleaner white with very little black underneath. **Back:** entire back and wings an even, rich medium brown with no fringes to coverts or remiges.

Female. Head: crown rufous-brown, only extending to hindcrown; eye-ring crescents distinctly buffy; cheeks and nape brown, similar to mantle; pre-loral 'tufts' as extensive as male, but buffy, similar in coloration to eye-ring crescents. **Throat:** clean white malar stripe connects with broad white crescent on upper chest; slightly broader blackish submalar terminates at white upper chest crescent. **Breast and belly:** broad, white, upward-curving crescent on upper chest extends below ear-coverts and cleanly divides throat and malar markings from chest scalloping; band across entire upper breast, c.1 cm wide, blackish, thickly scalloped white; more diffuse scalloping continues thickly well down flanks and sides of breast and belly, quickly giving way to clean

white; mid-breast and belly white. *Back*: entire back and wings even medium brown with no fringes to coverts or remiges.

Soft-part colours. Bill of both sexes blackish grey at base, becoming dull yellowish green at tip. The bill has been described as pure blackish in other works^{9,10}. In both sexes, eyes were dark chestnut and legs pale, fleshy grey.

Key features in sex identification

G. peruviana does exhibit marked sexual dimorphism, but until the two sexes are carefully compared, these differences may not be obvious under field conditions. Our detailed observations of adults at the nest, most of which have been recorded on video tape, demonstrate that certain characteristics, in combination or alone, can be used to reliably distinguish between males and females. Starting with the potentially most useful for assigning a bird to a particular sex, we briefly review the four most prominent characters.

Breast pattern. The dark and more complete breast scalloping of the male is probably the best plumage feature. Compared to the female, the male's breast and belly are so overwhelmingly dark and scalloped that confusion is unlikely given a good view. Aside from the flanks, which are more extensively marked, the scalloping is restricted to the upper breast in the female, where it forms an indistinct band or bridge of scalloping.

Submalar stripe. The blackish submalar of the male is about twice as broad as in the female, and widened into an almost elongate triangle, whereas the female's was a more or less even, narrower strip, resulting in much more extensive white throat and adjacent chest crescent.

Crown. Under a variety of light conditions, we observed the differences between the amount and intensity of rufous on the crown. As might be expected, the male's crown was richer orange-rufous, rather than rufous-brown, and more extensive, reaching slightly further onto the hinderown than in the female. The female's crown was still richly coloured, but noticeably less so than in the male.

Eye-ring and pre-loral 'tuft'. Without direct comparison, these two characters can be hard to judge. Nevertheless, the crescentic eye-rings and pre-loral tufts are better demarcated and cleaner white in the male, and appear more diffuse and buffy in the female.

Discussion

Though little is known concerning the breeding of any *Grallaricula*, recent observations of Ochre-breasted Antpitta *G. flavirostris* in Costa Rica suggest a nestling period for this species of 14–16 days⁶, and Schwartz¹¹ estimated 16–17 days for Rusty-breasted Antpitta *G. ferrugineipectus*. These observations support our own estimation of 16–17 days for *G. peruviana*. The nest we observed was most similar to those recently described for *G. flavirostris*⁶ in that it was a neat moss cup rather than the disorganised cup of twigs described for *G. ferrugineipectus*⁹. Additionally, its location in a small depression, as well as its neat mossy cup construction, were very similar those of *G. flavirostris* on the slopes of nearby Volcán Sumaco (HFG unpubl.). Unlike these *Grallaricula* and other antpitta genera (e.g. *Grallaria*, *Hylopezus*, *Pittasoma*), the nest of *G. peruviana* was not in a well-supported location such as a tree fork^{2,5,6,12}. The precariously saddled position over a single branch, however, may not prove to be typical of the species, as it appears to have contributed to the nest failure. We hope this brief note will stimulate interest in supporting future studies of the basic natural history of this and other, increasingly threatened, Neotropical species.

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Figure 1. Nestling Peruvian Antpitta *Grallaricula peruviana*, 29 September 2002 (H. F. Greeney)



Figure 2. Nest of and nestling Peruvian Antpitta *Grallaricula peruviana*, 10 October 2002 (H. F. Greeney).

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Notas sobre la historia natural, distribución y conservación de algunas especies de aves amenazadas del suroccidente de Ecuador

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Cotinga 21 (2004): 18–24

Field observations of 11 globally threatened and near-threatened species are summarised (nine of which are Tumbesian endemics), including some behavioural and ecological notes, as well as vocalisations and new sites for these species. Compiling new field information on these birds will aid the identification of new priority areas and specific activities for the conservation of the highly endangered Tumbesian region.

La región tropical del Ecuador occidental presenta dos zonas biogeográficas que se juntan y sobreponen a lo largo de la Costa y de la base de los Andes. Éstas representan dos de las áreas de endemismo más importantes del Neotrópico: Chocó al norte y Tumbes al sur²². Pese a que ambas regiones se sobreponen geográficamente, su diferenciación ecológica es notable, con bosques muy húmedos en el Chocó y bosques deciduos a muy secos en el Tumbes²² (Fig. 1). Dichas regiones presentan además elevados números de especies amenazadas de extinción o especies generalmente escasas a lo largo de todo su rango de distribución^{7,10}. Pese a esto, el nivel de protección real es deficiente, encontrándose únicamente escasas y aisladas reservas estatales y privadas²⁰.

En el presente artículo resumimos una serie de observaciones de campo de algunas aves amenazadas o casi amenazadas, realizadas entre marzo 1997 y mayo 2001 en varias localidades del occidente ecuatoriano (Fig. 1). Las localidades que investigamos fueron las siguientes: 1) Hacienda Paraíso de Papagayos, prov. Esmeraldas, 00°20'N 79°28'W, c.100 m; 2) vía Puerto Cayo-Jipijapa, prov. Manabí, 01°20'S 80°39'W, 500 m; 3) Río Ayampe, Manabí, 01°40'S 80°47'W, 300 m; 4) Agua Blanca, Parque Nacional Machalilla, Manabí, 01°33'S 80°44'W, 10 m; 5) Las Goteras, P.N. Machalilla, Manabí, 01°32'S 80°46'W, 500 m; 6) altos del Río Chico, Manabí, 01°36'S; 80°48'W, 200 m; 7) Cantalapiedra, Manabí, 01°40'S 80°45'W, 200 m; 8) Tiquibuzo, prov. Bolívar, 02°01'S 79°05'W, 2.200 m; 9) Achiotos, prov. Loja, 04°07'S 80°24'W, 350 m; 10) El Limo, Loja, 03°58'S 80°07'W, 1.100 m; y 11) El Faique, Loja, 04°07'S 80°24'W, 450 m.

En el recuento de especies a continuación incluimos, junto al nombre científico y común de cada especie, las categorías de amenaza en las cuales han sido asignadas, tanto a nivel nacional¹⁰ como global⁷. Los nombres en español corresponden a Ridgely *et al.*¹⁸

Recuento de especies

Aramides wolfi Rascón Montés Moreno EN/VU

Observamos una pareja en dos ocasiones separadas en Paraíso de Papagayos caminando a lo largo de un sendero abierto, rodeado de una ciénaga de pastizales altos y bordes de bosque secundario y en interior de bosque secundario a menos de 50 m de la misma ciénaga (marzo 1998; JAC, JFF). Para su identificación nos basamos en la coloración enteramente gris de su cabeza y parda uniforme en todo el cuerpo¹⁷. Ridgely & Greenfield¹⁷ reportaron previamente la presencia de *A. wolfi* en esta localidad.

Éste es posiblemente uno de los pocos registros recientes de esta especie en Ecuador^{7,17}. En la Reserva Bilsa, cercana a Paraíso de Papagayos, se registró a *A. wolfi* en bosque prístino muy húmedo (K. S. Berg com. pers.), a diferencia de nuestro registro en bosque secundario y humedales alterados. Taylor²³ menciona que *A. wolfi* podría ser incapaz de sobrevivir en parches aislados de bosque húmedo, considerando su probable extinción de la Estación Científica Río Palenque¹³ (aunque aún existen reportes relativamente recientes en esta localidad¹⁷). Pese a que en Paraíso de Papagayos aún pudimos registrar a esta especie, es muy probable que su población no sea viable tomando en cuenta la corta extensión de esta reserva (menos de 40 ha). Es importante considerar, sin embargo, su aparente capacidad de sobrevivir en remanentes de bosque reducidos y quizás incluso en hábitats marginales (P. J. Greenfield com. pers.), como lo sugiere su presencia en Paraíso de Papagayos y en Río Palenque. En la actualidad Paraíso de Papagayos al parecer ha sido deforestada por completo.

Aratinga erythrogenys Perico Caretirrojo VU/NT

En la localidad andina de Tiquibuzo registramos a esta especie diariamente en numerosas bandadas de 5–80 individuos volando entre parches aislados de bosque secundario dominados por palmas de cera *Ceroxylon cf. parvifrons*. Estas bandadas visitaban

campos de maíz en los cuales usualmente se congregaba más de un grupo, tanto para alimentarse como para descansar en sitios de reposo comunales, como ha sido reportado por Juniper & Parr¹² (septiembre 1999; JFF, MMV). Éste es uno de los registros más altos de *A. erythrogegens* en Ecuador, junto con Utuana, prov. Loja (2.400 m)^{4,17}. La mayoría de registros de esta especie se concentra por debajo de los 1.300 m, y su presencia sobre esta altitud ha sido sugerida como ocasional o estacional¹⁷.

En las localidades de Achiotos y El Faique, así como en toda el área comprendida entre estos sitios (alrededor de las poblaciones de Mangaurquillo y Cañaveril), *A. erythrogegens* es una especie frecuente (observamos bandadas de 2–15 individuos diariamente), pero está sometida a una fuerte presión por el saqueo de nidos y la captura de juveniles y adultos para mascotas y para su comercialización hacia ciudades cercanas como Machala, Loja, Guayaquil o Tumbes¹⁹ (abril y mayo 2001; JFF, TS, EB). Aunque es una especie frecuente en el área, sus poblaciones han disminuido en los últimos años (según los pobladores locales).

Brotogeris pyrrhopterus Perico Cachetigris VU/EN
En Achiotos, El Faique y la población de Mangaurquillo observamos diariamente pocas bandadas, de 4–20 individuos, volando sobre bosques alterados y poco disturbados, así como sobre zonas agrícolas y habitadas (abril y mayo 2001; JFF, TS, EB).

De las cuatro especies de Psittacidae registradas en el área—*Aratinga erythrogegens*, *B. pyrrhopterus*, *Forpus coelestis* y *Pionus chalcopterus* (esta especie visita estacionalmente el área según los habitantes locales)—*B. pyrrhopterus*, conocido localmente como Periquito Macareño, es la menos común¹⁹. Existe fuerte presión sobre esta especie por su intensa captura para mascota (hay parejas e individuos solitarios de *B. pyrrhopterus* en la mayoría de casas y fincas del área), así como para el tráfico ilícito, en particular hacia Loja, Machala y Tumbes.

Debido posiblemente a su capacidad de tolerar hábitats degradados, *B. pyrrhopterus* fue considerada inicialmente como casi amenazada⁸, pero posteriormente fue ascendida a En Peligro a escala global⁷ y Vulnerable a nivel nacional¹⁰. La presión de la captura y el tráfico son al parecer bastante intensos (es una de las especies silvestres más comunes como aves de jaula en Ecuador^{4,5,24}, obs. pers.). Esto, junto al grado de alteración de los ecosistemas deciduos y semideciduos de la región Tumbesina, la califica como una especie en seria declinación y amenaza de extinción (ver además⁵). A pesar de que existen poblaciones en áreas urbanas y agrícolas, el nivel de presión al que está sometido *B. pyrrhopterus* justificaría su categorización como

Tabla 1. Datos morfométricos de un individuo de *Syndactyla ruficollis* y de un individuo de *Hylocryptus erythrocephalus* capturados, respectivamente, en El Faique y Achiotos, Loja, Ecuador.

Medidas (mm)	<i>Syndactyla ruficollis</i>	<i>Hylocryptus erythrocephalus</i>
Culmen	21.5	28.8
Ancho del pico (base)	5.6	4.8
Alto del pico (base)	6.1	7.1
Tarso	22.7	27.0
Ala (aplanada)	83.0	90.0
Cola	78.3	85.6
Peso (g)	34.0	50.0
Muda	leve	avanzada

especie Vulnerable. Es recomendable realizar estudios puntuales y monitorear el estado y tendencias de conservación de las poblaciones de esta especie¹⁷, así como ejercer un control más estricto sobre la posesión ilegal de mascotas silvestres.

***Syndactyla ruficollis* Limpiafronda Cuellirrufa EN/VU**

Capturamos un individuo en El Faique, en sotobosque denso de bosque deciduo poco alterado (Fig. 2). Este registro, uno de los pocos reportados en bosque deciduo, representa una extensión altitudinal de alrededor de 200 m^{6,16,17} (mayo 2001; JFF, TS, EB). Presentamos sus medidas morfométricas en la Tabla 1.

Existen escasas localidades de registro de *S. ruficollis* en Ecuador, la mayoría de ellas ubicadas en la región piemontana del occidente de la provincia de Loja y zonas adyacentes de El Oro^{6,17}. En la región suroccidental la deforestación ha sido notablemente alta, produciendo un elevado nivel de fragmentación de los bosques²⁰. En la actualidad existen parches de corta extensión, usualmente aislados entre sí, en los cuales aún es posible encontrar poblaciones remanentes de especies de interior de bosque como *S. ruficollis*⁴. De las escasas localidades donde habita *S. ruficollis*, únicamente dos, Utuana y El Tundo, han sido designadas recientemente como reservas privadas^{11,21}. *S. ruficollis* está presente en bosques deciduos en pequeños números¹⁷; así, es de vital importancia la protección de áreas piemontanas húmedas para su conservación. Si bien en el área de El Faique existen aún importantes extensiones continuas de bosques poco alterados, estos son deciduos y semideciduos, por lo que las poblaciones de *S. ruficollis* pueden no ser muy numerosas. Existe únicamente un reporte adicional de este tipo de bosques en el país (Tambo Negro⁴).

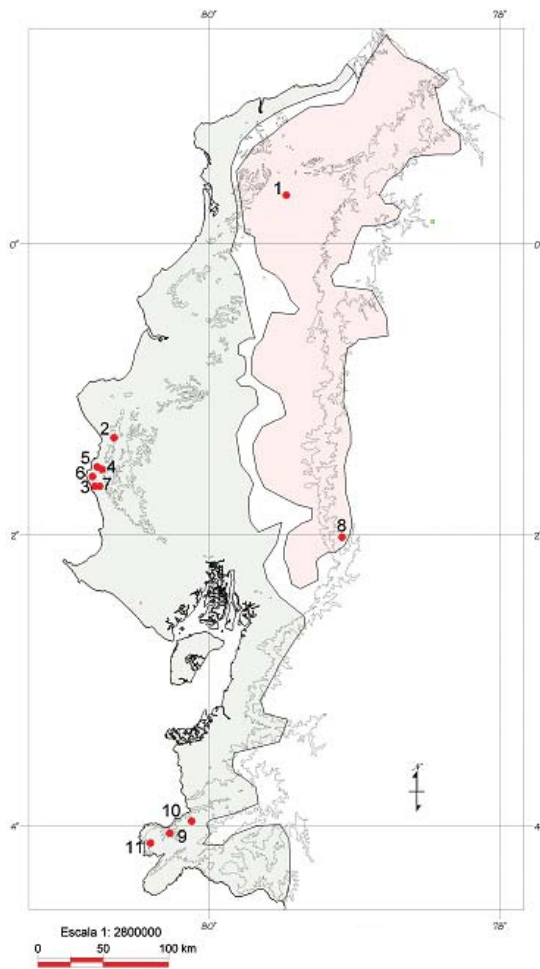


Figura 1. Mapa de la costa del Ecuador mostrando las localidades de muestreo. La numeración de las localidades se presenta en la introducción. Se muestran dos curvas altitudinales a 400 y 1.400 m. Además están marcadas, de manera aproximada, las áreas de endemismo de aves (EBA) Chocó en rojo claro y Tumbes en verde claro.



a



b



c



d

Figura 2. Especies amenazadas de extinción capturadas en tres localidades del área de endemismo tumbesina en Manabí y Loja, Ecuador. a) *Hylocryptus erythrocephalus*, interior de bosque deciduo alterado, Achiotes, Loja (T. Santander); b) *Syndactyla ruficollis*, interior de bosque deciduo poco disturbado, El Faique, Loja (J. F. Freile); c) *Lathrotriccus griseipectus*, interior de sembrío mixto de sombra, Río Chico, Manabí (J.A. Chaves); d) *Carduelis siemiradzki*, borde de sembrío mixto de sombra, Río Chico, Manabí (J. A. Chaves)

Tabla 2. Datos morfométricos de dos individuos de *Lathrotriccus griseipectus* capturados en Río Chico, Manabí y de un individuo capturado en Achiotos, Loja, Ecuador.

Medidas (mm)	Río Chico 1	Río Chico 2	Achiotos
Culmen	12	11.7	11.5
Ancho del pico (base)	6.4	7.2	5.3
Tarso	17.6	16.4	14.4
Ala (aplanada)	59.6	58	60.0
Cola	57.4	55.3	53.5
Peso (g)	11	11.5	8.0
Muda	no	no	no

Lathrotriccus griseipectus **Mosquerito Pechigris**
VU/VU

Capturamos dos individuos en una red de neblina colocada al interior de un sembrío mixto de sombra

(café y plátano) en Río Chico (Fig. 2). El sembrío se encuentra entre una zona más extensa de bosque secundario y áreas abiertas a los costados del río (octubre 1999; JFF, JAC). Presentamos los datos morfométricos tomados en la Tabla 2. La coloración de la maxila en un individuo era rosado amarillento, mientras que en el otro era amarillo pálido. No pudimos determinar si esta diferencia tiene relación con la edad o sexo, y no existen reportes previos en la literatura sobre esta variación^{16,17}.

En Achiotos capturamos un juvenil en sotobosque de bosque deciduo alterado, en un área dominada por árboles de faique, *Acacia macracantha*. En el área el sotobosque está muy alterado por el pastoreo y pisoteo de chivos y vacas principalmente. Pese a esto, *L. griseipectus* aparentemente sí se reproduce en el área¹⁹. En El Faique, por su parte, observamos a esta especie en dos ocasiones en borde de bosque poco disturbado

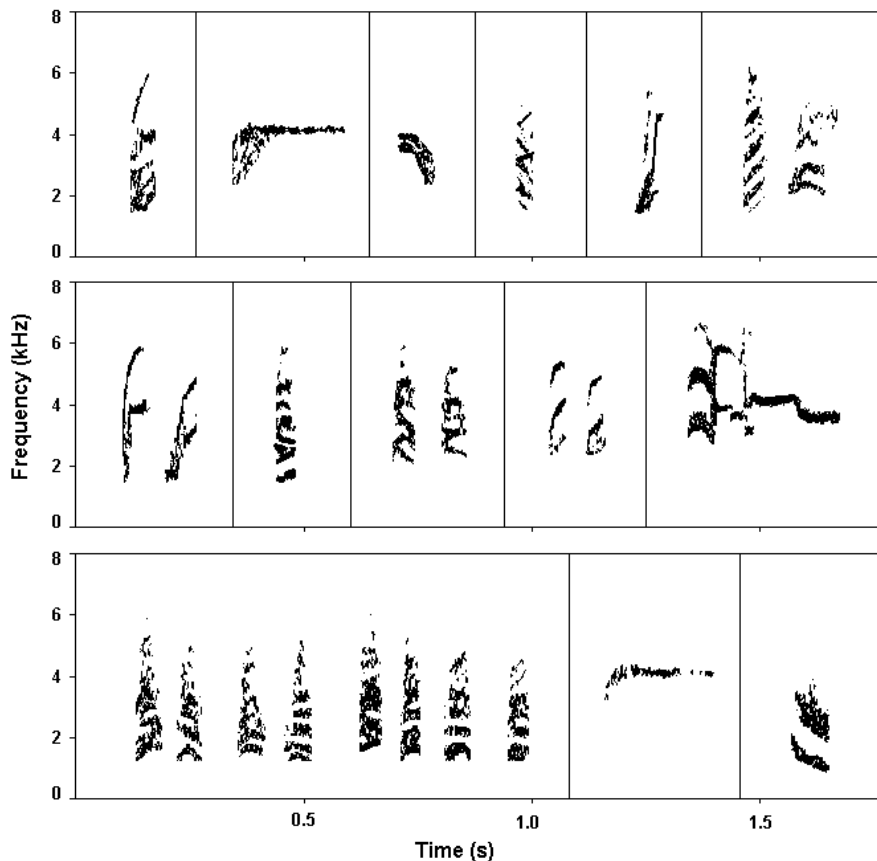


Figura 3. Sonograma de una serie de vocalizaciones (perchando y en vuelo) de una bandada de *Carduelis siemiradzkyi* en Río Chico, Manabí, Ecuador (grabado por J. F. Freile; preparado por Hans Slabbekorn, Center for Tropical Research, San Francisco State University).

Tabla 3. Datos morfométricos de dos individuos de *Carduelis siemiradzkii* capturados en Río Chico, Manabí, Ecuador.

Medidas (mm)	macho	hembra
Culmen	10	9.1
Ancho del pico (base)	5.9	5.9
Alto del pico (base)	6.5	5.9
Tarso	16	15.9
Ala (aplanada)	54.4	56.8
Cola	33.6	33.2
Peso (g)	11	11

(abril 2001; JFF, TS, EB). Estudios previos en la región tumbesina mencionan que esta especie habita particularmente en interior de bosques deciduos a húmedos y reportan escasos registros en áreas alteradas^{1,13}. Su presencia en hábitats alterados (reportada en este artículo por ejemplo) podría indicar un moderado nivel de sensibilidad a las alteraciones en su hábitat, como lo han sugerido previamente Parker *et al.*¹⁴.

***Carduelis siemiradzkii* Jilguero Azafranado**
VU/VU

En Río Chico observamos bandadas de hasta 15–20 individuos en un sembrío mixto de sombra (café y banano) y en bordes de bosque secundario. Los grupos estaban cruzando entre parches de bosque y alimentándose de las semillas de una pequeña herbácea no identificada de la familia Asteraceae, que crecía en zonas abiertas de pastizal. Grabamos vocalizaciones como *chiquip-chic-chic* típicas de los *Carduelis* (Fig. 3). Adicionalmente, capturamos un macho y una hembra en una red de neblina de borde de bosque secundario (Fig. 2). Presentamos sus datos morfométricos en la Tabla 3 (octubre 1999; JFF, JAC).

Pese a que *C. siemiradzkii* es capaz de ocupar hábitats degradados, como pastizales, sembríos, bordes de bosques, márgenes de caminos, áreas de maleza y matorrales^{7,8,17}, es posible que sea dependiente del bosque deciduo durante al menos una parte de su ciclo anual, por lo que está considerado como Vulnerable por la elevada deforestación y fragmentación de este tipo de bosques a todo lo largo de su pequeño rango de distribución⁷. Ridgely y Greenfield¹⁷ sugieren considerarla únicamente como Casi amenazada, pero es posible que califique como Vulnerable considerando principalmente su elevada restricción geográfica^{15,17}, el limitado número de localidades de registro¹⁷ y su probable dependencia parcial de áreas de bosque (ver además¹⁰).

Otras especies registradas

***Crypturellus transfasciatus* Tinamú Cejiblanco**
VU/NT

Registrado en interior de bosque deciduo alterado en Agua Blanca (septiembre 1999; JFF, MMV). En Achiotés, por su parte, registramos a *C. transfasciatus* con frecuencia diaria, pero en números bajos, en bosque alterado y matorral en regeneración. Asimismo, en El Faique lo registramos a diario, pero esta vez fue más numeroso y estuvo en interior de bosque semideciduo poco alterado con sotobosque denso. Aquí estimamos que tiene una densidad aproximada de 0.2 individuos por ha (un individuo ocupaba un área de 5 ha aproximadamente) (abril y mayo 2001; JFF, TS, EB). Adicionalmente, en Río Chico escuchamos y grabamos varios individuos en interior de bosque secundario en regeneración (octubre 1999; JFF, JAC). Previamente ha sido registrado en la zona de Cerro San Sebastián y otras localidades del Parque Nacional Machalilla^{6,17}.

***Leucopternis occidentalis* Gavilán Dorsigris**
EN/EN

Registramos a esta especie en tres localidades en los alrededores del P. N. Machalilla: vía Puerto Cayo–Jipijapa, Río Ayampe y Río Chico (septiembre y octubre 1999; JFF, MMV, JAC). En las tres localidades *L. occidentalis* se encontraba en áreas de bosque secundario, bordes de bosque y zonas alteradas adyacentes (pastizales y cultivos). Adicionalmente, en una visita a la localidad de El Limo registramos cuatro individuos de *L. occidentalis* volando sobre un área de aproximadamente 200 ha de bosque semideciduo piemontano (febrero 2001; JFF).

***Ortalis erythroptera* Chachalaca Cabecirrufa**
VU/VU

Registramos a esta especie en cuatro localidades: Paraíso de Papagayos, en el interior de bosque secundario alto (marzo 1998; JFF, JAC); Cantalapiedra, en bosque secundario y primario (octubre 1999; JFF, JAC); Achiotés, en parches de bosque bastante alterado; y El Faique, en bosque semideciduo más continuo (abril y mayo 2001; JFF, TS, EB). Basados en los datos existentes y en nuestra propia experiencia de campo, consideramos que los registros de la presencia de *O. erythroptera* en hábitats de sabana y matorrales secos, reportados por del Hoyo⁹, son inadecuados (véase además⁷).

Hylocryptus erythrocephalus
Rascahojas Capuchirrufa VU/VU

En Las Goteras observamos una pareja forrajeando en un borde denso de bosque, entre arbustos y lianas hasta 1 m del suelo, dentro de una bandada mixta

(septiembre 1999; JFF). Por otra parte, un individuo fue capturado en Achiotes (Fig. 2), en interior de un bosque alterado con dominancia de faique, *Acacia macracantha*, y con sotobosque degradado por la presencia de chivos, cerdos y vacas (abril 2001; JFF, TS, EB). Presentamos las medidas morfométricas en la Tabla 1.

Atila torridus **Atila Ocráceo** VU/VU

En Río Ayampe observamos un individuo perchando y alimentándose en el subdosel de bosque secundario viejo, junto a una bandada mixta (septiembre 1999; JFF, MMV). Pese a que Collar *et al.*⁸ mencionan que *A. torridus* no se encuentra en asociación a bandadas mixtas, nuestras observaciones concuerdan con otros estudios realizados en la región tumbesina (ver Parker & Carr¹³).

Discusión

La mayoría de las especies tratadas en este artículo son casi endémicas del país^{3,17,22}. Así, la mayor responsabilidad sobre su conservación recae sobre las autoridades y organizaciones de conservación del Ecuador. Aunque se han publicado varios trabajos sobre las aves amenazadas y endémicas de la región Tumbesina (e.g. Best & Clarke², Best & Kessler³, Williams & Tobias²⁴) es importante seguir recopilando información ecológica y de distribución. Esto permitirá conocer su estatus actual y potencial, así como diseñar estrategias de conservación adecuadas para estos ecosistemas, que han sido identificados como los más amenazados del país, sobre los cuales se deben enfocar esfuerzos inmediatos de conservación²⁰. En la actualidad se estima que sobrevive, en promedio, alrededor de 20% de la cobertura original de las distintas formaciones vegetales de bosque decíduo y semidecíduo del occidente de Ecuador, mismas que están altamente fragmentadas y sometidas a un nivel muy alto de presión antropogénica²⁰. A esta estimación es importante tomarla con precaución porque se basó en información satelital, misma que no puede mostrar el estado de alteración de la vegetación por debajo del dosel del bosque. En los bosques secos tumbesinos la destrucción del sotobosque por pisoteo y forrajeo de animales introducidos (chivos, cerdos, burros y vacas) es una amenaza grave³. Pese a esto, muy poca extensión se halla protegida, como en el P. N. Machalilla, la Reserva Ecológica Manglares-Churute y en escasas reservas privadas²⁰. La adquisición de extensiones importantes de bosque seco, decíduo, semidecíduo y nublado es, sin lugar a dudas, una estrategia esencial para proteger los escasos y amenazados remanentes de los ecosistemas de la región.

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More distributional data on Ecuadorian birds

Ottavio Janni

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Se presenta nueva información para 12 especies de aves en Ecuador, en base a 102 días de trabajo de campo entre 1994 y 1999, la mayoría en las provincias de Loja y Zamora-Chinchiipe. De interés particular son los primeros registros de *Ixobrychus exilis* y *Gallinula chloropus* para la región sur-andina, y el primer registro de *Phaeomyias murina* para el suroriente.

Howell² recently updated distributional data in Ridgely & Greenfield^{4,5} for 13 species in Ecuador. Here I present additional distributional data for 12 species of Ecuadorian birds which complements information presented by Ridgely & Greenfield^{4,5}. My data are derived from 102 days of field work between 1994 and 1999, much of it in Loja and Zamora-Chinchiipe provinces. Several interesting parallels can be drawn between data presented here and those of Howell², especially in the expansion of several non-forest species to higher elevations of Zamora-Chinchiipe province.

Least Bittern *Ixobrychus exilis*

Ridgely & Greenfield⁴ list its status as 'complex and still imperfectly known', and cite only two highland records, both from Quito. On 11 July 1996, an injured individual was brought to Fundación Arcoiris in Loja, Loja province, having been captured by children on the banks of the río Malacatos within the city itself. This appears to be the first record in the southern highlands of Ecuador.

Grey-headed Kite *Leptodon cayanensis*

Ridgely & Greenfield⁴ list it as occurring to 900 m in Ecuador. I observed an adult at close range just above the town of Mindo, Pichincha province, on 22 July 1996, at c.1,300 m. This appears to be an altitudinal range extension within Ecuador, although the species had already been listed for the Mindo area³ and occurs to 2,200 m elsewhere in its range¹.

Common Moorhen *Gallinula chloropus*

I observed eight individuals in a small, reed-fringed pond near Zalape, just north of Loja city, Loja province, at c.2,000 m, on 2 July 1995. This appears to be the first record for the southern highlands⁴.

Little Woodstar *Chaetocercus bombus*

The only records for the east slope of the Andes cited by Ridgely & Greenfield⁴ are a handful of early-20th-century specimens. On 5 October 1999, Pablo Andrade and I watched a female feeding in a flowering *Inga* tree between Zamora and the río Bombuscaro entrance to Podocarpus National Park, Zamora-Chinchiipe province. It was observed down

to 3 m and identified on the basis of the tiny size (quite noticeably smaller than a White-bellied Woodstar *C. mulsant* feeding at the same *Inga* tree), rufous throat and underparts (paler on the belly but completely lacking any white), green upperparts including the rump, rather noticeable whitish supercilium merging into the buffy neck-sides, conspicuous white flank patch, and rufous tail with black subterminal band. These field marks eliminate all other hummingbirds except the very similar female Gorgeted Woodstar *C. heliodor*, which occurs at higher elevations and has not been recorded in southern Ecuador. Those characters noted, especially the white supercilium and the paler belly centre, appear more applicable to Little Woodstar.

Crimson-crested Woodpecker *Campephilus melanoleucus*

Ridgely & Greenfield^{4,5} do not indicate the species for the Marañón Valley in Ecuador. One along the río Isimanchi, c.3 km east of Isimanchi town, Zamora-Chinchiipe province, on 13 July 1996, therefore appears to be the first area record.

Mouse-coloured Tyrannulet *Phaeomyias murina*

Pablo Andrade and I observed one of this species near La Fragrancia on the Loja–Zamora road, Zamora-Chinchiipe province, about 10 km north-west of Zamora at c.1,200 m, on 12 October 1999. We noted the small size, mostly upright posture, small bill, faint white supercilium mostly in front of the eye, faint dark line on the lores, grey-brown crown and nape, brown back, dark wings with two pale buff wingbars (the lower being more prominent), greyish breast with hints of streaking and pale yellowish wash to the belly. Ridgely & Greenfield⁴ note only four records in Ecuador, all from the north-east, and none above 600 m. This appears to be the first record in the south-east and an intra-country altitudinal range extension. Its occurrence in Zamora is most likely due to increasing deforestation, as evidenced by recent local records of Pearl Kite *Gampsonyx swainsonii* and Caquetá Seedeater *Sporophila [americana] murallae*, which have also recently been recorded farther south and at higher elevations than previously known in Ecuador².

Yellow-throated Spadebill *Platyrinchus flavigularis*

One observed in a mixed-species flock in subtropical cloud forest below Quebrada Honda, Podocarpus National Park, Zamora-Chinchipe province, on 10 June 1995, at c.1,900 m, is among the few Ecuadorian records, but at an expected locality and altitude for this species⁴.

Baird's Flycatcher *Myiodynastes bairdii*

A single well watched at the El Tundo reserve, near Sozoranga, Loja province, on 10 July 1996 was at c.1,600 m, an altitudinal range extension based on Ridgely & Greenfield⁴, who list it only to 1,000 m.

Andean Slaty-thrush *Turdus nigriceps*

A male at Río Bombuscaro, Podocarpus National Park, Zamora-Chinchipe province, on 16 October 1999 appears to be only the third record for the east slope of the Andes in Ecuador, and was at a lower altitude than previously recorded, c.1,000 m, versus the 1,400 m lower altitudinal limit reported for Ecuador⁴. It was identified on the basis of the overall slate-grey plumage, yellow bill, white throat with black stripes, dark eyes, somewhat paler grey underparts and white belly, and size and shape. The dark eyes, yellow bill, throat pattern and size eliminate the only possible confusion species, Slaty-backed Nightingale-thrush *Catharus fuscater*.

Bay-breasted / Blackpoll Warbler *Dendroica castanea/D. striata*

One in a mixed-species flock near Pedro Vicente Maldonado, Pichincha province, on 30 November 1998 was not specifically identified, but was either the second *D. striata* on the west slope of the Andes in Ecuador or the fourth *D. castanea* in the country⁴.

Swallow Tanager *Tersina viridis*

Ridgely & Greenfield⁴ state it to be 'unaccountably scarce in the south-east' with 'virtually no recent reports' from the Zamora area. In October 1999

Pablo Andrade and myself observed this species twice between Zamora and the río Bombuscaro entrance to Podocarpus National Park, Zamora-Chinchipe province: one on 3 October and two on 7 October. As with *Phaeomyias murina*, and the records of *Gampsonyx swainsonii* and *Sporophila [americana] murallae* of Howell², it appears likely that increased deforestation has assisted the species' spread to the Zamora area, although these occurrences may alternatively reflect its propensity to wander⁴.

Slate-coloured Seedeater *Sporophila schistacea*

Apparently rare and local in Ecuador, without a well-defined pattern of occurrence⁴. An adult male at Tinalandia, Pichincha province, on 13 July 1995, is additional to the few recent records and a new locality, though well within its Ecuadorian range⁴.

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Notes on the breeding biology of Ladder-tailed Nightjar *Hydropsalis climacocerca* in Bolivia

Aidan Maccormick and Ross MacLeod

Cotinga 21 (2004): 28–30

Hydropsalis climacocerca es bastante común a lo largo del centro de Sudamérica, pero poco se conoce sobre sus períodos de reproducción. Presentamos notas sobre la biología reproductiva de *H. climacocerca* de Cochabamba, Bolivia, en septiembre y octubre de 1999 y 2001, incluyendo la primera descripción del polluelo y describimos los despliegues acústicos. También describimos un despliegue visual único, no reportado para el género *Hydropsalis*.

The Ladder-tailed Nightjar *Hydropsalis climacocerca* is found throughout central South America, from southern Venezuela and the Guianas south to Bolivia, and south-east Colombia and eastern Ecuador east to central Brazil¹. Throughout its range the species inhabits forest, open woodlands with grassland and especially sandy riverbanks, from sea level to 500 m^{1,3}. Despite being widespread and reasonably common in suitable habitat, the breeding biology of *H. climacocerca* is poorly known. Its breeding season is thought to be late July–August in Colombia¹, and June–September² and December–February in Brazil¹. Here we present notes on the courtship behaviour, vocalisations and nesting period of *H. climacocerca* in Parque Nacional Carrasco (PNC), Cochabamba, Bolivia, and describe the downy young.

Courtship behaviour

During August 1999, courtship-display flights by male *H. climacocerca* were observed at the confluence of the río Rico and the río San Mateo (17°25'S 64°15'W, 350 m). The locality consists of a small tributary (the río Rico), c.5 m wide, entering the main river (the río San Mateo), which is c.20 m wide and bordered by primary and disturbed humid forest. As water levels were low, large stretches of flat sandbanks and rocks lay exposed, with relatively few vegetated areas, these being dominated by stands of *Gynerium sagittatum*. During daylight, adult *H. climacocerca* were regularly flushed from these sand and rock banks. Between 18h00 and 19h30 on 7–8 September, up to seven individuals were observed in flight over the río Rico or on its banks. Perched birds often gave a distinctive sucking *sipp* call (see Vocalisations). On several occasions, males performed low courtship flights over the water. The courtship flights began with 1–2 males pursuing a single female in flight. The male(s) flew erratically behind and above a female, normally at a distance >1 m, occasionally emitting an excited *skeet*. The male(s) displayed by lowering and fanning their tails while performing quick half-flaps of their raised wings (see Fig. 1). This wing display produced a whistling/humming noise and caused the males

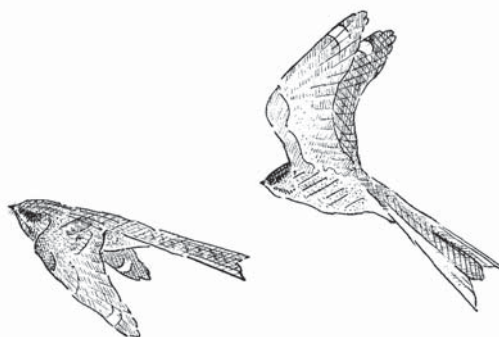
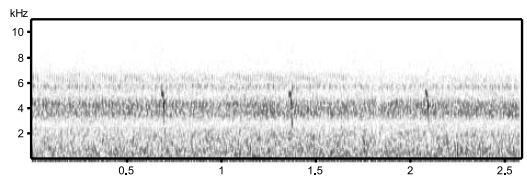


Figure 1. Male and female Ladder-tailed Nightjar *Hydropsalis climacocerca* in flight (Aidan Maccormick)

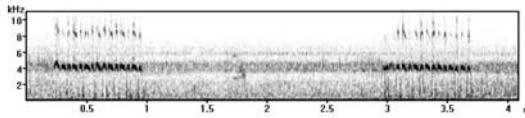
to hover briefly. The male(s) sometimes immediately re-approached the female, repeating both wing display and calls. These displays were observed after a period of heavy rain and in strong moonlight. Both the *skeet* calls and courtship-display wing noises were heard on 4 October 2001 at Valle del Luna (17°17'S 64°03'W, 450 m). However, courtship-displays were not observed at this site. The courtship-display described above differs from that of Scissor-tailed Nightjar *Hydropsalis brasiliiana*, the only other member of the genus *Hydropsalis*¹.

Vocalisations

Both members of the genus *Hydropsalis* give a characteristic 'song' of repeated *tsip* or *chit* notes¹. This type of vocalisation for *H. climacocerca* was



Sonogram 1. *Sipp* call or song of Ladder-tailed Nightjar *Hydropsalis climacocerca*, río Leche, Parque Nacional Carrasco, Cochabamba, Bolivia, 7 October 2001. Recorded by Aidan Maccormick using a Sharp MD-SR75 recorder and Sennheiser ME80 microphone, and analysed using Avisoft SASLab Light.



Sonogram 2. Courtship-display wing noise of Ladder-tailed Nightjar *Hydopsalis climacocerca*, río Rico, Parque Nacional Carrasco, Cochabamba, Bolivia, 8 September 1999. Recorded by Aidan Maccormick using a Sony TCM5000 recorder and Sennheiser ME80 microphone, and analysed using Avisoft SASLab Light.

recorded within PNC from 25 July until 19 September 1999, and as late as 7 October, in 2001. The repeated *sipp* is given from a ground perch in open sandy or rocky areas. The notes are repeated every 0.8–1.5 seconds for a duration of several seconds to over a minute, as shown in sonogram 1. Sonogram 2 presents two mechanical wing sounds and a single *skeet* call (see Courtship behaviour).



Figure 2. Nest of Ladder-tailed Nightjar *Hydopsalis climacocerca* with eggs, río Leche, Parque Nacional Carrasco, Cochabamba, Bolivia, 7 October 2001 (Aidan Maccormick)



Figure 3. Incubating female Ladder-tailed Nightjar *Hydopsalis climacocerca*, río Leche, Parque Nacional Carrasco, Cochabamba, Bolivia, 7 October 2001 (Aidan Maccormick)



Figure 4. Newly hatched nestlings of Ladder-tailed Nightjar *Hydopsalis climacocerca*, río Rico, Parque Nacional Carrasco, Cochabamba, Bolivia, 20 September 1999 (Ross MacLeod)



Figure 5. Older nestling Ladder-tailed Nightjar *Hydopsalis climacocerca*, río Leche, Parque Nacional Carrasco, Cochabamba, Bolivia, 7 October 2001 (Aidan Maccormick)

Nesting

During field work in 1999 and 2001 within PNC a total of four nests was found, two containing eggs and two with nestlings. All were situated on exposed rocky riverbanks, the actual nest sites being shallow depressions or scrapes in sand or fine gravel (see Fig. 2). In all cases a small fern or other plant was present within 20 cm of the nest. On 8 September 1999, beside the río Ichoa (17°25'S 64°15'W, 350 m), an incubating female was disturbed from a nest containing two cream-coloured eggs marked with brown scrawls. This nest was found abandoned on 18 September following heavy rains. Another female was found incubating two eggs on 4–7 October 2001 at Valle del Luna (Fig. 3). Newly hatched nestlings covered in pale grey down speckled dark grey and brown, and still damp, with the egg shells nearby, were located on 20 September 1999 at Estero Glasgow (17°25'S 64°21'W, 400 m) (Fig. 4). An older nestling was observed at Valle del Luna on 5 and 7 October 2001 (Fig. 5).

Concluding remarks

Although *H. climacocerca* is both relatively widespread and not uncommon, these records extend our knowledge of breeding periods within South America and provide the first published details of breeding seasons within Bolivia. The aerial courtship display we witnessed had not been previously reported for the genus *Hydropsalis*. Likewise, we provide the first description of the downy chicks.

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Additional notes on eight bird species from Belize

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Con el fin de contribuir hacia el conocimiento de la avifauna de Belice se presenta información adicional sobre ocho especies: *Phoenicopterus ruber*, *Vermivora celata*, *V. ruficapilla*, *Piranga roseogularis*, *Amaurospiza concolor*, *Sicalis luteola*, *Carduelis psaltria* y *Dactylortyx thoracicus*. Un mapa del país indica las áreas en donde se realizaron los siguientes reportes.

Russell¹⁷ provided the first comprehensive report on the avifauna of Belize. Included was a detailed summary of all ornithological work conducted in Belize since 1845. Subsequently many have contributed new records and/or distributional information to our knowledge and understanding of the country's avifauna^{2–5,7–10,12,15,16,18,19}. In addition, Wood *et al.*²⁰, Garcia *et al.*⁶ and Miller & Miller^{13,14} produced checklists which the number of species varied from 533 to 556 to 540 to 549¹¹. Jones & Valley¹¹ recently published what is considered to be the most comprehensive and up-to-date avian checklist for Belize, documenting 566 species. The following is intended to augment the existing documentation.

The findings reported here are based on research conducted in the country since November 1997 by the staff of the Birds Without Borders-Aves Sin FronterasSM (BWB-ASF) project. OAF, WM and MT are citizens of Belize, and VDP is the project's international coordinator based in Wisconsin, USA; all have conducted avian research in Belize on behalf of BWB-ASF since November 1997. GA worked for BWB-ASF in 1999–2001, and participated in the research for c.2 months in Belize (February 2000 and March 2001). Intensive nest searching and monitoring, point counts, mist-netting and bird banding, censuses and behavioural and opportunistic observations were used to provide documentation for the following reports.

Species accounts

Greater Flamingo *Phoenicopterus ruber*

Jones & Valley¹¹ listed *P. ruber* as occurring in the Corozal, Orange Walk, Belize and Toledo districts but noted only 1–2 records from each. Wood *et al.*²⁰ and Miller & Miller¹⁴ considered it very rare and as occurring in mangroves and cayes. On 28 March 2001, during a survey flight over Aguacaliente Swamp, Toledo District, GA sighted two adults. GA and OAF observed the birds for a minimum of two minutes as they flew in an east–west direction at c.90 m above sea level. They were identified by their overall size, bright pink colour and black primaries and secondaries. This is the southernmost record in Belize and the first from Toledo District.

Singing Quail *Dactylortyx thoracicus*

Jones & Valley¹¹ listed *D. thoracicus* as a rare permanent resident occurring in Orange Walk and Cayo Districts and on Ambergris Caye. They further noted that it is not well known and can be easily overlooked. During 286 days of field work around Chaa Creek, western Cayo District (17°06'N 89°04'W), in November 1997–February 2002, BWB-ASF researchers observed or heard *D. thoracicus* on 107 (37.4%) days. Based on these observations, it appears that this species is fairly common in this area.

Orange-crowned Warbler *Vermivora celata*

On 16 December 2001, an individual of unknown sex was trapped along the south bank of the Sibun River within Runaway Creek Nature Preserve, Belize District (17°21'N 88°29'W; 38 m). The bird was captured in an elevated mist-net that sampled

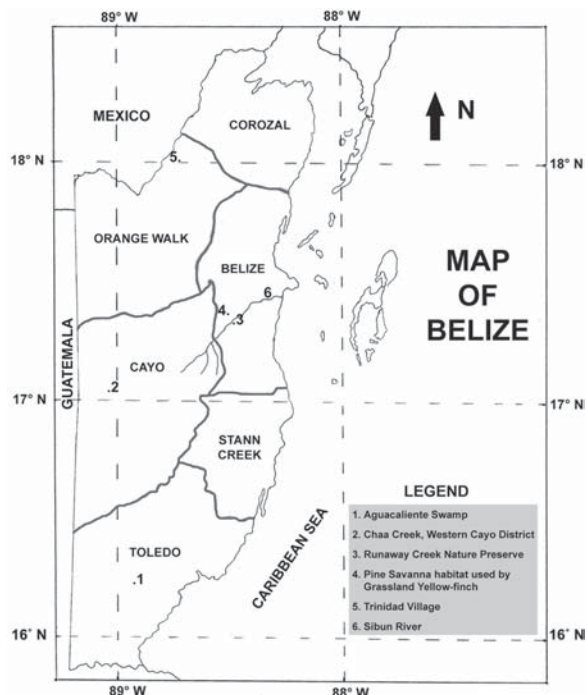


Figure 1. Map of Belize showing the various localities mentioned in the text

vegetation strata 4–6 m in height¹. It was identified as *V. celata* on size, morphology, yellow undertail-coverts, greyish head, presence of eyeline, indistinct eye-ring and olive upperparts. Contrasting wing-coverts, tapered primary-coverts and tapered rectrices indicated a second-year. This is considered the only credible documentation of *V. celata* in Belize (H. L. Jones pers. comm. 2002).

Nashville Warbler *Vermivora ruficapilla*

Jones & Valley¹¹ listed *V. ruficapilla* as occurring in Orange Walk, Belize, Cayo and Toledo districts but noted only 1–2 records in each. On 14 January 1999, while conducting point counts in a grapefruit *Citrus paradisi* plantation, in western Cayo District (17°05'N 89°05'W; 118 m) OAF and WM observed two individuals foraging on a dying grapefruit tree at c.07h30.

Rose-throated Tanager *Piranga roseogularis*

On 29 January 1998, while conducting point counts, OAF and MT observed an adult male *P. roseogularis* for over ten minutes at 17°06'N 89°05'W (226 m), in western Cayo District. A nasal mewing, very similar to that described by Howell & Webb⁸, was heard during the first few minutes of the observation. Point counts were conducted on 32 days along this transect and additional field work was conducted in the general area on 254 days without further records of *P. roseogularis*. This represents the first record for Cayo District and the southernmost record of the species in the Yucatán Peninsula.

Blue Seed-eater *Amaurospiza concolor*

Howell *et al.*⁷ and Valley & Aversa¹⁸ provided records of *A. concolor* within Belize District. Jones & Valley¹¹ listed it as uncommon there and as being known from only 1–2 records in Orange Walk District. In 2000–2002, OAF and MT banded five individuals at a location (17°21'N 88°29'W, 38 m)



Figure 2. Blue Seed-eater *Amaurospiza concolor*, Runaway Creek Nature Preserve, Belize, March 2000 (Gene Albanese)



Figure 3. Lesser Goldfinches *Carduelis psaltria*, foraging near Trinidad village, Belize, December 2001 (Wilver Martinez)

on the south bank of the Sibun River within Runaway Creek Nature Preserve, Belize District. The microhabitat was dominated by spiny bamboo *Guadua longifolia* and transitioned into a secondary broadleaf riverine forest. On 21 March 2000, two were captured in mist-nets and banded. One was a male and the other a female, with unflattened wing chords (uwc) of 61 mm and 58 mm, and weights of 12.9 g and 12.2 g. On 3 March 2001, an individual of unknown sex was banded; it had a uwc of 60 mm and weight of 12.8 g. On 4 March 2001, an adult male was trapped. This individual had a uwc of 63.5 mm and weight of 12.8 g. On 21 January 2002, a female with a uwc of 59 mm and weight of 12.4 g was trapped. All five individuals had completely ossified skulls and only a trace of subcutaneous fat.

Grassland Yellow-finch *Sicalis luteola*

Jones & Valley¹¹ listed *S. luteola* as an uncommon permanent resident in Orange Walk, Belize, Stann Creek and Toledo Districts. Valley & Aversa¹⁸ observed 40–50 near San Felipe, Orange Walk District, on 17 January 1994. In 1999, as part of the BWB-ASF project, intensive nest searching and monitoring was conducted in a pine savanna (17°21'N 88°33'W; 46 m) within Belize District. A 200 m² nest-searching plot was systematically monitored on 59 days in April–July 1999. *S. luteola* was observed on 21 (35.6%) days, the first on 27 April 1999 and last on 13 July 1999. In addition, three active nests each containing three eggs were located, one in May and two in June, constructed at 0.2 m, 0.3 m and 0.3 m above ground. In 2000, the study site burned and only casual observations were conducted between April and mid-August, during which *S. luteola* was not observed. In 2001, the nest-searching plot was expanded to encompass an area of 395 m² and intensive nest searching and monitoring was conducted in April–August. *S. luteola* was not observed in 2001. Based on our research in 1999–2001, it appears that *S. luteola* moved into the area in late April 1999, established breeding territories, nested, and then departed in mid-July 1999. Intensive nest searching and monitoring at nearby Runaway Creek Nature

Preserve in 2000–2001 failed to produce any records of the species. The savanna at this study site varied from open areas with high graminoid density to parts that were at a mature successional stage, with extensive woody vegetation. This habitat was probably not suitable for nesting of *S. luteola*.

Lesser Goldfinch *Carduelis psaltria*

Jones & Vallye¹¹ listed this species as an uncommon permanent resident in Orange Walk District and not occurring elsewhere in Belize. Jones *et al.*⁹ also commented that recent records from north-eastern Orange Walk District may indicate the establishment of a small resident population. On 30 December 2001, WM flushed a female *C. psaltria* from an active nest. The nest contained three eggs and an adult male was observed nearby. The nest was constructed on a Sour Orange *Citrus quarantium* tree (18°01'N 88°41'W; 49 m) in the village of Trinidad, Orange Walk District. The nest was located 18 cm from the main stem and 1.68 m above ground level. This represents the first nesting record of *C. psaltria* in Belize and confirms the establishment of a local population.

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Description of the nest, egg and nestling of Watkins's Antpitta *Grallaria watkinsi*

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Cotinga 21 (2004): 35–37

Describimos el nido, huevos y pichón de la Gralaría de Watkins *Grallaria watkinsi* en base a observaciones hechas cerca de Celica, Loja, Ecuador, a principios de marzo de 2000. El nido, único entre los previamente descriptos para gralarias, estaba localizado relativamente alto en un árbol, apoyado en ramas pequeñas, y estaba compuesto principalmente de palitos. El huevo era azul verdoso pálido y sin marcas, similar a los huevos conocidos de otras especies de *Grallaria*. Como ya fuera mencionado para otros pichones del género, la *G. watkinsi* de 1–2 días de edad tenía el pico, comisura e interior de la boca anaranjado brillantes, pero resultó única en tener también la cloaca de ese color.

Watkins's Antpitta *Grallaria watkinsi* is a poorly known species largely restricted to the Tumbesian region of south-west Ecuador and north-west Peru⁸, where it inhabits tropical deciduous forest at 600–2,000 m^{1,6}. Although *G. watkinsi* was formerly considered a subspecies of Chestnut-crowned Antpitta *G. ruficapilla*, the two are vocally distinct^{5,6} and largely segregated by habitat and elevation⁸. *G. watkinsi* favours dense and relatively lush vegetation within narrow shaded ravines in deciduous forest^{1,6}, while *G. ruficapilla* occurs in secondary woodland and borders of humid forest, mostly above 2,000 m⁸. In south-west Ecuador, the two overlap at 1,600–2,000 m¹. From a degraded transition zone, between deciduous forest and humid evergreen forest at 1,900 m elevation, we present the first description of the nest, egg and nestling of *G. watkinsi*.

Nest description

The nest was located in a patch of roadside trees 6.5 km east of Celica (04°07'S 79°58'W), Loja province, Ecuador. At approximately 14h30 on 5 March 2000, we discovered the nest while an adult was incubating one egg and brooding a young hatchling. Constructed upon interior branches of a thorny tree (*Acacia* sp., Leguminosae), the nest was 3.0–3.5 m above ground and 0.5–1.0 m below a canopy formed by the nest tree and adjacent trees of similar size. The nest was supported by 2–3 relatively small branches (2–5 cm diameter) and 2–3 hanging live green vines (<0.5 cm diameter). The nest was a bulky and unkempt-looking cup (see Fig. 1). The majority of the nest's base and exterior consisted of woody material (i.e., sticks, vine twigs), but it also included a few damp dead leaves. The little moss present in the nesting material was apparently used incidentally, as remnants that once grew on the sticks that comprised most of the nest. The nest was lined solely with narrow black rootlets.

The outer diameter of the nest was 23 x 22 cm (measured at perpendicular angles). The inner diameter (i.e. the cup) measured 10.0 x 10.5 cm. The

cup depth was 5 cm and the external nest height (i.e. bottom of the nest proper to the rim of the cup) was 10 cm, with an additional 7 cm of woody material hanging below.

Egg description

The unhatched egg measured 30.09 x 25.33 mm and had a short subelliptical shape. Its mass was 7.886 g, but note that at that stage it had probably already lost water. The egg was a uniform turquoise or pale greenish-blue colour with no flecking or spotting.

Nestling description

The nestling appeared to be 1–2 days old, based on comparison with Scaled Antpitta *G. guatemalensis* nestlings³. The nestling was mostly naked and had dark pinkish skin. Sparse blackish down was present on most, if not all, feather tracts, and pin feathers were just starting to break the skin of the wing. The eyes were closed. Except for a black nail to the tip of the upper mandible, the entire bill, gape and mouth lining were bright orange, much like nestling *G. guatemalensis*³, Variegated Antpitta *G. varia*^{4,7}, and Pale-billed Antpitta *G. carrikeri*¹². Apparently absent or unnoticed in previously described nestling *Grallaria*, and definitely absent in *G. guatemalensis*³, the cloaca of the *G. watkinsi* nestling was also bright orange, identical to the colour of the bill, gape and mouth lining. The significance of the cloacal coloration is unknown, but a possible hypothesis is that it functions as a signal for parents to cue in on emerging faecal material or peck at the cloaca to stimulate nestling defecation. Adult *G. guatemalensis* frequently remove faecal sacs directly from nestlings' cloacas after provisioning them with food, although in that species the cloaca is dark³.

The presence of an unhatched egg and the developmental stage of the nestling suggest that hatching commenced on 4 or 5 March. Thus, it appears that hatching coincided with the middle of the rainy season, which, along with high breeding activity among many other forest birds, occurs in

January–April in this region².

Adult behaviour

While on the nest, the adult was still as we observed it from a distance of c.5 m for 20–30 minutes. In contrast to incubating or brooding *G. guatemalensis*³ and *G. varia*⁷ (PRM pers. obs.), which often raise their bills to a c.70° angle to reveal streaking in the throat and neck plumage when a potential predator is close, the brooding *G. watkinsi* looked straight out from the nest with its bill held very slightly upwards (Fig. 1). We eventually flushed the bird in order to examine the contents of the nest. It flew into the understorey, where it sang from dense vegetation. Immediately, another *G. watkinsi*—presumably the flushed individual's mate—began singing from c.20 m away. The two sang continually for the brief remainder of our presence at the nest and were tape-recorded.

Discussion

The bulky, unkempt and mostly stick cup nest of *G. watkinsi* appeared quite different from most previ-

ously described *Grallaria* nests, which tend to be more compact, composed of more humus material, and placed less than 3 m above ground^{3,4,7,11,12}. Also, most previously described *Grallaria* nests have been located against the main trunk of a tree or stump^{3,7,11}, or on a fallen or partially fallen trunk¹². The *G. watkinsi* nest's location among the narrow canopy branches of a tree (i.e., not against a main trunk), its height above ground and the considerable use of long (e.g., 15 cm) sticks as nesting material made it more reminiscent of a jay (e.g. *Cyanocorax*) nest rather than a *Grallaria* nest. While there is no direct evidence to suggest that the *G. watkinsi* nest was built by another species, the nest-building behaviour of antpittas, including their propensity to use old nests, is virtually unknown. Given that Streak-chested Antpitta *Hylopezus perspicillatus* has been documented using an old nest of a different species¹⁰, this possibility must be recognised. Note, however, that the one known nest of *G. ruficapilla*, which is more closely related to *G. watkinsi* than any other congener⁵, was also 'some height' above the ground⁹.



Figure 1. Adult Watkins's Antpitta *Grallaria watkinsi* at its nest, sitting on an egg and a newly hatched nestling. Painting by P. R. Martin, from a photograph of the nest and field notes. Plumage details of the adult were confirmed by inspection of specimens housed at the Louisiana State University Museum of Natural Science (Baton Rouge).

The *G. watkinsi* egg was similar in size and coloration to previously described *Grallaria* eggs^{3,4,11,12}, including those of the sister taxon *G. ruficapilla*⁹. Note that Wiedenfeld's¹² second-hand report of *G. ruficapilla* having 'buffy eggs with rufous blotches' conflicts with T. K. Salmon's direct observation⁹ of 'greenish-blue' *G. ruficapilla* eggs, which were further described as 'rather round' and measured 31.2 x 26.4 mm. Although comparison of nestling appearance with *G. ruficapilla* (undescribed) is not possible, the *G. watkinsi* nestling was largely similar to other described *Grallaria* nestlings^{3,4,7,12}. A distinct nestling cloacal coloration is described for *G. watkinsi*; its uniqueness within the genus is unclear and its adaptive significance, if any, is speculative. As is often the case with the ground antbirds, new observations serve largely to emphasise what remains unknown of their basic natural history.

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Further observations of birds from Colima and adjacent Jalisco, Mexico

Steve N. G. Howell

Cotinga 21 (2004): 38–43

Se proporcionan observaciones recientes de 25 especies de aves del estado de Colima y partes adyacentes de Jalisco, en el occidente de México. Estos registros incluyen ocho primeros registros para el estado de Colima (*Botaurus lentiginosus*, *Rostrhamus sociabilis*, *Arenaria melanocephala*, *Cypseloides storeri*, *Calypte costae*, *Petrochelidon fulva*, *Parula americana* y *Dendroica dominica*) y cinco para el estado de Jalisco (*Plegadis falcinellus*, *Turdus infuscatus*, *Dendroica pensylvanica*, *D. tigrina* y *Carpodacus cassinii*). Son particularmente notables las extensiones de distribución de *Rostrhamus sociabilis* y *Aramus guarauna*.

Introduction

In western Mexico, the small state of Colima and adjacent areas of the state of Jalisco support a great diversity of birds^{5,10,17}. Here, further observations of 25 species are noted, including supporting data for several records listed without comment by Howell⁶. This paper is based on 65 days of field work: 16–21 December 1995 (Howell, Robert A. Behrstock and Bernie Master), 17 February–1 March 1997 (Howell and Behrstock), 16–19 and 23–27 February 1999 (Howell and Will Russell), 15–26 February 2000 (Howell and Rich Hoyer), 13–24 February 2001 (Parker Backstrom and Daniel Lane), and 13–24 February 2002 (Howell and Lane). Sites mentioned in the species accounts are located and described by Howell^{5,6}.

Records discussed here include eight first state records from Colima (American Bittern *Botaurus lentiginosus*, Snail Kite *Rostrhamus sociabilis*, Black Turnstone *Arenaria melanocephala*, White-fronted Swift *Cypseloides storeri*, Costa's Hummingbird *Calypte costae*, Cave Swallow *Petrochelidon fulva*, Northern Parula *Parula americana*, Yellow-throated Warbler *Dendroica dominica*) and five from Jalisco (Glossy Ibis *Plegadis falcinellus*, Black Thrush *Turdus infuscatus*, Chestnut-sided Warbler *Dendroica pensylvanica*, Cape May Warbler *D. tigrina*, Cassin's Finch *Carpodacus cassinii*). For the following species, subsequent observations (not detailed here) support the status in the region described by Howell⁶: Common Loon *Gavia immer*, Blue-footed Booby *Sula nebouxii*, Wood Duck *Aix sponsa*, White-tailed Kite *Elanus leucurus*, Broad-winged Hawk *Buteo platypterus*, Ruddy Crake *Laterallus ruber*, Stilt Sandpiper *Calidris himantopus*, Herring Gull *Larus argentatus*, Great Swallow-tailed Swift *Panyptila sanctihieronymi*, Olive-sided Flycatcher *Contopus cooperi*, White-throated Flycatcher *Empidonax albigularis*, Scissor-tailed Flycatcher *Tyrannus forficatus*, Golden-crowned Kinglet *Regulus satrapa*, Aztec Thrush *Zoothera pinicola*, Black-throated Green Warbler *Dendroica virens*, Palm Warbler *D.*



Figure 1. Juan Fernández Petrel *Pterodroma externa*, 5 km off Manzanillo, Colima, 26 February 1999 (Peter Payzant)

palmarum, Rose-breasted Grosbeak *Pheucticus ludovicianus*, Ruddy-breasted Seedeater *Sporophila minuta*, and Baltimore Oriole *Icterus galbula*.

Juan Fernández Petrel *Pterodroma externa*

One seen well and photographed 5 km off Manzanillo, Colima, 26 February 1999 (Fig. 1). The underwings had atypically broad black margins (perhaps accentuated by shading), which may indicate an immature. The nape and back were uniform grey, with no white hind-collar, eliminating White-necked Petrel *P. cervicalis*. Although Juan Fernández Petrels are fairly common over offshore waters^{10,16} this individual was unusually close to the mainland.

American Bittern *Botaurus lentiginosus*

One standing in roadside reeds at Manzanillo airport marshes, Colima, on 16 December 1995 was within the mapped winter range for this species¹⁰ but appears to be the first specific record from Colima^{3,17,18}.

Wood Stork *Mycteria americana*

Two were at Laguna Sayula, Jalisco, on 17 February 2002, and two (possibly the same?) flew south over the western edge of Ciudad Colima, Colima, on 23

February 2002. There are few inland records in Mexico, and previous occurrences on the plateau have mainly been in May–October¹⁰.

Glossy Ibis *Plegadis falcinellus*

At Laguna Zapotlán, Jalisco, two were among 1,500 White-faced Ibis *P. chihi* on 17 February 2001, and one with 500 White-faced Ibis on 16 February 2002. They were carefully studied and had slaty lores with bluish-white margins and brown eyes diagnostic of Glossy and distinct from the numerous White-faced Ibis present. There are no previous records from Jalisco and only one other from western Mexico, in Colima⁵. The spread of this species in Mexico and North America was summarised by Howell & de Montes⁸ and Patten & Lasley¹⁵.

Black-bellied Whistling-Duck *Dendrocygna autumnalis*

Sixty were at Laguna Zapotlán on 23 February 1999, my only record there in numerous trips. Although common in the tropical lowlands of Mexico, the species is rarely recorded in the interior^{10,19}.

Snail Kite *Rostrhamus sociabilis*

This species has spread into north-west Mexico in recent years. At Manzanillo airport marshes at least three (including an adult male and juvenile) were present in February 2000, a single on 14 February 2001, and up to five in February 2002. All field marks were noted on these birds, including the distinctive arch-winged flight shape, large white area at the base of the square-ended tail, and very slender hooked bill; several were watched hunting and eating snails, which they snatched from near the water surface with their feet. Farther north, Snail Kites (up to five together in 2002, pers. obs.) have been seen around San Blas, Nayarit, since January 2000 when found there by Rick Taylor & Narca Moore-Craig (pers. comm.). The nearest record to the south on Mexico's Pacific slope is from eastern Guerrero¹⁰: on 18 April 1988, S. Webb and I observed an adult male and three females/immatures at a small pond beside Highway 200 near the Ometepec junction. The Colima and Nayarit records represent a range expansion of c.700 km and mirror the colonisation of north-west Mexico by Limpkin *Aramus guarauna*, which feeds on the same snails. The marshy savannas of south-east Mexico were plagued by drought and fires during the 1990s (pers. obs.), which may have contributed to the dispersal of these two species.

Red-shouldered Hawk *Buteo lineatus*

An adult of the nominate subspecies at Laguna Zapotlán, on 16 February 2002, was beyond the south-west limit of the species' known winter range in Mexico¹⁰.

Swainson's Hawk *Buteo swainsoni*

A concentration of 60–70 birds (95% light morph) fed over burning sugar cane on the northern outskirts of Ciudad Colima, on 25 February 1999. While this species winters regularly (and increasingly?) in western Mexico, most records from Colima are of singles or small groups.

Limpkin *Aramus guarauna*

This species continues to increase at Manzanillo airport marshes, where it first appeared in 1994⁵. High counts in recent years have been six in December 1995, five in February 1997, 8+ in February 1999, 5+ in February 2000, 20 in February 2001 and 12+ in February 2002. In addition, increasing numbers have been found around San Blas, Nayarit, since 2000 (Rick Taylor & Armando Santiago pers. comm.).

King/Clapper Rail *Rallus elegans/longirostris*

Two large rails observed in mangroves at Barra de Navidad, Jalisco, on 13 February 2002, were outside the known range of either taxon. The back was sandy olive-brown with clean-cut blackish feather centres, the neck and chest vinaceous-cinnamon, the black-and-white flank bars narrow and relatively broken (not broad and solid); the bill was orangish and the legs dull orange-flesh. They thus resembled the western *obsoletus* subspecies group, usually treated within Clapper Rail but considered by Olson¹⁴ to be King Rails.

Black Turnstone *Arenaria melanocephala*

One associating loosely with other shorebirds at Manzanillo, on 23 February 2001, was the southernmost recorded in Mexico¹⁰. It fed among stones and shells on mudflats and was viewed in good light to within 100 m, when all field marks were observed—size, shape, bill length, thick dark reddish legs, and plumage. Poor-quality photos of the bird (Fig. 2) reveal its blackish upperparts and chest, eliminating Ruddy Turnstone *A. interpres*, a species familiar to the observers.



Figure 2. Black Turnstone *Arenaria melanocephala*, Manzanillo, Colima, 23 February 2001 (Daniel Lane)

Whip-poor-will *Caprimulgus vociferus*

At the Barranca El Choncho, Jalisco (250 m elevation), a female was flushed from roost and then studied at close range on 15 February 2002. There are few records of this species from the lowlands of western Mexico, where it may be a regular elevational migrant.

White-fronted Swift *Cypseloides [cryptus] storeri*

At Playa de Oro, Colima, two adults (presumably of this taxon) were studied for 45 minutes on 13 February 2002. They were viewed at ranges down to 30 m in excellent early-morning light in association with a group of 20 Chestnut-collared Swift *C. rutilus*, which may have moved down to the coastal lowlands due to snowstorms over the inland mountains. The presumed *storeri* were not obviously larger than the *C. rutilus*, but were notably stockier with a larger and blunter head and a relatively shorter and broader, squared tail—which is in accord with details of the only previous documented sighting of this taxon in life⁹. They flew with bursts of rapid wingbeats alternating with glides on bowed wings, not noticeably different from the flight style of the *C. rutilus* present, though they tended to fly in the upper stratum of the group. They were overall black with a white frontal band that appeared striking in the low-angle morning sun. The white extended between the eyes and seemed narrower over the bill than immediately forward of the eyes (Figs. 3–4). The bold white 'front' of the Playa de Oro birds was much more striking than the silvery-white forehead often exhibited by Black Swift *C. niger* and recalled the bright 'headlights' of Spot-fronted Swift *C. cherriei*⁷. Whilst similar in shape

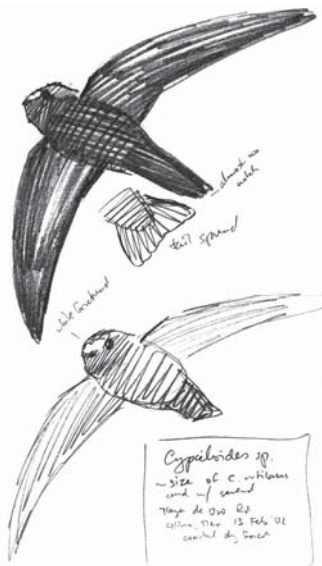


Figure 3. White-fronted Swift *Cypseloides storeri*, Playa de Oro, Colima, 13 February 2002 (Daniel Lane)



Figure 4. White-fronted Swift *Cypseloides storeri*, Playa de Oro, Colima, 13 February 2002 (Steve N. G. Howell)

to *storeri*, Spot-fronted Swift is unknown north of Costa Rica and has white supraloral spots, not a white front. The face markings of the presumed adult *storeri* were more striking in life than suggested from specimens (Fig. 1 in Navarro *et al.*¹³) and quite different from White-chinned Swift *C. cryptus*, with which *storeri* has been considered conspecific¹⁰.

Chestnut-collared Swift *Cypseloides rutilus*

Records additional to those listed by Howell⁵ are: at Playa de Oro, 80 on 21 February 1997, 10+ on 19 February 1999 and 18 February 2000, 20 on 13 February 2002; and at the Barranca el Choncho, 50 on 18 February 1999. Presumably these are local elevational migrants (cf. White-fronted Swift).

White-collared Swift *Streptoprocne zonaris*

On 18 December 1995 at the Barranca de Beltrán, Jalisco, 120 calling individuals were seen gathering before dusk, presumably to roost. I have heard second-hand reports of other sightings from this locality, suggesting a local resident population (and cf. Howell⁵). An additional regional record is two over San Antonio, Colima, on 20 December 1995.

Lucifer Hummingbird *Calothorax lucifer*

An adult male was at roadside flowers 6 km north of Comala, Colima, on 20 December 1995. The only other Colima record is of an adult male collected in March 1959¹⁷.

Costa's Hummingbird *Calypte costae*

An immature male at roadside flowers 7 km north of Comala on 20 December 1995 constitutes the first

state record for Colima. The species was otherwise known south only to southern Nayarit and Jalisco, where it occurs during late October to early January^{1,10}. The Colima bird was studied at close range, and diagnostic features included its small size and short tail, overall dull green and pale grey plumage, broad inner primaries, a central patch of purple throat feathers, and species-specific call note.

Eastern Phoebe *Sayornis phoebe*

A single at Barra de Navidad, on 16 February 2000, is one of the few lowland records available for west-central Mexico¹⁰.

Cave Swallow *Petrochelidon fulva*

On 13 February 2002, at least five flew north-west over Playa de Oro in association with a loose group of Northern Rough-winged Swallows *Stelgidopteryx serripennis*, Tree Swallows *Tachycineta bicolor*, and Chestnut-collared Swifts. They were *Petrochelidon* swallows with a dirty cinnamon throat distinctly but not abruptly separated from the dingy whitish underparts (and clearly lacking the contrasting dark throat patch of Cliff Swallow *P. pyrrhonota*), and a cinnamon forehead and rump. Migrant records of the species are few, although important wintering grounds have been recently identified in El Salvador¹¹. An additional migrant record of note is 40 flying north-west over Yagul, Oaxaca, on 21 March 2000 (Howell and Daniel Lane), also apparently a first state record^{2,10}. The Colima birds may have been forced into the lowlands by prevailing bad weather in the highlands (cf. White-fronted Swift), and, together with the Oaxaca record noted above, indicate northward migration during at least mid-February to late March. Additionally, a single Cave Swallow was reported by Alvaro Jaramillo and Jay Vandergaast among dozens of Northern Rough-winged Swallows and Grey-breasted Martins *Progne chalybea* on the Playa de Oro road on the early date of 13 January 2002⁴.

Black Thrush *Turdus infuscatus*

On 18 February 2002, tour participant Colin Hedderwick spotted 'an odd thrush' perched on an open pine branch at El Floripondio, Jalisco. It proved to be a female/immature Black Thrush, which we studied for ten minutes at c.50 m range with telescopes and binoculars before the bird flew. The following is taken from my field notes. An obvious *Turdus*, clearly smaller and more compact than nearby White-throated Thrushes *T. assimilis*, and less stocky and slightly smaller in direct comparison with an Aztec Thrush. Overall dark warm brown with underparts slightly paler than upperparts, lores slightly darker, throat paler with faint dark streaking; undertail-coverts unmarked; greater coverts and innermost tertial with slightly paler brown tips but not clear-cut or strongly contrasting.

Eyes dark with no discernible orbital ring, bill black, legs and feet dull fleshy yellow, darker in front and dorsally, with paler and yellower hind tarsus and soles. Silent. This is a distinctive but relatively nondescript bird that is rarely kept in cages (I have seen caged males, but not females, in eastern Mexico). Non-breeding thrushes are well-known wanderers, and there is one other vagrant record of Black Thrush in Mexico—an adult male in Morelos, on 8 March 1982¹⁹. The nearest source population to Jalisco is the Sierra Madre del Sur of Guerrero, c.300 km to the south-east.

Northern Parula *Parula americana*

A male at the same site at Playa de Oro, on 17 February 1999 and 16 February 2000 may have been a returning individual. Relative to Tropical Parula *P. pitiayumi* in the same area, it had less extensive yellow on the throat and underparts, distinct white eye-crescents, and a strongly marked slaty and chestnut chest-band. This species is a rare winter migrant in west Mexico and there appear to be no previous records from Colima¹⁰.

Chestnut-sided Warbler *Dendroica pensylvanica*

One at Barra de Navidad, on 13 February 2002 (Fig. 5), was the first state record for Jalisco¹⁰. Similar in size and overall structure to nearby Yellow Warblers *D. petechia*, but held its longer tail more strongly cocked. It had a bright lemon-green cap and upperparts with two bold pale lemon wingbars and white tail-spots. The face and underparts were smoky pale grey becoming white on the belly, with a bold white eye-ring and a trace of chestnut on the flanks.

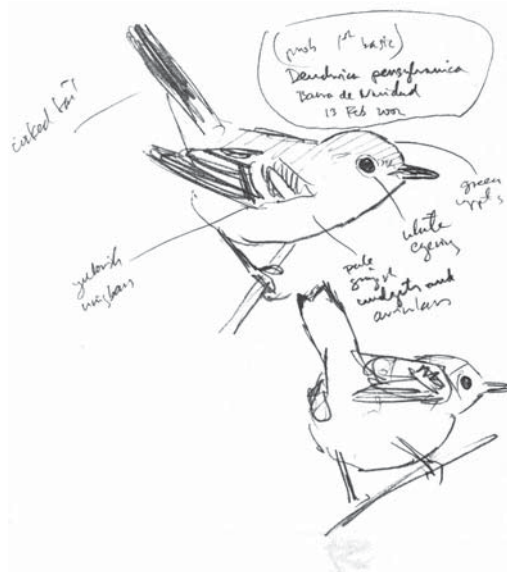


Figure 5. Chestnut-sided Warbler *Dendroica pensylvanica*, Barra de Navidad, Jalisco, 13 February 2002 (Daniel Lane)

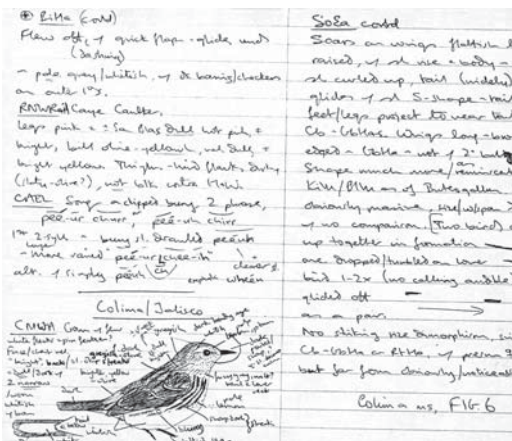


Figure 6. Cape May Warbler *Dendroica tigrina*, Barra de Navidad, Jalisco, 18 February 1997 (Steve N. G. Howell)

Cape May Warbler *Dendroica tigrina*

A female seen daily in a flowering bottlebrush (*Callistemon*) at Barra de Navidad, on 18–21 February 1997, was presumably wintering at the site and constitutes the first state record for Jalisco¹⁰. A small warbler with sharply pointed dark bill, greyish-olive upperparts with a yellow-olive rump and dull whitish wingbars, dingy pale lemon throat and chest with sharp dark chest streaking, and whitish tail-spots (Fig. 6).

Yellow-throated Warbler *Dendroica dominica*

One at Laguna la María, Colima, on 21 February 2001 (Fig. 7) was the first state record for Colima, and apparently of the race *albiflora*. The species has been found wintering in much of western Mexico¹⁰.

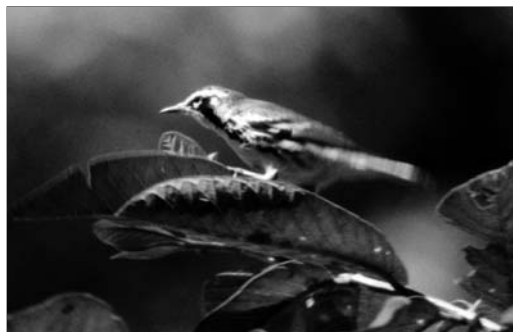


Figure 7. Yellow-throated Warbler *Dendroica dominica*, Laguna la María, Colima, 21 February 2001 (Daniel Lane)

Cassin's Finch *Carpodacus cassinii*

An adult male and female/immature were studied at El Floripondio, on 26 February 1997, through a Questar telescope at 200 m range, perched in a pine tree in excellent light, at 07h45–07h50. They were obvious *Carpodacus* finches, between Red Crossbill *Loxia curvirostra* and Pine Siskin *Carduelis pinus* in size (both present for comparison), and had an

almost siskin-like, conical and pointed bill with a straight culmen, as well as a cleft tail. The female was overall grey-brown above, whitish below, with paler wing edgings, a bold whitish supercilium and malar, and fine dusky streaks below that faded out on the lower belly. The male had a rosy-pink face (patterned like the female), chest and rump with an unstreaked whitish belly. This is the southern limit of this species' irruptive winter range and appears to be the first specific record from Jalisco. The 1996/1997 winter was a notable flight year for the species in western North America¹².

Acknowledgements

I thank the observers listed in the introduction, as well as numerous tour participants, for their company and for sharing their observations with me. Daniel Lane furnished documentary photos and sketches included here. Narca Moore-Craig, Armando Santiago and Rick Taylor kindly contributed their unpublished records from San Blas, Nayarit.

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Catálogo de especímenes recientes de aves de las sierras Juárez y San Pedro Mártir, e inmediaciones, noroeste de Baja California, México

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Cotinga 21 (2004): 45–58

A catalogue of bird specimens collected during the past 18 years (1985–2003) in the Sierra Juárez and Sierra San Pedro Mártir, and adjacent areas, north-west Baja California, México, is presented. This catalogue is supported by 470 bird specimens belonging to 110 species, 84 genera and 41 families, which are deposited in the bird collection of the Facultad de Ciencias, Universidad Autónoma de Baja California. The first specimens for 12 species of these montane regions are reported (Common Loon *Gavia immer*, Great Blue Heron *Ardea herodias*, Green Heron *Butorides virescens*, Gambel's Quail *Callipepla gambelii*, Greater Yellowlegs *Tringa melanoleuca*, White-winged Dove *Zenaida asiatica*, Belted Kingfisher *Ceryle alcyon*, Hammond's Flycatcher *Empidonax hammondi*, Willow Flycatcher *E. traillii*, Bullock's Oriole *Icterus bullockii*, Baltimore Oriole *I. galbula* and House Sparrow *Passer domesticus*), as well as some biogeographical considerations concerning the region's avifauna.

La avifauna de las sierras Juárez (SJ) y San Pedro Mártir (SPM), e inmediaciones, ha sido referida en varios trabajos de tipo distribucional para la península de Baja California^{8,12,14,17,37} y más específicamente en una escala regional^{4,15,20,27,31,32,36}.

Aunque la avifauna de estas dos regiones montañosas es relativamente bien conocida, la mayoría de sus registros fueron bastante puntuales en tiempo y espacio. Asimismo, gran parte del material ornitológico ahí recolectado fue depositado en colecciones científicas de los EUA, especialmente de California^{4,12,31,32}, limitando por una parte su acceso por investigadores mexicanos, y por la otra, evidenciando la marcada influencia que ha tenido el desarrollo de la ornitología de la península de Baja California de dicho país vecino.

Recientemente, Ruiz-Campos *et al.*³⁰ reportaron primeros especímenes de cinco especies para la SJ y SPM, e inmediaciones (*Mergus merganser*, *Asio otus*, *Sphyrapicus varius*, *Vireo bellii* y *Xanthocephalus xanthocephalus*), representando *M. merganser* y *S. varius* los primeros conocidos para la península de Baja California.

Durante un período de 18 años (1985–2003), el personal del Laboratorio de Vertebrados de la Universidad Autónoma de Baja California (UABC), ha efectuado recolecciones de aves en diferentes localidades representativas del distrito faunístico Mártirensis e inmediaciones^{5,21}, desde las localidades ribereñas cercanas a la costa hasta los 2.030 m. El material ornitológico contenido en el presente catálogo queda representado por 470 especímenes pertenecientes a 110 especies, 84 géneros y 41 familias, mismo que se encuentra catalogado y depositado en la Colección Ornitológica de la UABC. La intención de este catálogo es proporcionar una base de información curatorial sobre especímenes

de aves de reciente recolección en SJ y SPM, y áreas adyacentes, como apoyo a futuros estudios taxonómicos, ecológicos, biogeográficos y de conservación de su componente aviar.

Métodos

Área de estudio

Geomorfología. La SJ es considerada geológicamente una extensión norteña de la SPM, siendo separada de esta última por un estrecho valle conocido como Paso San Matías. Por tal motivo, la descripción del área de estudio se centra en la SPM por ser la formación orográfica más importante y la mejor conocida en términos geomorfológicos, climáticos y biológicos.

La SPM es parte de la cordillera peninsular que se extiende desde el sur de California, EUA, hasta el extremo sur de la península de Baja California, México. El Picacho del Diablo es el punto más alto de SPM (3.095 m). La SPM está delimitada al Este por un escarpamiento o escalón que supera los 2.500 m, y que la separa de las cuencas de Valle Chico y Valle San Felipe que forman parte de la llamada depresión del Golfo; al norte esta sierra colinda con la Falla de Agua Blanca; la parte occidental de bajo relieve de SPM presenta una inclinación con dirección al Océano Pacífico²².

Hidrología. La hidrología superficial de SJ y SPM está caracterizada por una serie de corrientes intermitentes que drenan las áreas de clima mediterráneo (lluvias de invierno), las cuales se vuelven criptorreicas en sus partes próximas a la desembocadura al Océano Pacífico. Dichas partes presentan avenidas cuando algún ciclón recorre o cruza la península^{34,35}. Los arroyos principales que

bajan de ambas sierras con dirección al Océano Pacífico, son de norte a sur: Guadalupe, San Carlos, Santo Tomás, San Vicente, El Salado, San Rafael, San Telmo, Santo Domingo, San Simón y El Rosario²⁹.

Climatología. El tipo de clima que predomina en las SJ y SPM es de tipo Csb', es decir, sub-húmedo con precipitación principalmente invernal; semifrío, con temperatura media anual del orden de 7°C y con promedio de intervalo diario del orden de 10°C^{2,9}. La precipitación promedio anual es de 400 mm, con máximos durante algunos años de más de 1.000 mm²⁵. El origen de las lluvias es de tipo orográfico, causadas por tormentas tropicales que entran al Golfo de California o del Océano Pacífico; o bien causadas por frentes fríos de tormenta que se originan en el Golfo de Alaska, que se mueven en dirección sureste¹.

Vegetación. Dentro de la SPM se reconocen fitosociológicamente cinco pisos de vegetación²⁴. (1) Inframediterráneo, representado por una franja costera situada entre los paralelos 30° y 31°N, en altitudes que no sobrepasan los 700 m, con dos asociaciones principales (matorral rosetófilo: *Berberocactus emoryi* y *Agave shawii*, y chaparral: *Rosa minutifolia* y *Aesculus parryi*). (2) Termomediterráneo, este piso de inicia desde los 700 m y puede alcanzar en algunas solanas los 1.600 m, aunque en laderas de sombra no sobrepasa los 1.200–1.300 m. Dentro de esta faja térmica se presentan dos grandes grupos de comunidades, chaparrales y encinares. Los chaparrales son dominados por arbustos esclerófilos y caducifolios por sequía, principalmente por asociaciones climáticas de *Xylococcus bicolor* y *Ornitostaphylos oppositifolia*; mientras que la presencia de encinares *Quercus agrifolia* está condicionada por aparición de humedad edáfica, ocurriendo como elementos ribereños o asociados a laderas con acumulación de nieblas. (3) Mesomediterráneo, este piso bioclimático es dominado por coníferas heliófilas como *Pinus monophylla* y *P. quadrifolia*, los cuales forman bosquetes abiertos entre los 1.300 y 2.000 m, en asociación con *Adenostoma sparsifolium* y *Juniperus californica*. (4) Supramediterráneo, este estrato bioclimático se reconoce por arriba de los 2.000 m como formaciones forestales dominadas por grandes coníferas (*Pinus jeffreyi*, *P. murrayana*, *Abies concolor* y *Calocedrus decurrens*). (5) Mesotropical, este piso representativo de la región Xerofítica-Mexicana y del desierto Sonorense, está presente en la vertiente oriental de la SPM, entre el nivel del mar en el golfo de California y los 800-900 m, siempre bajo condiciones de ombroclima árido. Dos comunidades dominantes son aquí reconocidas, *Echinocereus engelmannii*–*Agave deserti* y *Fouquieria splendens*–*Larrea tridentata*.

La vegetación asociada a los arroyos de la SPM, forman el componente ribereño⁷, donde es posible distinguir formas arbóreas de afinidad mesófila boreal como *Populus fremontii*, *P. tremuloides*, *Platanus racemosa*, *Salix lasiolepis*, *Prosopis glandulosa* y *Acacia greggii*; formas arbustivas como *Rhus ovata*, *Baccharis sarathroides* y *B. salicifolia*; y formas herbáceas como *Nasturtium officinale*, *Juncus acutus*, *Haplopappus venetus*, *Apium graveolens* y *Mentha arvensis*.

Recolecta y material examinado

El presente catálogo incluye las especies de aves recolectadas en las regiones de SJ y SPM e inmediaciones, durante un período de 18 años (1985–2003). Se consideran parte de la región SPM (Mártirensis) aquellas localidades ubicadas entre las latitudes 30°00' y 31°25'N, desde la línea de costa hasta el parteaguas de la vertiente occidental de la sierra SPM. Para las localidades cercanas a la costa únicamente son consideradas aquellas especies con afinidad a los hábitats ribereños. Los ejemplares fueron recolectados con redes de niebla y/o rifle de municiones de diferentes calibres. El material recolectado fue preservado en hielo para su traslado al laboratorio, pero en aquellos sitios de difícil acceso (p.e., pradera La Grulla y Rancho San Antonio de Murillos), se utilizó como preservador hielo seco, o en su defecto, los ejemplares fueron preparados taxidérmicamente *in situ*.

En el laboratorio, los ejemplares fueron preparados taxidérmicamente siguiendo la metodología de Hall¹³ e incorporados a la Colección Ornitológica de la Facultad de Ciencias de la Universidad Autónoma de Baja California (UABC) o en la Universidad Autónoma de Nuevo León (UANL). La identidad taxonómica de los ejemplares fue verificada por Amadeo M. Rea, Philip Unitt, Robert A. Hamilton, Richard A. Erickson, Steve N. G. Howell y Kimball L. Garrett.

Resultados

Un total de 470 ejemplares pertenecientes a 110 especies, 84 géneros y 41 familias componen el siguiente catálogo sobre la avifauna de SJ y SPM, y sus respectivas inmediaciones, en el noroeste de Baja California. El arreglo sistemático de los taxa sigue la AOU³. Para cada ejemplar recolectado se incluyen datos de sexo (cuando disponible), número de catálogo (UABC), localidad de captura, fecha de recolección (día-mes-año), y nombre del recolector en acrónimos (cf. Apéndice 2). Un asterisco (*) señala un primer registro con espécimen(es) para esas regiones geográficas. Una lista de especies avistadas en el área de estudio, pero no recolectadas, se presenta en el apéndice 3.

Familia Gaviidae****Gavia immer***

SPM: un juvenil (UABC-1059), Rancho M.B. [Arroyo San Vicente], 06-11-1999, GRC.

Familia Ardeidae****Butorides virescens***

SPM: una hembra (UABC-867), Rancho El Divisadero, 13-10-1996, GRC.

****Ardea herodias***

SPM: un juvenil (UABC-312), pradera La Grulla, 10-08-1990, LQB.

Familia Anatidae***Anas platyrhynchos***

SJ: un macho (UABC-466), Ojos Negros (laguna), 21-05-1991, FCC.

Anas acuta

SPM: una hembra (UABC-1143), ciénaga La Grulla, 22-09-2001, GRC.

Familia Accipitridae***Accipiter striatus***

SPM: un macho (UABC-397), Rancho Santa Cruz, 17-01-1991, FCC.

Buteo jamaicensis

SPM: una hembra (UABC-331), 1 km arriba bocana Arroyo El Rosario, 09-12-1990, JEV.

Familia Falconidae***Falco sparverius***

SPM: una hembra (UABC-1109), confluencia Arroyo La Zanja y Arroyo San Antonio, 01-04-2001, GRC; un macho (UABC-1150), Rancho San Antonio, 12-10-2001, GRC.

Familia Odontophoridae***Callipepla californica***

SJ: una hembra (UABC-123), Rancho Casa Verde, 25-04-1987, MRM; una hembra (UABC-173), *idem*, 26-09-1987, MGR; una hembra (UABC-184), Ejido Neji, 22-04-1989, GRC; un macho (UABC-465), Rancho Casa Verde, 16-09-1990, FCC; un macho (UABC-906), cerca Cerro Colorado, 16-02-1997, GRC.

SPM: dos machos (UABC-018, 019), El Cartabón, 15-09-1985, GGC; un macho (UABC-021) y una hembra (UABC-020), *idem*, 15-09-1985, MB; un macho (UABC-098) y una hembra (UABC-093 [ahora UANL-1899]), Rancho El Salto, 19-04-1987, LAA; un macho (UABC-272) y una hembra (UABC-291), pradera La Grulla, 23-03-1990 y 10-08-1990, respectivamente, GRC; una hembra (UABC-789), Arroyo Santa Cruz entre la Encinoza y Valladares, 30-09-1995, GRC; un macho (UABC-921), camino a Rancho Mike's Sky cerca Aguaje del Burro, 16-04-1997, GRC; una hembra (UABC-1116), Rancho San

Antonio, 31-03-2001, GRC; un macho (UABC-1115), camino a Rancho San Antonio, 1-04-2001, GRC; un macho (UABC-1110), Rancho [Nuevo] Valladares, 12-04-2001, GRC; un macho (UABC-1152), Rancho San Antonio, 12-10-2001, GRC; un macho (UABC-1346), Rancho San Antonio, 24-05-2003, GRC.

****Callipepla gambelii***

SJ: un macho (UABC-606), Cañada Jaquejel (Ejido Jamau), 10-10-1992, FCC.

Oreortyx pictus

SJ: una hembra (UABC-594), c.3 km N entronque camino a Laguna Hanson y carr. Ensenada-San Felipe, 31-05-1992, FCC.

SPM: un juvenil (UABC-292), Rancho San Javier [camino a Rancho Mike's Sky], 19-06-1990, LQB.

Familia Rallidae***Fulica americana***

SPM: un macho (UABC-1347), Rancho San Antonio, 23-05-2003, GRC.

Familia Charadriidae***Charadrius vociferus***

SPM: una hembra (UABC-122), Rancho La Cieneguita, 06-06-1987, MRM; un adulto sexo indeterminado (UABC-121), *idem*, 7-07-1987, MRM.

Familia Scolopacidae****Tringa melanoleuca***

SPM: un macho (UABC-136), Rancho El Divisadero, 28-07-2000, GRC.

Familia Columbidae****Zenaida asiatica***

SPM: una hembra (UABC-908), Misión Santo Domingo, 07-03-1997, GRC; un macho (UABC-934), Rancho San Antonio, 31-05-1997, GRC; un ejemplar sexo indeterminado (UABC-554), *idem*, 20-05-2000, GRC.

Zenaida macroura

SJ: un macho (UABC-081) y una hembra (UABC-082), Rancho Casa Verde, 29-03-1987, LAA; un macho (UABC-103), *idem*, 21-05-1987, LAA; un macho (UABC-1341), Rancho Las Estrellas, 09-03-2003, GRC.

SPM: un macho (UABC-017), El Cartabón, 15-09-1985, GGC; un macho (UABC-354), Rancho El Divisadero, 27-07-2000, GRC; un macho (UABC-1124), Rancho San Antonio, 01-04-2001, GRC.

Familia Cuculidae***Geococcyx californianus***

SPM: una hembra (UABC-007), El Cartabón, 14-09-1985, GGC; un juvenil (UABC-832), Arroyo San Rafael cerca Colonett (31°02'N 116°13'O), 28-06-1996, GRC.

Familia Strigidae***Asio otus***

SJ: una hembra (UABC-1101), Rancho Casa Verde, 29-03-1987, LAA.

Otus kennicottii

SJ: una hembra (UABC-079), Rancho Casa Verde, 29-03-1987, LAA.

SPM: un macho (UABC-474), Rancho Santa Cruz, 29-06-1991, LQB.

Familia Caprimulgidae***Chordeiles acutipennis***

SPM: un macho (UABC-480), Arroyo El Rosario (bocana), 22-06-1991, LQB; una hembra (UABC-165), Rancho [Nuevo] Valladares, 18-05-2000, GRC.

Phalaenoptilus nuttallii

SPM: un macho (UABC-124), Rancho El Salto, 16-04-1987, MRM; una hembra (UABC-090), *idem*, 29-04-1987, MRM.

Familia Trochilidae***Archilochus alexandri***

SJ: una hembra (UABC-420) Rancho Casa Verde, 16-09-1990, HSK; una hembra (UABC-421), *idem*, FCC.

Calypte anna

SJ: una hembra (UABC-032), Rancho Casa Verde, 30-08-1986, LAA; un macho (UABC-244), La Zorra, 08-06-1990, GRC.

SPM: un macho (UABC-275), Rancho Santa Cruz, 25-11-1989, GRC; una hembra (UABC-645), c.500 m arriba bocana Arroyo El Rosario, 13-03-1994, GRC; un macho (UABC-635), 800 m arriba bocana Arroyo San Telmo (Mesa San Jacinto), 26-02-1996, GRC; un macho (UABC-823), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 23-03-1996, GRC; una hembra (UABC-1106), 3 km oeste de Rancho La Concepción, 04-10-1999, JAG.

Familia Alcedinidae***Ceryle alcyon***

SPM: una hembra (UABC-866), Arroyo Santo Domingo cerca El Divisadero, 13-10-1996, GRC.

Familia Picidae***Melanerpes formicivorus***

SJ: un macho (UABC-027), Rancho San Faustino, 23-08-1986, LAA; un macho (UABC-028), Rancho San Faustino, 30-08-1986, LAA; un ejemplar sexo indeterminado (UABC-175 [ahora UANL-1905]), Rancho Casa Verde, 20-09-1986, MER; un macho (UABC-097), Rancho Casa Verde, 25-04-1987, LAA; una hembra (UABC-118), Rancho Casa Verde, 25-04-1987, MRM; una hembra (UABC-119), Rancho Casa Verde, 25-05-1987, MRM; un macho (UABC-174), Rancho Casa Verde, 21-09-1987, GJ; una hembra (UABC-187), Rancho Agua Fria, 22-09-1989,

GRC; una hembra (UABC-188), La Bashisha, 23-09-1989, GRC; una hembra (UABC-268), Rancho Agua Fria, 27-01-1990, RPA; una hembra (UABC-195), Laguna Hanson, 29-01-1990, GRC; un macho (UABC-1064), Rancho Casa Verde, 15-09-1990, FCC; una hembra (UABC-411), La Zorra, 07-02-1991, GRC.

SPM: una hembra (UABC-109), Rancho El Salto, 29-04-1987, MRM; una hembra (UABC-255), Rancho Mike's Sky, 25-11-1989, GRC; un macho (UABC-269), Rancho El Potrero, 25-11-1989, GRC; un macho (UABC-287), Rancho Santa Cruz, 25-11-1989, GRC; un macho (UABC-943), Rancho San Antonio, 31-05-1997, GRC; una hembra (UABC-1094) y un macho (UABC-1095), Rancho Santa Cruz, 26-01-2001, GRC; una hembra (UABC-1120) y un macho (UABC-1121), Rancho San Antonio, 31-03-2001, GRC.

Melanerpes uropygialis

SPM: una hembra (UABC-016), El Cartabón, 15-09-1985, GGC.

Colaptes auratus

SJ: un macho (UABC-024), Rancho Casa Verde [cañada], 06-07-1986, LAA; dos machos (UABC-094, 095), Rancho Casa Verde, 25-04-1987, LAA; un macho (UABC-114), Rancho Casa Verde, 25-04-1987, MRM; una hembra (UABC-115), Rancho Casa Verde, 24-05-1987, MRM; un macho (UABC-116), Rancho Casa Verde, 25-05-1987, MRM; un macho (UABC-117), Rancho Casa Verde, 05-07-1987, MRM; una hembra (UABC-231), Ejido Neji, 22-04-1989, GRC.

SPM: un macho (UABC-232), Rancho Mike's Sky, 22-05-1989, GRC; un macho (UABC-605), Rancho Mike's Sky, 01-05-1992, GRC; un macho (UABC-1111) y una hembra (UABC-1112), Rancho [Nuevo] Valladares, 12-04-2001, GRC.

Colaptes chrysoides

SPM: un macho (UABC-1151), Rancho San Antonio, 12-10-2001, GRC.

Sphyrapicus nuchalis

SJ: un macho (UABC-076), Rancho Casa Verde, 09-11-1986, LAA.

SPM: dos machos (UABC-245, 224), Rancho Santa Cruz, 25-11-1989, GRC; un macho (UABC-208), Rancho Mike's Sky, 09-12-1989, RPA; un macho (UABC-784), Rancho El Potrero, 30-09-1995, GRC.

Sphyrapicus varius

SPM: un inmaduro (UABC-228), Rancho Mike's Sky, 24-10-1989, GRC.

Picoides nuttallii

SPM: dos machos (UABC-259, 284), Rancho Mike's Sky, 23 y 24-10-1989, respectivamente, RPA; un macho (UABC-210), Rancho Mike's Sky, 09-12-1990, RPA.

Picoides scalaris

SPM: dos hembras (UABC-014, 015), El Cartabón, 15-09-1985, GGC.

Picoides villosus

SJ: un macho (UABC-039), Laguna Hanson, 04-04-1991, FCC; un macho (UABC-508) y dos hembras (UABC-526, 592), Laguna Hanson, 20-04-1991, FCC.

SPM: un macho (UABC-1063), pradera La Grulla, 25-10-1992, GRC.

Familia Tyrannidae***Contopus sordidulus***

SPM: una hembra (UABC-951), Rancho [Nuevo] Valladares, 30-06-1997, GRC; un ejemplar sexo indeterminado (UABC-979), Rancho Mike's Sky, 22-08-1997, GRC.

Empidonax difficilis

SPM: un macho (UABC-128), Rancho Tepi, 15-10-1988, MRM; un ejemplar sexo indeterminado (UABC-433), pradera La Grulla, 10-08-1990, AGA; un macho (UABC-848), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 28-09-1996, GRC.

****Empidonax hammondi***

SPM: un macho (UABC-1113), Rancho [Nuevo] Valladares, 11-04-2001, GRC.

****Empidonax traillii***

SPM: un macho (UABC-013), El Cartabón, 15-09-1985, GGC.

Sayornis nigricans

SPM: un juvenil (UABC-296), Rancho Mike's Sky, 20-07-1990, GRC; un juvenil (UABC-293), pradera La Grulla, 10-08-1990, GRC; un adulto (UABC-718), c.800 m arriba bocana Arroyo El Rosario, 03-10-1993, GRC; un juvenil (UABC-1092), Rancho El Divisadero, 28-07-2000, GRC.

Sayornis saya

SPM: Dos adultos sexo indeterminado (UABC-578, 649), c.1 km arriba bocana Arroyo El Rosario, 09-12-1990 y 03-10-1993, respectivamente, GRC.

Pyrocephalus rubinus

SPM: un macho (UABC-300), pradera La Grulla, 30-09-1990, GRC.

Myiarchus cinerascens

SJ: un ejemplar sexo indeterminado (UABC-166), Rancho Casa Verde, 23-04-1987, MRM; un macho (UABC-113), *idem*, 25-05-1987, MRM; dos hembras (UABC-135 [ahora UANL-1903], 138), *idem*, 25-05-1987, LAA; un macho (UABC-226), La Zorra, 08-06-1990, GRC.

SPM: un ejemplar sexo indeterminado (UABC-261), Rancho Mike's Sky, 22-05-1989, GRC; un ejemplar sexo indeterminado (UABC-295), *idem*, 20-07-1990, GRC.

Tyrannus verticalis

SJ: un macho (UABC-025), Arroyo El Barbón, 13-07-1986, LAA.

SPM: un macho (UABC-941), Rancho [Viejo] Valladares, 30-05-1997, GRC; una hembra (UABC-1071), Rancho [Nuevo] Valladares, 18-05-2000, GRC.

Tyrannus vociferans

SJ: un macho (UABC-139), Rancho Casa Verde, 25-05-1987, LAA; un ejemplar sexo indeterminado (UABC-1329), Rancho Las Delicias, 09-03-2003, GR.

SPM: una hembra (UABC-633), Arroyo San Rafael cerca Ejido Veintisiete de Enero (Punta Colonett), 13-03-1994, GRC; un adulto sexo indeterminado (UABC-884), camino a bocana de Colonett (31°02'N 116°13'O), 20-01-1997, GRC; un macho (UABC-992), camino a La Misión Santo Domingo cerca Rancho Hamilton, 07-03-1997, GRC; una hembra (UABC-940), Rancho [Viejo] Valladares, 30-05-1997, GRC; una hembra (UABC-1054), Rancho El Salado, 06-11-1999, GRC; un macho (UABC-1075), Rancho [Nuevo] Valladares, 19-05-2000, GRC; una hembra (UABC-1127), Rancho [Nuevo] Valladares, 12-04-2001, GRC; un adulto sexo indeterminado (UABC-1272), Rancho San Antonio, 25-05-2002, GRC.

Familia Laniidae***Lanius ludovicianus***

SJ: un macho (UABC-101), Rancho Casa Verde, 21-05-1987, LAA.

SPM: una hembra (UABC-144), Rancho La Cienegueta, 08-09-1987, LAA; un ejemplar sexo indeterminado (UABC-164), Valle de La Trinidad, 11-10-1987, MRM.

Familia Vireonidae***Vireo bellii***

SPM: un juvenil (UABC-952), Rancho San Antonio, 31-05-1997, GRC; un macho (UABC-1103), Rancho Mike's Sky, 22-08-1997, GRC; una hembra (UABC-167), Rancho El Divisadero, 27-07-2000, GRC.

Vireo gilvus

SPM: Dos ejemplares sexo indeterminado (UABC-858, 846), Rancho Garet, 06-09-1996, JAG; un macho (UABC-590), El Cartabón, 15-09-1985, GGC; dos machos (UABC-1266, 1278), Rancho San Antonio, 25-05-2002, GRC.

Familia Corvidae***Aphelocoma californica***

SJ: un macho (UABC-029), Rancho San Faustino, 30-08-1986, LAA; un macho (UABC-107), Rancho Casa Verde, 25-04-1987, MRM; un macho (UABC-137), *idem*, 25-05-1987, LAA; una hembra (UABC-108), *idem*, 05-07-1987, MRM; un ejemplar sexo indeterminado (UABC-176 [ahora UANL-1906]), *idem*, 26-09-1987, MGR; un ejemplar sexo

indeterminado (UABC-262), Rancho Agua Fría, 28-01-1990, RPA; un macho (UABC-419), La Zorra, 22-02-1991, GRC; una hembra (UABC-1334), *idem*, 09-03-2003, GRC.

SPM: un macho (UABC-874), Rancho El Divisadero, 13-10-1996, SSG; dos machos (UABC-959, 962), Rancho Mike's Sky, 22-08-1997, GRC; un macho (UABC-1048), Rancho [Viejo] Valladares, 24-09-1999, GRC; un macho (UABC-1038), Rancho San Antonio, 26-09-1999, GRC; un ejemplar sexo indeterminado (UABC-771), *idem*, 20-05-2000, GRC; un macho (UABC-1119), Rancho [Nuevo] Valladares, 11-04-2001, GRC; un macho (UABC-1273) y una hembra (UABC-1269), Rancho San Antonio, 25-05-2002, GRC.

Gymnorhinus cyanocephalus

SJ: Dos juveniles (UABC-238, 240), Laguna Hanson, 08-06-1990, GRC y AGA, respectivamente; un adulto sexo indeterminado (UABC-410), *idem*, 07-02-1991, LQB.

SPM: Dos adultos sexo indeterminado (UABC-298, 299), pradera La Grulla, 30-09-1990, GRC; un juvenil (UABC-1145), *idem*, 23-09-2001, GRC.

Familia Alaudidae

Eremophila alpestris

SJ: un macho (UABC-131), Ojos Negros, 26-04-1987, LAA.

SPM: una hembra (UABC-009) y tres machos (UABC-010–012), El Cartabón, 15-09-1985, GGC; un adulto sexo indeterminado (UABC-834), Laguna Figueroa, 27-06-1996, GRC; una hembra (UABC-734), c.800 m arriba bocana Arroyo El Rosario, 18-02-1995, GRC.

Familia Hirundinidae

Tachycineta thalassina

SPM: dos machos (UABC-263, 265) y una hembra (UABC-264), pradera La Grulla, 24-03-1990, GRC; un macho (UABC-812), c.300 m arriba bocana Arroyo El Rosario, 24-02-1996, GRC; una hembra (UABC-584), Rancho El Divisadero, 28-07-2000, GRC.

Stelgidopteryx serripennis

SPM: una hembra (UABC-471), c.1 km arriba bocana Arroyo El Rosario, 23-06-1991, GRC; un macho (UABC-893), Arroyo San Simón cerca Panteón Inglés, 26-06-1996, GRC.

Hirundo rustica

SPM: un ejemplar sexo indeterminado (UABC-580), Arroyo El Rosario (bocana), 07-09-1991, FCC.

Familia Paridae

Baeolophus inornatus

SJ: un ejemplar sexo indeterminado (UABC-1068), Rancho Casa Verde, 30-08-1986, LAA; dos machos

(UABC-047, 048), *idem*, 19-09-1986, LAA; un macho (UABC-153) y dos hembras (UABC-146, 160), *idem*, 26-09-1987, LAA.

SPM: un ejemplar sexo indeterminado (UABC-1068), Rancho Casa Verde, 30-08-1986, LAA; tres ejemplares sexo indeterminado (UABC-958, 976, 978), Rancho Mike's Sky, 22-08-1997, GRC; un ejemplar sexo indeterminado (UABC-956), Rancho San Antonio, 31-05-1997, GRC; un macho (UABC-1133), Rancho [Nuevo] Valladares, 12-04-2001, GRC.

Poecile gambeli

SJ: un macho (UABC-080), Rancho Casa Verde, 29-03-1987, LAA; un macho (UABC-141), Rancho Casa Verde, 25-05-1987, LAA; un ejemplar sexo indeterminado (UABC-026), El Aserradero, 29-01-1990, RPA; un ejemplar sexo indeterminado (UABC-1148), Laguna Hanson, 20-04-1996, ESP; una hembra (UABC-1011), Parque Nacional Constitución 1857 [=Laguna Hanson], 20-10-1998, ESP; una hembra (UABC-1285), Torre Forestal en Parque Nacional Constitución 1857, 10-01-2002, GRC.

Familia Aegithalidae

Psaltriparus minimus

SJ: un ejemplar sexo indeterminado (UABC-422), Rancho Casa Verde, 15-09-1990, FCC.

SPM: un ejemplar sexo indeterminado (UABC-207), Rancho Mike's Sky, 23-10-1989, GRC; una hembra (UABC-933) y dos ejemplares sexo indeterminado (UABC-1014, 1015), Rancho Garet, 06-09-1996, JAG; dos ejemplares sexo indeterminado (UABC-1061, 1062), Rancho San Antonio, 20-05-2000, GRC; dos ejemplares sexo indeterminado (UABC-1099, 1100), Rancho El Divisadero, 27-07-2000, GRC; dos ejemplares sexo indeterminado (UABC-1296, 1298), *idem*, 29-06-2002, GRC.

Familia Sittidae

Sitta canadensis

SJ: un macho (UABC-297), Rancho Casa Verde, 15-09-1990, FCC.

Sitta carolinensis

SJ: un ejemplar sexo indeterminado (UABC-199) y un macho (UABC-200), El Aserradero, 29-01-1990, AGA y RPA, respectivamente.

Sitta pygmaea

SJ: un ejemplar sexo indeterminado (UABC-215), Laguna Hanson, 08-06-1990, LQB; dos machos (UABC-954, 957) y dos hembras (UABC-953, 1029), Laguna Hanson, 07-06-1997, SGG.

SPM: un ejemplar sexo indeterminado (UABC-247), pradera La Grulla, 10-08-1990, GRC; un ejemplar sexo indeterminado (UABC-568), *idem*, 11-08-1990, GRC; un ejemplar sexo indeterminado (UABC-407), *idem*, 30-09-1990, GRC; un macho (UABC-1233), *idem*, 22-09-2001, GRC.

Familia Troglodytidae***Thryomanes bewickii***

SJ: dos machos (UABC-036, 062), Rancho Casa Verde, 15-09-1986, LAA; un ejemplar sexo indeterminado (UABC-086), *idem*, 29-03-1987, LAA; un macho (UABC-178), *idem*, 25-05-1987, LAA; un ejemplar sexo indeterminado (UABC-843), Laguna Hanson, 20-04-1996, MRM; un macho (UABC-1030), La Zorra, 07-03-1999, GRC.

SPM: dos ejemplares sexo indeterminado (UABC-1297, 1299), Rancho El Divisadero, 29-06-2002, GRC.

Cistothorus palustris

SPM: un ejemplar sexo indeterminado (UABC-618), c.800 m arriba bocana Arroyo El Rosario, 03-10-1993, GRC.

Familia Regulidae***Regulus calendula***

SJ: un macho (UABC-070), Rancho Casa Verde, 13-02-1987, LAA; un macho (UABC-156), *idem*, 28-09-1987, LAA; una hembra (UABC-205), Rancho San Salvador, 09-02-1990, GRC.

SPM: una hembra (UABC-281), Rancho Mike's Sky, 09-12-1989, AGA; un macho (UABC-1096), Rancho Santa Cruz, 26-01-2001, GRC.

Familia Sylviidae***Polioptila caerulea***

SPM: un macho (UABC-946), Rancho San Antonio, 31-05-1997, GRC; un ejemplar sexo indeterminado (UABC-1300), Rancho Los Aguajes, 27-09-2002, GRC.

Polioptila californica

SPM: dos hembras (UABC-514, 521), un macho (UABC-517) y un ejemplar sexo indeterminado (UABC-518), 14 km sudoeste de Volcán Riveroll, 27-01-1991, EMB; un macho (UABC-516), 8 km norte de El Rosario, 28-01-1991, EMB; un ejemplar sexo indeterminado (UABC-513), 1 km este de San Telmo, 20-02-1991, EPC; una hembra (UABC-520), 1 km este de San Telmo, *idem*, EMB; una hembra (UABC-0507), 5 km oeste de Rancho Meling, *idem*, EPC.

Familia Turdidae***Sialia mexicana***

SJ: dos machos (UABC-033, 1070), Rancho Casa Verde, 30-08-1986, LAA; un macho (UABC-052 [ahora UANL-1900]), *idem*, 09-09-1986, LAA; una hembra (UABC-049), *idem*, 19-09-1986, LAA; un macho (UABC-096), *idem*, 25-04-1987, LAA; un macho (UABC-110), *idem*, 24-05-1987, MRM; un macho (UABC-254), Laguna Hanson, 23-09-1989, GRC; dos machos (UABC-239, 246), El Rayo, 08-06-1990, GRC; un macho (UABC-243), Laguna Hanson, 08-06-1990, GRC; una hembra (UABC-529), Laguna Hanson, 20-04-1991, FCC.

SPM: un macho (UABC-289), Rancho Mike's Sky, 09-12-1989, RPA; un macho (UABC-266), *idem*, 10-12-1989, RPA; una hembra (UABC-233), pradera La Grulla, 22-03-1990, GRC; dos machos (UABC-267, 270), *idem*, 24-03-1990, GRC; una hembra (UABC-658), Rancho [Nuevo] Valladares, 11-03-1994, GRC; un macho (UABC-926), camino a Rancho Mike's Sky, 16-04-1997, GRC; dos machos (UABC-1229, 1232), pradera La Grulla, 22-09-2001, GRC.

Myadestes townsendi

SPM: un ejemplar sexo indeterminado (UABC-271), Rancho Mike's Sky, 09-12-1989, RPA.

Catharus guttatus

SPM: dos ejemplares adultos (UABC-260, 286), Rancho Mike's Sky, 09-12-1989, RPA.

Turdus migratorius

SJ: un macho (UABC-527), Laguna Hanson, 20-04-1991, FCC.

SPM: una hembra (UABC-1114), Rancho [Nuevo] Valladares, 12-04-2001, GRC.

Familia Timaliidae***Chamaea fasciata***

SPM: un ejemplar sexo indeterminado (UABC-258), Rancho El Potrero, 25-11-1989, AGA; dos machos (UABC-1081, 1126) y dos ejemplares de sexo indeterminado (UABC-1074, 1108), Arroyo Santo Domingo cerca El Divisadero, 27 y 28-07-2000, GRC.

Familia Mimidae***Mimus polyglottos***

SJ: una hembra (UABC-159), Rancho Casa Verde, 15-11-1987, LAA.

SPM: un ejemplar sexo indeterminado (UABC-631), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 13-03-1994, GRC.

Toxostoma redivivum

SJ: una hembra (UABC-133), Rancho Casa Verde, 05-07-1987, LAA; un ejemplar sexo indeterminado (UABC-253), Rancho Agua Fria, 22-09-1989, FCR.

SPM: un macho (UABC-142), Rancho La Cieneguita, 08-08-1987, LAA.

Toxostoma cinereum

SPM: un macho (UABC-406), San Telmo, 10-08-1990, GRC; un macho (UABC-624), 1.9 km arriba de San Telmo, 12-03-1994, GRC.

Familia Sturnidae***Sturnus vulgaris***

SJ: un macho (UABC-169), Rancho Casa Verde, 27-09-1987, MGR; un macho (UABC-158), *idem*, 15-11-1987, LAA.

SPM: un adulto reproductivo (UABC-089), Rancho [Nuevo] Valladares, 19-05-2000, GRC; un juvenil (UABC-666), Rancho San Antonio, 20-05-2000, GRC.

Familia Motacillidae***Anthus rubescens***

SPM: un adulto no reproductivo (UABC-579), Arroyo El Rosario (bocana), 09-12-1990, GRC.

Familia Bombycillidae***Bombycilla cedrorum***

SPM: un ejemplar adulto (UABC-209), Rancho Mike's Sky, 09-12-1989, GRC; tres ejemplares adultos (UABC-1060, 1079 y 1088), Rancho San Antonio, 19 y 20-05-2000, GRC; un macho (UABC-1149), pradera La Grulla, 22-09-2001, GRC.

Familia Ptilonotidae***Phainopepla nitens***

SJ: una hembra (UABC-130), Rancho Casa Verde, 20-06-1987, LAA.

SPM: un macho (UABC-1122), Rancho San Antonio, 31-03-2001, GRC.

Familia Parulidae***Vermivora celata***

SJ: un macho (UABC-162), Rancho Casa Verde, 26-09-1987, LAA; un juvenil (UABC-170), *idem*, 27-09-1987, MRM.

SPM: un macho (UABC-646), Rancho [Nuevo] Valladares, 12-03-1994, GRC; una hembra (UABC-858) y un macho (UABC-932), Rancho Garet, 06-09-1996, JAG; una hembra (UABC-1301), Rancho Los Aguajes, 27-09-2002, GRC.

Dendroica coronata

SPM: un ejemplar sexo indeterminado (UABC-301), pradera La Grulla, 30-09-1990, GRC; dos ejemplares sexo indeterminado (UABC-570, 574), 1 km arriba bocana Arroyo El Rosario, 03-11-1990, JEV y GRC, respectivamente; un macho (UABC-399) y una hembra (UABC-400), *idem*, 09-12-1990, JEV y AGA, respectivamente; un ejemplar sexo indeterminado (UABC-647), Rancho [Nuevo] Valladares, 11-03-1994, GRC; un ejemplar sexo indeterminado (UABC-909), Rancho El Divisadero, 07-03-1997, GRC.

Dendroica nigrescens

SJ: un macho (UABC-844), Laguna Hanson, 20-04-1996, MRM.

Dendroica petechia

SPM: un macho (UABC-944), Rancho San Antonio, 31-05-1997, GRC; una hembra (UABC-963), Rancho Mike's Sky, 21-08-1997, GRC; dos machos (UABC-1271, 1292), Rancho El Divisadero, 29-06-2002, GRC.

Wilsonia pusilla

SJ: un macho (UABC-842), Laguna Hanson, 20-04-1996, MRM; un macho (UABC-1147), Cañón de Guadalupe, 02-04-2001, MRM.

SPM: un macho (UABC-308), pradera La Grulla, 30-09-1990, GRC; dos machos (UABC-865, 873), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 28-09-1996, GRC; un macho (UABC-980), Rancho Mike's Sky, 22-08-1997, GRC; un macho (UABC-1293), Cañada El Ranchito (El Caballito), 27-09-2002, GRC.

Seiurus noveboracensis

SPM: un ejemplar sexo indeterminado (UABC-531), Arroyo El Rosario (bocana), 03-11-1990, GRC.

Geothlypis trichas

SPM: una hembra (UABC-572), Arroyo El Rosario (bocana), 03-11-1990, JEV; un macho (UABC-530), *idem*, 09-12-1990, GRC.

Familia Thraupidae***Piranga ludoviciana***

SPM: una hembra (UABC-1291), Rancho Los Aguajes, 28-09-2002, GRC.

Familia Emberizidae***Pipilo maculatus***

SJ: un macho (UABC-031), Rancho Casa Verde, 30-08-1986, LAA; un macho (UABC-134), Rancho Casa Verde, 5-07-1987, LAA.

SPM: un macho (UABC-100), Rancho La Cieneguita, 09-06-1987, LAA; un macho (UABC-405), Rancho Santa Cruz, 25-11-1989, AGA; un macho (UABC-961), Rancho Mike's Sky, 23-08-1997, GRC.

Pipilo crissalis

SJ: un macho (UABC-132), Rancho Casa Verde, 05-07-1987, LAA; un ejemplar sexo indeterminado (UABC-236), La Zorra, 08-06-1990, LQB.

SPM: un macho (UABC-161), Rancho La Cieneguita, 08-06-1987, LAA; un macho (UABC-143), *idem*, 08-08-1987, LAA; un macho (UABC-627), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 13-03-1994, GRC; un macho (UABC-786), Rancho [Nuevo] Valladares, 01-10-1995, GRC; un ejemplar sexo indeterminado (UABC-868), Rancho El Divisadero, 13-10-1996, SSG; un macho (UABC-912), *idem*, 06-03-1997, GRC; un macho (UABC-1053), Rancho El Salado, 06-11-1999, GRC; un macho (UABC-1089), Rancho El Divisadero, 27-07-2000, GRC.

Amphispiza belli

SPM: un macho (UABC-154), Rancho La Cieneguita, 12-08-1987, LAA; un ejemplar sexo indeterminado (UABC-1076), Rancho Mike's Sky, 20-08-2000, ACM; dos ejemplares sexo indeterminado (UABC-1077, 1097), *idem*, 19 y 20-08-2000, respectivamente, GRC.

Passerella iliaca

SJ: un ejemplar sexo indeterminado (UABC-075), Rancho Casa Verde, 15-11-1986, MRM; un macho (UABC-1016), La Zorra, 07-03-1999, GRC; dos ejemplares sexo indeterminado (UABC-1305, 1309), camino a Laguna Hanson cerca El Ranchito, 15-10-2002, ETS y MRM, respectivamente.

SPM: un ejemplar sexo indeterminado (UABC-304), pradera La Grulla, 30-09-1990, GRC.

Chondestes grammacus

SJ: un macho (UABC-1328), Rancho El Tularcito, 09-03-2003, GRC.

SPM: un macho (UABC-1274), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 28-06-2002, GRC.

Passerculus sandwichensis

SPM: un macho (UABC-326) y un ejemplar sexo indeterminado (UABC-573), Arroyo El Rosario (bocana), 03-11-1990, GRC; un macho (UABC-1026) y un ejemplar sexo indeterminado (UABC-1027), c.500 m arriba bocana Arroyo El Rosario, 08-05-1999, GRC; una hembra (UABC-1302), Arroyo San Telmo (bocana), 17-03-2002, GRC.

Melospiza lincolni

SPM: un ejemplar sexo indeterminado (UABC-910), Rancho El Divisadero, 07-03-1997, SGG.

Melospiza melodia

SPM: un ejemplar sexo indeterminado (UABC-581), 1 km arriba bocana Arroyo El Rosario, 23-06-1991, GRC; una hembra (UABC-1279), Rancho El Divisadero, 29-06-2002, GRC; un macho (UABC-1287), Arroyo El Rosario frente a El Rosario de Arriba, 30-06-2002, GRC.

Zonotrichia atricapilla

SJ: un macho (UABC-083), Rancho Casa Verde, 29-03-1987, LAA.

Zonotrichia leucophrys

SJ: cuatro hembras (UABC-057, 058, 060 [ahora UANL-1902], 061), Rancho Casa Verde, 15-11-1986, LAA.

SPM: un macho (UABC-069), Rancho La Suerte, 16-01-1987, LAA; un macho (UABC-250), Rancho Santa Cruz, 25-11-1989, AGA; un macho (UABC-659), Rancho [Nuevo] Valladares, 11-03-1994, GRC; una hembra (UABC-819), Arroyo San Vicente c.1 km SE Eréndira, 24-03-1996, GRC; un macho (UABC-885), camino a bocana Arroyo San Rafael (30°58'N 116°15'O), 19-01-1997, GRC.

Junco hyemalis

SJ: tres machos (UABC-053, 054 [ahora UANL-1901], 055), Rancho Casa Verde, 09-11-1986, LAA; dos hembras (UABC-056, 059), *idem*, 15-11-1986, LAA y MRM, respectivamente; un macho (UABC-129), *idem*, LAA; una hembra (UABC-179) y un ejemplar sexo indeterminado (UABC-180), *idem*, 13-11-1988, MRM; un ejemplar sexo indeterminado (UABC-212), El Aserradero, 29-01-1990, RPA; un ejemplar sexo indeterminado (UABC-242), Laguna Hanson, 08-06-1990, GRC; una hembra (UABC-840), *idem*, 20-04-1996, MRM.

SPM: un juvenil (UABC-294), pradera La Grulla, 10-08-1990, GRC; un ejemplar sexo indeterminado (UABC-302), *idem*, 29-09-1990, GRC.

Pheucticus melanocephalus

SJ: una hembra (UABC-183), Ejido Neji, 22-04-1989, MRM.

SPM: un macho (UABC-099), Rancho La Cieneguita, 09-06-1987, LAA; un macho (UABC-168), *idem*, 14-08-1987, MRM; un macho (UABC-145), *idem*, 22-08-1987, LAA; un macho (UABC-935), Rancho San Antonio, 31-05-1997, RL; una hembra (UABC-942) y un macho (UABC-945), *idem*, 31-05-1997, GRC; una hembra (UABC-035), Rancho Mike's Sky, 22-08-1997, GRC; un macho (UABC-960), *idem*, 22-08-1997, GRC; una hembra (UABC-1073), Rancho San Antonio, 19-05-2000, GRC.

Familia Icteridae

Sturnella neglecta

SJ: un macho (UABC-030), Rancho San Faustino, 30-08-1986, LAA; un macho (UABC-1327), Rancho Las Estrellas, 09-03-2003, GRC.

SPM: un adulto sexo indeterminado (UABC-630), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 13-03-1994, GRC.

Xanthocephalus xanthocephalus

SPM: un inmaduro (UABC-619), bocana Arroyo El Rosario, 02-10-1993, GRC.

Agelaius phoeniceus

SPM: una hembra (UABC-084), Rancho El Salto, 19-04-1987, LAA; un macho (UABC-629), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 13-03-1994, GRC; un macho (UABC-883), camino a bocana Arroyo San Rafael cerca Ejido V. Morelos (31°02'N 116°12'O), 19-01-1997, GRC; un macho (UABC-1072), Rancho [Nuevo] Valladares, 18-05-2000, GRC; un macho (UABC-1117), Rancho San Antonio, 01-04-2001, GRC.

Quiscalus mexicanus

SPM: dos hembras (UABC-339, 340), c.1 km arriba bocana Arroyo El Rosario, 08-12-1990, LQB y MMZ, respectivamente.

Euphagus cyanocephalus

SJ: un macho (UABC-002) y una hembra (UABC-003), Ojos Negros, 24-02-1985, GGC; una hembra (UABC-102), Rancho Casa Verde, 21-05-1987, LAA; un macho (UABC-157), *idem*, 28-09-1987, LAA; una hembra (UABC-186), Ejido Neji, 22-04-1989, GRC; una hembra (UABC-190), El Aserradero, 29-01-1990, GRC; un macho (UABC-1330), Rancho Las Delicias, 09-03-2003, GRC.

SPM: una hembra (UABC-111), Rancho El Salto, 17-04-1987, MRM; una hembra (UABC-626), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 13-03-1994, GRC; un macho (UABC-817), cerca el poblado Colonett, 23-03-1996, GRC.

****Icterus bullockii***

SJ: un macho (UABC-1351), Rancho Las Estrellas, 17-05-2003, GRC.

SPM: un macho (UABC-818), c.1 km sudeste de Eréndira, 24-03-1996, GRC.

Icterus cucullatus

SPM: un macho (UABC-185), Rancho Mike's Sky, 22-05-1989, GRC; dos machos (UABC-938, 939), Rancho [Viejo] Valladares, 30-05-1997, GRC; un macho (UABC-1118), Rancho [Nuevo] Valladares, 11-04-2001, GRC; un macho (UABC-1275), Arroyo El Rosario frente a El Rosario de Arriba, 30-06-2002, GRC; una hembra (UABC-1276), Arroyo San Rafael cerca Ejido Veintisiete de Enero, 28-06-2002, GRC.

Icterus parisorum

SJ: un macho (UABC-112), Rancho Casa Verde, 05-07-1987, MRM.

****Icterus galbula***

SPM: un macho (UABC-1290), Rancho Los Aguajes, 28-09-2002, GRC.

Familia Fringillidae

Carpodacus mexicanus

SJ: un macho (UABC-105) Rancho Casa Verde, 15-11-1986, LAA; un macho (UABC-152 [ahora UANL-1904]), *idem*, 26-09-1987, LAA; una hembra (UABC-241), Laguna Hanson, 08-06-1990, AGA.

SPM: una hembra (UABC-163), Rancho La Cieneguita, 8-06-1987, LAA; un macho (UABC-237), pradera La Grulla, 10-08-1990, AGA; un macho (UABC-993), Ejido El Papalote, 08-03-1997, GRC; una hembra (UABC-1055), Rancho El Salado, 06-11-1999, GRC; un macho (UABC-1087) y una hembra (UABC-1090), Rancho El Divisadero, 27-07-2000, GRC.

Loxia curvirostra

SPM: una hembra (UABC-306), pradera La Grulla, 30-09-1990, GRC.

Carduelis lawrencei

SJ: dos hembras (UABC-148, 171) y tres machos (UABC-149, 150, 151), Rancho Casa Verde, 26 y 27-09-1987, LAA.

SPM: un macho (UABC-1349) y una hembra (UABC-1350), Rancho San Antonio, 24-05-2003, GRC.

Carduelis pinus

SJ: tres hembras (UABC-064, 065, 066), Rancho Casa Verde, 15-11-1986, LAA; una hembra (UABC-067), *idem*, MRM.

Carduelis psaltria

SJ: un macho (UABC-034), Rancho Casa Verde, 30-08-1986, LAA; un macho (UABC-051) y una hembra (UABC-147), *idem*, 26-09-1986, LAA; un macho (UABC-068), *idem*, 15-11-1986, LAA; un inmaduro (UABC-104) y un macho (UABC-140), *idem*, 25-04-1987, LAA; una hembra (UABC-155), *idem*, 28-09-1987, LAA; dos inmaduros (UABC-415, 417) y un macho (UABC-416), La Zorra, 07-02-1991, LQB.

Familia Passeridae

****Passer domesticus***

SJ: una hembra (UABC-005), Ojos Negros, 26-02-1985, GGC.

Discusión

La avifauna de SJ y SPM, y sus respectivas inmediaciones, está compuesta principalmente por especies con afinidad neártica¹⁸, algunas de ellas como *Oreortyx pictus*, *Picoides nuttallii*, *Poecile gambeli* y *Chamaea fasciata*, alcanzan aquí sus límites más meridionales^{12,14,16,37}. En estas mismas áreas montanas, otras formas de afinidad neártica como *Gymnorhinus cyanocephalus*, *Sitta pygmaea*, *Toxostoma redivivum* y *Loxia curvirostra*, alcanzan también sus ámbitos de distribución más australes en la costa del Pacífico^{12,14,16,37}.

Por su parte, la especie endémica peninsular *Toxostoma cinereum* alcanza su límite más norteño en la localidad de Eréndira (31°16'N³⁶). Destaca también la presencia de la codorniz de Gambel *Callipepla gambelii*, especie con afinidad al distrito del Bajo Río Colorado^{5,12,23,28}, la cual se distribuye en la parte oriental de SJ y posiblemente en parapatria con *C. californica*²³. Algunas especies características de la avifauna del desierto sonorense como *Melanerpes uropygialis* y *Colaptes chrysoides*²³, concurren en localidades sureñas de la SPM, y más al norte, en sitios ribereños a lo largo del río Santo Domingo, al menos hasta las inmediaciones del Rancho San Antonio (560 m). Estas localidades se distinguen por tener una vegetación ecotonal conformada por elementos xerofíticos (*Pachycereus pringlei*, *Lophocereus schottii*, *Agave deserti*) y del matorral rosetófilo.

El endemismo en el componente aviar del distrito faunístico Mártirensis está expresado a nivel de subespecies^{19,20}: *Oreortyx pictus confinis*, *Poecile gambeli atratus*, *Sitta pygmaea leuconucha*, *Junco hyemalis pontilis* (SJ) y *J. h. townsendi* (SPM).

En relación a nuevos registros con especímenes para la región que aquí nos ocupa^{4,10-12,17,20,31,32}, se incluyen los siguientes taxa: *Gavia immer*, *Butorides virescens*, *Ardea herodias*, *Callipepla gambelii*, *Tringa melanoleuca*, *Zenaida asiatica*, *Ceryle alcyon*, *Empidonax hammondii*, *E. traillii*, *Icterus bullockii*, *Icterus galbula* y *Passer domesticus*. De estos ejemplares sobresale *I. galbula* debido a su presencia rara en la península, ya que el único espécimen previamente reportado en la península de Baja California procede de Isla Cedros³⁰.

Otros cinco registros de nuevos especímenes para esta misma región geográfica (*Mergus merganser*, *Asio otus*, *Sphyrapicus varius*, *Vireo bellii* y *Xanthocephalus xanthocephalus*) fueron recientemente reportados por Ruiz-Campos *et al.*³⁰, siendo *M. merganser* y *S. varius* nuevos especímenes para la península de Baja California.

El presente trabajo representa la lista más completa de especímenes recolectados en las sierras antes mencionadas, tanto en cobertura espacial como temporal. Por tanto, esta lista complementa y amplía los registros locales para muchas de las especies previamente reportadas^{4,10-12,17,20,31,32}.

De las especies incluidas en el presente catálogo, *Sitta canadensis* es considerada de concurrencia rara en el área de estudio con tres registros conocidos, dos en SJ^{8,26} y uno en SPM¹⁶.

La situación poblacional de algunas especies como *Empidonax traillii* y *Vireo bellii pusillus*, entre otras, requiere ser determinada en el área de estudio ya que sus poblaciones en el sur de California han estado disminuyendo^{33,38}.

Cabe señalar que SJ y SPM son consideradas Áreas de Importancia para la Conservación de las Aves (AICA) en México⁶, sin embargo sus límites actuales deben ser ampliados para incluir los corredores ribereños, especialmente aquellos de los arroyos El Barbón (SJ), San Rafael, San Telmo y Santo Domingo (SPM), ya que éstos representan sitios importantes de alimentación y reproducción de aves residentes, además de ser utilizados como sitios de escala (*stopovers*) por la avifauna migratoria.

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Apéndice 1. Lista de localidades de muestreo en las sierras Juárez y San Pedro Mártir, y sitios adyacentes, en el noroeste de Baja California, México. Toponimias basadas en cartas INEGI escala 1:50.000.

Sierra Juárez

- Ojos Negros, laguna y poblado del mismo nombre (31°54'N 116°16'O; 700 m)
- Ranchos Las Delicias y Las Estrellas, Valle de Ojos Negros (31°58'N 116°16'O; 695 m)
- Camino Ojos-Negros-Laguna Hanson (31°53'N 116°06'O; 910 m)
- Arroyo El Barbón (31°57' N 116°16' O; 700 m)
- Rancho El Tularcito cerca mina Agua Caliente (31°59'N 116°02'O; 1.300 m)
- Camino a Laguna Hanson cerca El Ranchito (31°55'N 116°05'O; 1.250 m)
- Inmediaciones de Cerro Colorado, carr. Ensenada-San Felipe (31°45'N 115°59'O; 1.200 m)
- Cañada Jaquejel en Ejido Jamau (31°35'N 115°26'O; 550 m)
- Ejido Neji (32°24'N 116°19'O; 925 m)
- Rancho San Faustino (32°13'N 116°10'O; 1.280 m)
- Rancho Agua Fria (32°33' N 116°30'O; 900 m)
- Rancho Casa Verde (32°04'N 116°05'O; 1.370 m)
- Laguna Hanson (32°02'N 115°55'O; 1.650 m)
- Torre Forestal en Parque Nacional Constitución 1857 (32°05'N 115°55'O; 1.665 m)
- El Aserradero (32°00'N 115°56'O; 1.650 m)
- El Rayo (31°58'N 115°58'O; 1.550 m)
- La Zorra (31°54'N 116°05'O; 1.265 m)
- La Bashisha, Arroyo de (31°54'N 116°05'O; 1.100 m)
- Rancho San Salvador (31°50'N 116°04'O; 1.100 m)
- Cañón de Guadalupe (32°09'N 115°47'O; 350 m)

Sierra San Pedro Mártir

21. Arroyo San Vicente en Rancho M.B. (31°20'N 116°15'O; 100 m)
22. Arroyo San Vicente, c.1 km sudeste de Eréndira (31°15'N 116°22'O; 50 m)
23. Rancho El Salado, cañón y zona ribereña (31°09'N 116°12'O; 164 m)
24. Camino a bocana Arroyo San Rafael (30°58'N 116°15'O; 70 m)
25. Camino a bocana [Arroyo San Rafael] de Colonett (31°02'N 116°13'O; 20 m)
26. Arroyo San Rafael cerca Colonett (31°02'N 116°13'O; 20 m)
27. Camino a bocana Arroyo San Rafael (31°02'N 116°12'O; 20 m)
28. Arroyo San Rafael cerca Ejido Veintisiete de Enero, Punta Colonett (30°58'N 116°16'O; 10 m)
29. Colonett, poblado (31°05'N 116°12'O; 50 m)
30. Rancho Garet (31°04'N 115°36'O; 1.350 m)
31. Rancho Mike's Sky, arroyo y zona ribereña (31°06'N 115°37'O; 1.230 m)
32. Aguaje del Burro, camino a Rancho Mike's Sky (31°13'N 115° 35'O; 1.120 m)
33. Rancho San Javier, camino a Rancho Mike's Sky (31°12'N 115°37'O; 1.285 m)
34. Rancho La Cieneguita (31°13'N 115°40'O; 1.220 m)
35. Rancho Tepi (31°09'N 115°43'O; 980 m)
36. Valle de La Trinidad (31°23'N 115°47'O; 750 m)
37. Arroyo San Telmo, c.800 m arriba de la bocana (30°56'N 116°14'O; 10 m)
38. 1 km este de San Telmo (30°58'N 116°05'O, 120 m)
39. 5 km oeste de Rancho Meling (30°57'N 115°47'O; 760 m)
40. San Telmo, poblado (30°58'N 116°05'O; 75 m)
41. 1.9 km arriba San Telmo (30°58'N 116°04'O; 120 m)
42. Misión Santo Domingo (30°45'N 115°56'O; 40 m)
43. Rancho El Divisadero, c.2 km arriba de Misión Santo Domingo (30°46'N 115°54'O; 50 m)
44. Camino a Misión Santo Domingo cerca Rancho Hamilton (30°45'N 115°58'O; 40 m)
45. Pradera La Grulla, que incluye el arroyo y ciénaga del mismo nombre (30°53'N 115°28'O; 2.034 m)
46. 3 km oeste de Rancho La Concepción (30°58'N 115°39'O; 1.360 m)
47. Rancho El Potrero, arroyo y zona ribereña (30°54'N 115°38'O; 892 m)
48. Rancho Santa Cruz, zona ribereña del Arroyo Santa Cruz (30°52'N 115°39'O; 860 m)
49. Arroyo Santa Cruz entre la Encinoza y Valladares (30°52'N 115°39'O; 840 m)
50. Rancho [Viejo] Valladares, arroyo y zona ribereña (30°52'N 115°41'O; 700 m)
51. Rancho [Nuevo] Valladares, arroyo y zona ribereña (30°51'N 115°42'O; 690 m)
52. Camino [vereda] a Rancho San Antonio (30° 49' N 115° 37'O; 837 m)
53. Confluencia del Arroyo La Zanja y Arroyo San Antonio, cerca Rancho San Antonio (30°49'N 115°37'O; 565 m)
54. Rancho San Antonio (30°48'N 115°37' O; 560 m)
55. Laguna Figueroa (30°39'N 116°01'O; 50 m)
56. Arroyo San Simón cerca Panteón Inglés (30°27'N 115°55'O; 10 m)
57. 14 km sudoeste de Volcán Riveroll (30°21'N 115°59'O; <10 m)
58. Ejido El Papalote (30°28'N 115°56'O; 50 m)
59. Cañada El Ranchito (=El Caballito) (30°30'N 115°41'O; 170 m)
60. Rancho Los Aguajes (30°31'N 115°39'O; 372 m)
61. Rancho La Suerte (30°33'N 115°18'O; 1.037 m)
62. 8 km norte de El Rosario (30°08'N 115°45'O; 100 m)
63. Arroyo El Rosario, desde la bocana hasta 1 km arroyo arriba (30°02'N 115°47'O; 10 m)
64. Rancho El Salto (30°28'N 115°25'O; 610 m)
65. El Cartabón (30°05'N 115°12'O; 600 m)

Apéndice 2. Nombre de recolectores de especímenes de aves del área de estudio, los cuales aparecen referidos en el texto mediante acrónimos:

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Apéndice 3. Especies de aves observadas en el área de estudio, pero no recolectadas. Un asterisco indica registro fotográfico, y entre paréntesis el número de individuos observados.

Ardea alba: Rancho El Divisadero cerca Misión Santo Domingo, 27 y 28-07-2000 (1); La Grulla, 22-09-2001 (1).

Anas crecca: La Grulla, 23-10-1992 (17).

Anas cyanoptera: El Divisadero, 07-03-1997 (1).

Cathartes aura: Misión Santo Domingo, 27 y 28-07-2000 (4); Rancho [Nuevo] Valladares, 11-04-2001, (1). Rancho San Antonio, 24-05-2002 (1), 23-05-2003 (1).

- **Pandion haliaetus*: Rancho Garet, 09-10-1999, (1); Rancho San Antonio, 19-05-2000 (1).
- **Aquila chrysaetos*: km 133 carr. Ensenada-San Felipe cerca San Matías [31°19'N 115°33'O; 940 m], 24-04-1993 (1); km 99 carr. Ensenada-Lázaro Cárdenas cerca Llano Colorado [31°16'N 116°11'O], 04-04-2002 (2); km 105 *idem* [31°13'N 116°10'O], 04-04-2002 (1), 28-06-2002 (2), 26-09-2002 (1).
- Circus cyaneus*: Rancho El Salado, 06-11-1999 (2).
- **Parabuteo unicinctus*: San Telmo, 12-03-1994 (1); 4.7 km este del La Chorera, San Quintín [30°30'N 116°01'O; 50 m], 25-07-2001 (2).
- Accipiter cooperi*: Rancho Mike's Sky, 24-10-1989 (1).
- Buteo lineatus*: La Grulla, 02-10-1994 (1).
- Falco columbarius*: Rancho San Antonio, 26-05-2001 (1); 12-10-2001 (2).
- Falco mexicanus*: La Grulla, 23-09-2001 (1).
- Gallinago gallinago*: La Grulla, 23-10-1992, (1); Rancho [Nuevo] Valladares, 11 y 12-04-2001 (2).
- Columbina passerina*: Misión Santo Domingo, 27 y 28-07-2000 (2).
- Columba fasciata*: Rancho Santa Cruz, 26-11-1989 (3); Rancho Mike's Sky, 09-12-1989 (2).
- Chaetura vauxi*: Rancho San Antonio, 24-05-2002 (2).
- Aeronautes saxatilis*: Rancho San Antonio, 23-05-2003 (1).
- Petrochelidon pyrrhonota*: Laguna Hanson, 22-04-1989 (>50); Misión Santo Domingo, 27-29-07-2000 (3).
- Tachycineta bicolor*: El Divisadero 07-03-1997 (5); Rancho San Antonio, 30-05-1997 (3); Rancho [Nuevo] Valladares, 11-04-2001 (>60).
- Progne subis*: Rancho [Nuevo] Valladares, 18-05-2000 (6).
- Selasphorus rufus*: La Grulla, 11-08-1990 (1).
- Troglodytes aedon*: La Grulla, 02-10-1994 (1); El Divisadero, 07-03-1997 (1).
- Molothrus ater*: La Grulla, 23-09-2001 (1).
- Corvus corax*: Laguna Hanson, 22-04-1989 (1), 23-09-1989 (1), 09-02-1990 (1), 08-06-1990 (1), 31-05-1992 (1); Rancho Agua Fria, 23-09-1989 (1), 27 y 28-01-1990 (2); Rancho Mike's Sky, 23 y 24-10-1989 (2), 09-12-1989 (1); Ejido Pino Suárez, 28-01-1990 (1); Rancho San Salvador, 09-02-1990 (1); La Grulla, 10 y 11-06-1990 (1), 29 y 30-09-1990 (2), 23-10-1992 (1), 22-09-2001 (2); Misión Santo Domingo, 27 y 28-07-2000 (2).

First record of Black-throated Blue Warbler *Dendroica caerulescens* for Ecuador

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Reportamos aquí el primer registro de la Bijirita Azul de Garganta Negra *Dendroica caerulescens* para Ecuador, que también representa el registro más austral para la especie, por c.1.200 km, y el único registro en el mes de junio fuera de su zona de nidificación. Observamos un macho adulto de *D. caerulescens* entre el 7 de febrero y 4 de junio de 2002, en un bosque nublado secundario, a 2.170 m, en la ladera este de los Andes, cerca de Cosanga, provincia de Napo. Se lo solía observar en compañía de un bando mixto, que consistía principalmente de paseriformes residentes.

The primary non-breeding range of Black-throated Blue Warbler *Dendroica caerulescens* is the Bahamas, Greater Antilles and Caymans^{2,6}. It is uncommon to rare in the Lesser Antilles¹⁰ and coastal northern Central America⁷, and rare to casual in Costa Rica¹² and Panama¹⁵. *D. caerulescens* is a rare non-breeding visitor to extreme northern South America, with records in December–March¹³. In Venezuela, Meyer de Schauensee & Phelps⁹ reported records from Ocumare de la Costa (dpto. Aragua) and Cerro Platillón (dpto. Guárico), the latter representing the southernmost published record, at 09°54'N 67°31'W, c.200 km south of the Caribbean coast. Hilty & Brown⁵ mentioned four records for Colombia, one from the Santa Marta Mountains (dpto. Magdalena) and three south-east of Titujura (dpto. Guajira).

We report the first record of *D. caerulescens* for Ecuador¹⁴ and the southernmost of the species^{5,9} by c.1,200 km. This also represents the only record of *D. caerulescens* in April, May or June in South America¹³, and apparently the only record for June outside of the USA or Canada.

Observations and description

On 7 February 2002, HC and MD identified a male *D. caerulescens* foraging in roadside vegetation, on the east slope of the Andes, at Yanayacu Biological Station (00°35'S 77°53'W), c.5 km west of Cosanga, Napo province, Ecuador. It was observed for c.2–4 minutes at a distance of c.10 m among a mixed-species feeding flock. No vocalisations were heard. Although MD was initially unsure of the bird's identification, HC instantly recognised the species through prior field experience with *D. caerulescens* from Canada. Subsequently, PRM, RCD and HFG observed an adult male (presumably the same) *D. caerulescens* between 14 February and 4 June 2002, at 2,170 m, also at Yanayacu. The bird was discovered, by PRM, at 06h30 on 14 February 2002, as it foraged with a mixed-species passerine flock. We observed and videotaped the warbler (Fig. 1) until 08h00 and subsequently monitored it every few

days until 30 March. In April–early May, the bird was apparently absent from the area or, more likely, foraging with a different, unobserved flock. We observed it again on 17 May–4 June, during which time it foraged with or in the vicinity of the original flock and sang in the early morning. The bird inhabited the border of primary forest, in secondary forest along a narrow road, and shrubby vegetation within a regenerating clearing, up to 30 m from the forest edge.

The *D. caerulescens* was similar in size to several other warblers in the mixed-species flock (see below). Plumage was marked by a blue-grey crown, slate-blue back and dark grey uppertail (Fig. 1). Belly and undertail-coverts white, and underside of tail mostly white. Bill black, as were the face, throat, upper breast and its sides. Primaries and secondaries dark grey, with a striking, large square white patch at base of primaries, suggesting that the bird was at least two years old. Video-grabs documenting the record have been archived at VIREO (Visual Resources for Ornithology, The Academy of Natural Sciences, Philadelphia, Pennsylvania, USA) with the accession numbers v06/45/001 and v06/45/002.

Vocalisations

During February and March, the only vocalisation given was the species' characteristic *chip* call note, which has a very 'thick' quality. It chipped frequently as it foraged with the mixed-species flock (e.g. 28–36 chips/minute on 14 February). Between 17 May and 4 June, the warbler sang irregularly each morning during the first 3–4 hours of daylight. It gave two song types, including the species' classic 3–4-syllable *zu-zu-zu-zee* song, in which all syllables possess a buzzy quality and the last is higher pitched. The other song was a variation of this, in which the last phrase broke into a rapid, stuttered series of 3–4 emphatic *chit-chit-chit* notes, which were neither buzzy nor higher pitched. The classic song appeared to be prevalent, although the variant was quite frequently uttered and did not seem to be in response to any particular stimulus.



Figure 1. Video-grabs of an after-second-year male Black-throated Blue Warbler *Dendroica caerulescens*, at 2,100 m, near Cosanga, Napo province, Ecuador, 14 February 2002 (Paul R. Martin).

Social behaviour

We always observed the *D. caerulescens* within or near a mixed-species flock consisting of Crimson-mantled Woodpecker *Piculus rivolii*, Yellow-vented Woodpecker *Veniliornis dignus*, Montane Woodcreeper *Lepidocolaptes lacrymiger*, Pearled Treerunner *Margarornis squamiger*, Streaked Tuftedcheek *Pseudocolaptes boissonneautii*, White-tailed Tyrannulet *Mecocerculus poecilocercus*, Streak-necked Flycatcher *Mionectes striaticollis*, Cinnamon Flycatcher *Pyrrhomyias cinnamomea*, Pale-edged Flycatcher *Myiarchus cephalotes*, Brown-capped Vireo *Vireo leucophrys*, Mountain Wren *Troglodytes solstitialis*, Blackburnian Warbler *Dendroica fusca*, Canada Warbler *Wilsonia canadensis*, Slate-throated Whitestart *Myioborus miniatus*, Spectacled Whitestart *M. melanocephalus*, Golden-collared Honeycreeper *Iridophanes pulcherrima*, Masked Flowerpiercer *Diglossopsis cyanea*, Capped Conebill *Conirostrum albifrons*, Chestnut-breasted Chlorophonia *Chlorophonia pyrrhophrys*, Orange-bellied Euphonia *Euphonia xanthogaster*, Saffron-crowned Tanager *Tangara xanthocephala*, Flame-faced Tanager *T. parzudakii*, Beryl-spangled Tanager *T. nigroviridis*, Black-capped Tanager *T. heinei* and Blue-winged Mountain-tanager *Anisognathus somptuosus*.

Several interspecific interactions between the *D. caerulescens* and resident species were observed. On 14 February, it investigated a *Mecocerculus poecilocercus* scolding an Emerald Toucanet *Aulacorhynchus prasinus*. The warbler appeared agitated (irregular wing-flicking and shifting sideways) as it approached to within 1 m of the toucanet, but did not vocalise or show any other signs of scolding. We also observed it foraging within 1 m of *Diglossopsis cyanea* and *Tangara heinei* without hostility. On 23 March, however, the *D. caerulescens* was involved in an agonistic interaction with *Myioborus melanocephalus* as both foraged 18–22 m up in a *Cecropia*. One displaced and chased the

other, although we were unable to determine which was the aggressor.

Foraging behaviour

The warbler foraged 3–25 m above ground in secondary forest and its borders, primarily for insects, which it took from live foliage of trees (68%) and epiphytes (11%), live leaf petioles (13%) and in the air (8%) (N=38). It took prey primarily by gleaning from a perched position (71%), but also employed the aerial sally-strike (10.5%), sally-glide (10.5%) and flutter-chase (8%) (N=38)¹¹. Thus, its foraging behaviour was similar to that of the species in its normal non-breeding range (e.g. Jamaica)^{6,8}. We also observed it probing an *Erythrina* (Leguminaciae) flower, drinking a clear liquid that may have been nectar and/or water, and taking unidentified food, presumably fruit, as it perched for an extended period at the base of a *Cecropia* cone.

Discussion

This report of *D. caerulescens* represents a significant southern extension of the species' known occurrence, with all previous South American records being within 200 km of the Caribbean coast, in northern Colombia⁵ and Venezuela⁹. Its presence in Ecuador in June is also significant in that late-spring dates from Caribbean non-breeding grounds are 11 to 14 May^{1,4}, with most departing in April⁶. The species has not been reported outside of September–March in Costa Rica, Panama, Colombia or Venezuela^{5,9,12,13,15}. Although published records of *D. caerulescens* in Costa Rica and Colombia are from below 1,500 m^{5,15}, the Ecuadorian bird's occurrence in cloud forest at 2,170 m was similar to at least one Venezuelan record, from cloud forest at 1,950 m⁹.

Foraging behaviour of the male *D. caerulescens* in Ecuador was similar to that of the species on its Caribbean non-breeding grounds. Its participation in a mixed-species flock, however, differed from the species' typical wintering social behaviour. *D.*

caerulescens is normally strongly territorial on its wintering grounds and generally does not join mixed-species foraging flocks⁶. Flock participation has been noted in wintering populations in Cuba³, in vagrant *D. caerulescens* in Costa Rica¹⁵ and Panama¹², and is common on migration⁶.

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New information on plumage, nesting, behaviour and vocalisations of the Bolivian Swallow-tailed Cotinga *Phibalura flavirostris boliviana* from the Apolo area of Madidi National Park, Bolivia

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Cotinga 21 (2004): 63–67

La casi amenazada *Phibalura flavirostris* (Palkachupa en Quechua) tiene dos subespecies, *P. f. flavirostris* de Brazil y la población aislada en los Andes de Bolivia, *P. f. boliviana*. Antes del año 2000, *boliviana* era solo conocida por dos especímenes colectados en 1902, y uno otra antes sin datos. Considerando que *boliviana* puede ser una especie distinta y muy amenazada, el programa de Áreas de Importancia para la Conservación de las Aves de Armonía (BirdLife en Bolivia) estableció la especie como una prioridad de investigación. Hemos entrado en el área del descubrimiento para observar 35 ejemplares, la mayoría en parejas. Hemos tomado fotos de hembras y machos, grabado sus llamadas, y anotado tres nidos.

La investigación mostró que el plumaje de la hembra de *boliviana* es diferente a lo de la hembra de *P. f. flavirostris*. Encontramos ejemplares en seis sitios en fragmentos de bosques semi-humedo y con nidos en arbustos en áreas abiertas. *P. f. boliviana* solo es común en el área de Pata sin datos de poblaciones saludables en otras áreas. La población esta ubicada en Parque Nacional Madidi pero en un área de manejo integrado que anualmente sufre de quemadas para ganadería. ABH esta preparando un manuscrito proponiendo *boliviana* como una especie que merece un más alto nivel de atención de conservación.

The Near Threatened¹, high research priority¹⁰ Swallow-tailed Cotinga *Phibalura flavirostris* is represented by two subspecies, *flavirostris* of eastern Brazil and, separated by c.2,500 km of lowland forest and pantanal, *P. f. boliviana* consisting of an isolated population of unknown size living in an Andean area of disturbed open forest surrounded by moist yungas and intermontane dry forest. Two specimens collected from a single locality in 1902^{2,3} and a mounted bird with no locality other than Bolivia⁸ were, for 98 years, the only evidence of *boliviana* until it was rediscovered in 2000⁴. In July 2002, Wildlife Conservation Society research in the Apolo area of Madidi National Park (Madidi) did not observe the species but found it was well known among local inhabitants near the villages of Pata and Virgen del Rosario, having the local Quechua name of Palkachupa (forked tail)^{5,6}.

Phibalura f. boliviana appears to occur at 1,400–2,000 m in semi-humid forest fragments surrounding the city of Apolo, whereas the Brazilian subspecies *flavirostris* occurs below 1,400 m¹³. They both prefer edge habitat^{4,14}. Considering that *boliviana* could be a distinct, highly threatened species, Armonía's (BirdLife Bolivia) Important Bird Area Programme considered it a high conservation priority. Our goal was to determine the population size of this subspecies and to obtain information on its natural history and ecology.

Methods

GB, WNR, VB and JR studied the Pata area (14°35'S 68°41'W) from 24 September to 4 October 2002, visiting altitudes of 1,800–2,300 m (Table 1); they camped at seven sites along the mule trail between Tentación (14°39'S 68°36'W) and Virgen del Rosario (14°34'S 68°42'W). Searches for *boliviana* were conducted using binoculars and a telescope. ABH collected local information from the villages of Pata and Virgen del Rosario in July 2002 and observed *boliviana* on 4 and 19 October 2002, at Estancia Altumcama (14°44'S 68°19'W; east of Apolo) while hiking to a study site in the lower Yungas of Madidi.

We compared our digital photos taken in the field of four individuals to the two adult specimens at the American Museum of Natural History and to digital photographs of the immature specimen at the Zoological Museum at the University of Copenhagen.

Results

We observed at least 35 individuals, mostly in pairs. These notes are the first detailed field observations of *boliviana*.

Plumage

Chapman³ in his description of *boliviana* was not convinced that the specimen collected and sexed by R. S. Williams was a female because it differed so strongly from females of nominate *flavirostris*. This led Snow⁸ to suggest that the female *boliviana* specimen 'was perhaps a young male'.



1



2



3



4



5



6

Table 1. Sites visited and number of individuals of *Phibalura flavirostris boliviana* observed.

Site	Number of birds	Date	Locality	Altitude(m)
1	3	27–28 September 2002	Pata	1,675
2	5	28 September 2002	Pata area west	1,750
3	5	28 September 2002	Pata area east	1,650–1,750
4	8	30 September 2002	Trail to Santa Rosa	1,600
5	5	2 October 2002	Between Pata and Virgen del Rosario	–
6	5	3 October 2002	Forest patch below Santa Rosa trail	–
7	4	4 October 2002	Tentación	–

Our field observations confirm that Williams' specimen was indeed a female and that the plumage differs strongly from *flavirostris* females (Fig. 1). The most prominent difference is the lack of streaking on the female *boliviana*'s throat and belly, compared to the heavy spotting on the throat and belly of *flavirostris*.

We observed very little individual plumage variation, the only exception being a female, seen at site 4 on 30 September 2002 asymmetrically streaked on the lower breast, the right side having an open area of yellow only slightly streaked near the line of the wing.

Sexual plumage dimorphism in *boliviana* is less dramatic than in *flavirostris*. We found *boliviana* males and females to vary little and to be very similar to the specimens, except the immature (Fig. 2). Field observations of males demonstrated their considerably longer tail and that they appeared bulkier with more pronounced colouring, though approximate measurements of the two adult specimens and field observations do not indicate

significant sexual size variation (Fig. 3). The yellow lower breast is similar in both sexes, but females possess more black smudgy striations on the lower breast. Both sexes have yellow undertail-coverts, pinkish-ivory bills and pinkish-orange legs. The forked tail appears medium grey when viewed from the front. The red crown patch is occasionally visible, but can be wholly concealed.

The black upper breast scalloping in both sexes affords the impression of a necklace, but the male's is larger with bold black markings, whilst that of the female is broader and less intense black. The female is more widely marked with black striations extending along the breast-sides to the flanks, with the central breast unmarked, like males. The vent of the male is bright yellow, whereas in the female it is slightly streaked on a yellow background.

Though female *boliviana* are more similar to males than is the case in *flavirostris*, the male's characteristics are still obvious, including the longer tail. In immatures it appears that the only clear sexual characteristic is the colour of the wing-coverts, black in males and olive in females. The immature specimen was originally sexed as a male, but ABH considers it to be a female, with many ambiguous sexual characteristics, based on the olive wing-coverts.

Range

The three main populations, from the original collection site³, the Pata area⁴ and Altumcama, suggest the species historically occurred within the Apolo semi-humid forest area. From these records, it appears that *boliviana* occurs within a narrow ring of open forest and humid forest fragments around Apolo, which are possibly less than 50,000 ha in area. All our records and all the local observations are of birds on the edge of fragmented open semi-humid forest. It is interesting that local people stated that it is observed around Pata only in September–January. Given the botanical heterogeneity of the area, its range appears restricted by changes in habitat. Semi-humid forest is surrounded by dry forest, moist yungas and cleared agricultural areas. This area has been subject to intense forest destruction for the last 100 years. For example,

Captions to plate on opposite page

Figure 1. Female Bolivian Swallow-tailed Cotinga *Phibalura flavirostris boliviana*, Pata, La Paz, Bolivia, 27 September 2002 (William N. Ritchie)

Figure 2. Male Bolivian Swallow-tailed Cotinga *Phibalura flavirostris boliviana*, Pata, La Paz, Bolivia, 27 September 2002 (Jolyon Ritchie)

Figure 3. Male and female Bolivian Swallow-tailed Cotingas *Phibalura flavirostris boliviana*, Pata, La Paz, Bolivia, 27 September 2002 (Jolyon Ritchie)

Figure 4. Habitat of Bolivian Swallow-tailed Cotinga *Phibalura flavirostris boliviana*, Pata area west, looking west, La Paz, Bolivia, 28 September 2002 (William N. Ritchie)

Figure 5. JR pointing to Bolivian Swallow-tailed Cotinga *Phibalura flavirostris boliviana* nest, Pata, La Paz, Bolivia, 1 October 2002 (William N. Ritchie)

Figure 6. Nest and eggs of Bolivian Swallow-tailed Cotinga *Phibalura flavirostris boliviana*, Pata area west, La Paz, Bolivia, 28th September (William N. Ritchie)

firewood was available from local forest within walking distance of Apolo 15 years ago (R. Cuevas pers. comm.), but is now non-existent.

Habitat

Apolo lies within a large intermontane plateau believed to be originally covered mostly by semi-humid forest with some marshes in valley bottoms and perhaps more open, savanna-like mountain ridge vegetation (Figs. 4–5). This c.120,000-ha area is now dominated by highly degraded and eroded grazing land burned annually, with open woodland and scrub in the less affected areas and forest fragments in moist deep valleys. The area is bordered by Andean intermontane dry forest and moist Yungas forest^{4,7}.

Phibalura f. boliviana is frequently observed on the edge of moist forest fragments and has been seen flying across large open areas, travelling between forests. It has never been observed in dry forest^{11,12} (ABH pers. obs.) areas in the Machariapo and Tuichi valleys, and we believe the species inhabits only this fragmented habitat with scrub and grasslands. Brief surveys of the bird community around Apolo suggest that the savanna is natural given the presence of such campo grassland¹⁵ species as Red-winged Tinamou *Rhynchotus rufescens*, White-tailed Hawk *Buteo albicaudatus*, Greater Thornbird *Phacellodomus ruber*, Black-faced Tanager *Schistochlamys melanopsis*, Burnished-buff Tanager *Tangara cayana* and Wedge-tailed Grass-finch *Emberizoides herbicola*. The last Stotz *et al.*¹⁵ list as an indicator species for campo grasslands of central South America.

Nests

Three nests were found. The first was 1.8 m above ground and c.100 m from a narrow strip of forest beside a stream, on 30 September 2002 (site 2, Fig. 5). The second was on the edge of a patch of cloud forest, on 4 October 2002 (site 7). The third nest was 1.4 m above ground, c.500 m from a large patch of forest and was found on 4 October 2002 (site 1). The nests were loosely constructed from lichen, basally supported in branch forks. They were c.10 cm across and c.2 cm deep, and in the shape of a shallow cup. Each contained two eggs that were pale pastel green marked with dark brownish-red spots and scribbling (Fig. 6). In one clutch the amount of marking differed, with one egg more intensively and uniformly marked, and the other less marked and more heavily so at the blunt end. One egg measured 2.5 cm. x 1.9 cm.

Vocalisations

GB tape-recorded the call notes of *boliviana* at 17h35 on 4 October 2003. This 14-second recording has 18 call notes repeated every 9–19 msec. The

sonogram shows a deep inverse dish c.0.2 msec in duration, rising and falling between 0.7 to 3 kHz. This possible contact note is harsh and weak and was heard several times within different groups. No other vocalisation type was heard and the local communities do not know of any other type of louder call or song.

Feeding

The species is locally known to eat small fruits of early successional trees like *Didymopanax morototoni* (Aubl.) Decne. & Planch. (Araliaceae). We observed individuals perching atop c.25 m-tall trees. They would almost vertically fly up c.10 m and then return to the same or a different perch. We were unable to verify if they were catching insects, but they shared some of these perches with Tropical Kingbird *Tyrannus melancholicus* that has similar flycatching behaviour. We twice observed *boliviana* actively chasing *T. melancholicus*.

Flight

Individuals in long-distance flight between forest fragments (c.200 m) were observed to fly with a non-rhythmic closed-wing undulation. They flew at canopy height (20–30 m) in a direct manner. The flight pattern was more similar to a lighter bodied flycatcher, with the male's closed long tail seen waving.

Conclusions

Presently *boliviana* only appears common in the Pata area (c.25,000 ha) with little indication, through local knowledge and brief field surveys, of healthy populations in other areas. We know that *flavivirostris* performs seasonal altitudinal movements¹⁴; therefore, it is possible that *boliviana* also moves away from the breeding areas, perhaps explaining the lack of records from some study sites. The original specimen site of Aten has not been surveyed.

The situation may be complex, with *boliviana* requiring a specific niche within breeding and non-breeding habitat, which has reduced the area of suitable habitat. We do not know if the area where we found *boliviana* is its preferred habitat or the last remnant of marginal habitat. What is certain is that the entire forested area around Apolo has been drastically reduced over the course of the last 100 years, and such destruction has continued until the present day. The population of *boliviana* receives partial protection by virtue of its presence in Madidi, but the area is designated as a management area, which by definition permits human agricultural activities, including clearing by burning. But there are conservation possibilities within Madidi and the park authorities are receptive to ideas to protect the species. ABH is preparing a manuscript proposing

species status for *boliviana* and that a higher level of conservation attention be focused upon the taxon. Additional field research into the population size and range, habitat requirements, conservation threats and natural history of this possibly very threatened species is urgently required.

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Notes on nesting in the Bronzy Jacamar *Galbula leucogastra* in Peru

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Cotinga 21 (2004): 68

Se observó una pareja de *Galbula leucogastra* anidando en la cabecera del río Amazonas, en el oriente de Perú. El nido, encontrado en junio de 2001, estaba situado en una bromelia epífita que crecía en un *Ficus*. Se observó a la hembra capturando insectos que eran provistos a las crías.

Bronzy Jacamar *Galbula leucogastra* is uncommon to rare^{4,9} in humid lowland forest south of the Orinoco River in southern Venezuela and the Guianas, west to eastern Ecuador and northern Peru south to Amazonas^{1,3}. According to most reports^{1,3,5-7}, jacamars nest mainly in excavated holes in banks and termitaria. I am aware of only two descriptions of the nest of Bronzy Jacamar: a one-line description in Haverschmidt² that mentions a nest found in an inhabited arboreal termitarium in Suriname, and a description in Tostain *et al.*¹⁰ of a nest found in Guiana, also within an arboreal termitarium. The latter was 15 m above ground, and the adults were observed feeding young in the nest.

Observation

On 28 June 2001, a pair of Bronzy Jacamar was observed tending young in a nest in *terra firme* forest near the small village of Camuchero (03°59'S 70°57'W) in the upper Amazon River basin of eastern Peru. Camuchero is just east of San Juan, between the mouths of the Mayurana and Ampiyacu rivers, c.400 km east of Iquitos. The nest was in an epiphytic bromeliad (Bromeliaceae) growing 7–8 m above ground on the main trunk of a large *Ficus*, just below the first fork of the limbs. The tree was c.4 m from a forest trail. The male was perched on a limb c.8 m above ground and 3 m from the nest, while the female perched on a vine directly adjacent to the bromeliad containing the young, and sallied for insects. After a successful capture, the female would land at the base of the bromeliad and feed young inside the nest structure by inserting the head and then backing out, similar to feeding behaviour noted for a pair of Rufous-tailed Jacamar *G. ruficauda* in Costa Rica⁵. This behaviour was repeated three times during approximately ten minutes of observation, and the young were heard peeping each time the female approached with food. The male never attempted to forage during this time, but continued to perch nearby while the female tended the nest. Neither the nest structure nor the young were directly visible from the ground, due to the bromeliad's leaves; however the feeding behaviour is consistent with that documented for other Galbulidae^{5,6,8,10}. The nest-opening appeared to be in the top of the bromeliad's base, as the female fed the young from that position.

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First record of wintering Swainson's Warbler *Limnothlypis swainsonii* in Chiapas, Mexico

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Cotinga 21 (2004): 69–70

En el presente trabajo se presenta el primer registro de un chipe corona café *Limnothlypis swainsonii* invernando en el Estado de Chiapas, México. Durante un proyecto de monitoreo de aves en la Reserva de la Biosfera Selva El Ocote se recapturó un individuo de esta especie con un intervalo de 69 días, respecto a su captura original. Consideramos a la especie como un residente de invierno poco común en la reserva.

Swainson's Warbler *Limnothlypis swainsonii* is a generally uncommon and local breeder throughout much of the south-east USA, excluding the Florida peninsula. It winters primarily in the West Indies, and in south-east Mexico to northern Guatemala⁴. In Mexico, the winter range is primarily within the Yucatán, although the species is considered a rare winter visitor to southern Veracruz and possibly coastal Tabasco and northern Oaxaca^{9,10,15,16}. In Chiapas, Swainson's Warbler has been reported only as a transient^{1,9}, a conclusion based on just two state records: a specimen from southern Montes Azules Biosphere Reserve, in October 1987, and one collected north-east of Tuxtla Gutiérrez, on an unknown date¹².

El Ocote Biosphere Reserve is located in north-west Chiapas, bordering the states of Oaxaca and Veracruz (16°55'N 93°45'W). It covers 101,000 ha and elevation ranges from 180 to 1,560 m¹³. Major forest types are low tropical deciduous forest, tropical evergreen forest and tropical semi-evergreen forest. In the two latter habitats we conducted intensive bird surveys involving mist-netting between January 1999 and March 2002. Six mist-netting stations were established using 15 mist-nets set over an area of c.5 ha. Mist-netting stations were operated on average for three continuous days every other month between October and April.

On 30 October 2000, we captured and banded a first-year Swainson's Warbler (partially ossified skull). It was recaptured 7 January 2001, c.25 m from the location of its original capture, and thus represents the first record of a wintering Swainson's Warbler in Chiapas and significantly extends the species' winter range in Mexico. Six additional individuals were trapped during our study, between 17 December and 22 February: a first-year in December, two second-years and one older than first-year in January, and two older than second-years in February. Ages were determined using skull and/or plumage characters following Pyle¹¹. All six had no visible fat and all were captured within karstic tropical evergreen forest (see below) at 200–700 m. These records strengthen the impression that El

Ocote is a hitherto unrecognised over-wintering area for the species.

Graves⁷ described mist-netting as a poor method for studying wintering populations of Swainson's Warbler, primarily because of the species' secretive foraging behaviour. In addition, Graves found wintering territories of the species in Jamaica to be large and widely dispersed. Call/song playbacks are the recommended censusing technique, as undisturbed birds rarely fly at mist-net levels but instead remain close to the ground foraging in leaf litter^{7,8}. This species' foraging habits, low densities, unobtrusive nature and the scant ornithological research in this region are the most likely reasons for its recent discovery in El Ocote.

The karstic tropical evergreen forests typical of the western half of El Ocote are part of a large karstic relief occupying 4,800–4,900 km² between north-east Oaxaca and south-east Veracruz to north-west Chiapas⁵. Large portions of this region are covered in mature humid forest, although many areas (e.g. southern Veracruz) have been deforested and converted to agriculture or grazing⁶.

Swainson's Warbler is ranked by Partners in Flight as a species of high conservation concern² and the Mexican government lists it as meriting special protection status³. Habitat degradation on both the breeding and wintering grounds are the most significant causes of population declines¹⁴. Our preliminary conclusion is that Swainson's Warbler is an uncommon winter resident in El Ocote. However, we recommend that the species be formally and more rigorously censused within the reserve and surrounding areas following techniques described in Graves⁷ both to estimate wintering density and to map the extent of its range there.

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First sight record of Alpine Swift *Tachymarptis melba* for South America, in French Guiana

Otte Ottema

Cotinga 21 (2004): 70–71

Se reporta el primer registro de Vencejo Alpino *Tachymarptis melba* para Sudamérica, con base en un individuo observado el 16 de junio de 2002 en St. Laurent, Guyana Francesa, cerca del límite con Surinam. Se describe al mismo y se discute la identificación.

Alpine Swift *Tachymarptis melba* is an Old World species which is a long-distance migrant breeder in the Palearctic. Whilst known from observations in the Caribbean region, it has not been reported in South America.

On 16 June 2002, at St Laurent in French Guiana (2 km from the border with Suriname), I observed an individual of this species from the road between St Laurent and Cayenne (the RN1) over the dirt road opposite the Route de Fatima. Over a field and adjacent forest, c.60–80 m above ground, were many Fork-tailed Palm-swifts *Tachornis*

squamata, swallows, several Short-tailed Swifts *Chaetura brachyura* and a much larger swift with a wingspan at least four times that of *T. squamata*. The upperparts were pale brown, the back appearing lighter than the wings, while the large oval-shaped belly and small throat patches were white, separated by a dark breast-band, and the undertail-coverts and short, shallow-forked tail were also dark. It was observed from five minutes before sunset until ten minutes after dusk.

The observation conditions were ideal, the clear sky and low angle of the sun providing optimal

lighting. The bird's size excludes all New World swifts^{5,7}, except the largest, White-collared Swift *Streptoprocne zonaris* which, however, possesses quite different, largely deep black plumage⁷. The only species to obviously accord with my description is Alpine Swift⁵, with which I have experience from one observation in India. There have been four records of this species in the Caribbean³: one on 20 September 1955 in Barbados¹, which was collected; one on 14 April 1987 on Guadeloupe⁴; one on 20 July 1987 on Desecheo Island, Puerto Rico⁶ and one on 19 August 1992 on St Lucia², which was photographed. Mottled Swift *Tachymarptis aequatorialis*, the only congeneric, has a longer, more deeply forked tail and lacks the large white oval belly patch. Furthermore, the latter has not been reported from the Americas⁵.

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Feeding observations on Scarlet Macaw *Ara macao* in Costa Rica

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Cotinga 21 (2004): 71–72

Observamos un grupo familiar de cuatro individuos, dos adultos y dos jóvenes, de Lapa Roja *Ara macao* alimentándose de los frutos de dos especies de árboles. Los adultos consumían los frutos de la Palma Royal *Scheelea rostrata*. Los dos juveniles, aparentemente carentes de habilidad para alimentarse de éstos, consumían al mismo tiempo los frutos del Jobo *Spondias mombin*. La disponibilidad de diferentes recursos alimentarios puede incrementar la supervivencia de juveniles, los cuales aún no han perfeccionado sus diferentes técnicas de alimentación.

On 7 September 1995, from approximately 14h00–14h15, four Scarlet Macaws *Ara macao* were observed feeding near the Carara National Park guard station, Costa Rica (09°47'N 84°35'W). They were feeding on the edge of partially deforested pasture, along the Costañera highway. Two adults and their two juveniles were concurrently feeding on two different tree species, both common in the region. The two adults were eating from a Royal Palm *Scheelea rostrata*, of approximately 30–35 m height, which contained large bunches of mature palm nuts. *S. rostrata* has been observed with abundant nut clusters at various times throughout the year, and is also common in seasonally inundated areas in central Pacific Costa Rica (pers. obs.)². *Scheelea rostrata* is a well-known, abundant food source for *A. macao* in the region, and is high in nutritional value^{2,3}. The nuts hang inverted from the

top of the tree, and must be removed by *A. macao* in mid-air. Within the same flight, the nuts are carried to a nearby tree for consumption. Therefore, the removal of palm nuts requires advanced skills, probably still under-developed in the two juveniles (estimated at 3–4 months old).

The juveniles were feeding c. 20 m off the ground in a nearby Jobo *Spondias mombin*, which provided many perches as well as nuts surrounded by visible, yellow fruits³. The base of the *Spondias mombin* tree was within 10–20 m of the *Scheelea rostrata*, and all four birds vocalised throughout the observation; the juveniles emitted soft, single-syllable calls while the adults shrieked loudly. We have observed both juvenile and adult *A. macao* consuming *Spondias mombin* at various times throughout the year. The adults flew repeatedly to the *Scheelea rostrata* to remove fruits swiftly from the tree,

immediately landing in nearby trees to consume portions of the nuts before intentionally dropping them. Simultaneously, the juveniles remained in the same *Spondias mombin*, walking among its branches in an uncoordinated fashion, often appearing to lose their balance, resulting in dropped fruits.

Although it has been suggested that skill variation among conspecifics, including juveniles versus adults, may affect survival¹, there appears to be a variety of food sources available to *A. macao* throughout the year (CV unpubl. data). These available food sources would enhance the survival rate of juveniles, which have not yet perfected various feeding techniques. Further, it has been suggested that adult *A. macao* lack the strength to access all parts of the palm fruit, and *Scheelea rostrata* may not be an essential part of their diet (S. Matola pers. comm.). However, in our study, *Scheelea rostrata* comprised a significant portion of feeding observations (38 of 163, or 23.3%), which included 43 different plant species (CV unpubl. data). Little has been published about the Central Pacific population of *A. macao*, which is one of two significant populations remaining in Costa Rica^{4,5}.

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Primer registro de *Arenaria interpres* para Bolivia

Mauricio Herrera

Cotinga 21 (2004): 72–73

Ruddy Turnstone *Arenaria interpres*, a boreal migrant in South America, is abundant along the coasts of Peru to Chile. During research with WWF-Bolivia, I observed two individuals in a mixed flock of shorebirds at Lake Cáceres, prov. Germán Bush, dpto. Santa Cruz, on 26–28 October 1998, accompanied by Spotted Sandpiper *Actitis macularia* and American Golden Plover *Pluvialis dominica*. This is the first record of *A. interpres* for Bolivia. I collected a juvenile male, which has been deposited in the Noel Kempff Mercado Natural History Museum (MNKM 1692). Lake Cáceres is near Puerto Suárez, 645 km south-east of the city of Santa Cruz. There are few records of Ruddy Turnstone from the interior of South America.

Arenaria interpres es un playero de distribución cosmopolita. Es un migrante boreal en Sudamérica, abundante sólo por las costas marinas en el norte del continente, principalmente Perú y el norte y centro de Chile, siendo escaso pero predecible en Argentina¹.

Durante el trabajo de campo del proyecto Evaluación y Identificación de Ecosistemas y

Especies Importantes para la Conservación en las Áreas Protegidas del Pantanal, financiado por la WWF-Bolivia, se observaron dos individuos de *Arenaria interpres* en un grupo mixto de aves playeras, alimentándose en las orillas de la laguna Cáceres, Estancia Arco Iris, prov. Germán Bush, dpto. Santa Cruz (18°56'S 57°48'W). Fueron observados sólo por las mañanas de los días 26–28

de octubre de 1998, y junto a otros dos migrantes boreales, *Actitis macularia* y *Pluvialis dominica*.

Estas observaciones representan el primer registro de *Arenaria interpres* para Bolivia. Se colectó un individuo macho en plumaje juvenil. El espécimen se encuentra depositado en el Museo de Historia Natural Noel Kempff Mercado, Santa Cruz de la Sierra (MNKM 1692). La comunidad de Scolopacidae presentes en esta laguna estaba representada por *Tringa solitaria*, *T. melanoleuca*, *T. flavipes* y *Calidris melanotos*. Su número no sobrepasaba los siete individuos por especie.

La laguna Cáceres está ubicada en las cercanías de la ciudad de Puerto Suárez, a 645 km al sudeste de Santa Cruz de la Sierra, en la región Chaco Pantanal. Es una laguna de inundación alimentada por canales del río Paraguay. Las orillas de la laguna son lodosas, presentando pequeñas playas despejadas, dado que se encuentran mayormente cubiertas de vegetación acuática (*Eichhornia crassipes*). Varios tipos de vegetación están asociados con la laguna Cáceres, comunidades de gramíneas enraizadas (denominadas 'colchas'), taropes, hidrófitos con hojas flotantes, palmares (*Copernicia alba*) inundados y bosque ribereño, éste bastante antropizado.

Arenaria interpres es un migrante boreal muy regular en la costa marítima en toda América del Sur, pero con pocos registros en aguas interiores⁴. En Argentina, se lo encuentra con cierta regularidad en aguas interiores, como ser en la laguna Mar Chiquita⁴. Pero desde 1976 se ha vuelto más rara, porque la Mar Chiquita ha crecido desmesuradamente por lluvias abundantes⁴. A. Lesterhuis y R. P. Clay registraron a la especie por primera vez en Paraguay en octubre de 2000, hallando un individuo juvenil en la Bahía de Asunción³. En Brasil existe muy poca información sobre la presencia de la especie en regiones del

interior del país. Existen registros ocasionales en Petrópolis, Nova Friburgo, Rio de Janeiro y Mato Grosso (J. F. Pacheco com. pers.) y también en la Isla Marchantaria en 1988, 1989 y 1991⁵. Además existen registros de esta especie fuera de costas marinas en la puna de Chile y Perú².

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Yellow Warbler *Dendroica petechia cruciana* successfully nesting in a man-made, disturbed location

Rafael Rodríguez-Mojica

Cotinga 21 (2004): 73–74

Se describe el hallazgo de un anidaje exitoso de la Reinita Amarilla *Dendroica petechia cruciana* en un ambiente creado por el hombre. Se observó y documenta fotográficamente el comportamiento de anidaje para esta especie. Se establece una hipótesis para explicar la selección de este ambiente para anidar.

On 12 June 2002 I discovered an active nest of Yellow Warbler *Dendroica petechia cruciana* within an exotic *Ficus nekbuda* planted in a clay pot next to the swimming pool of a hotel adjacent to Cabo Rojo

National Wildlife Refuge (CRNWR) in south-west Puerto Rico. I estimate the total area of the hotel grounds to be 0.2 ha, but the area where the warblers nested and foraged for food was approximately half

that size. All of the trees and shrubs were artificially planted as part of the hotel's landscaping. The pool area is highly disturbed both by personnel and noisy guests. Therefore, I was intrigued to determine whether this breeding attempt would be successful or not.

The nest was located c.2.1 m above ground in a fork of the *Ficus*, approximately 2 m from the pool area. The predilection of Yellow Warblers to breed near water probably influenced their nest-site selection. The nest consisted of a deep cup of plant fibres, down and strips of bark. The exterior was covered with plant down and fine fibres, giving it a cotton-like appearance. The inside of the cup was lined with fine fibres, down and feathers, i.e. consistent with descriptions in the literature.

I observed breeding behaviour over the next few days by visiting the area intermittently and documenting progress photographically. Two eggs were laid the day after the nest's discovery. Incubation was performed by the female alone, which left the nest for periods of c.20 minutes to feed. I never observed the male bring food to the incubating female. However, I frequently heard the male vocalising, probably protecting the territory from other males. After an incubation period of 11–12 days the altricial young hatched synchronously. Both parents fed the young at c.20-minute intervals. I never saw the parents forage outside the wooded area of the hotel, as evidently there was sufficient food in nearby trees. The female removed the nestlings' faecal sacs and frequently re-adjusted the nest material, maintaining the integrity of its structure. The fledglings left the nest c.2 weeks later.

Shiny Cowbird *Molothrus bonariensis* parasitism of Yellow Warblers is a serious problem in Puerto Rico with up to 76% of nests being parasitised². The absence of parasitism here is probably the result of a successful active cowbird control programme in the nearby CRNWR as part of an initiative to re-establish the Yellow-shouldered Blackbird *Agelaius xanthomus* population. Another possible and interesting explanation would be that by nesting in the artificial environment the Yellow Warblers avoided cowbird parasitism as an adaptive behaviour.

Successful nesting in a man-made and disturbed locality is sure indication of this species' adaptability to changing environmental conditions and helps explain why its breeding range is the most widespread of the parulids.

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New records concerning range and altitudinal distribution of Tropical Mockingbird *Mimus gilvus* in Ecuador

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Se reportan dos nuevas localidades para el Sinsonte Colilargo *Mimus gilvus* en Ecuador. Junto a estos registros la especie es conocida por cuatro observaciones en el país, todas ubicadas en los Andes del norte de Ecuador. Se sugiere que *Mimus gilvus* puede estar extendiendo su rango de distribución desde Colombia, colonizando nuevas áreas posiblemente debido a la modificación de hábitats por actividades antropogénicas. Además, se presenta una extensión al rango altitudinal de la especie (laguna de Cuicocha 3.100 m).

Tropical Mockingbird *Mimus gilvus* is widespread from southern Mexico to Brazil^{1,2}. It was introduced and is now widespread in Panama³ and has recently expanded its range in Nicaragua⁴ and El Salvador⁵. In Colombia, it is common in the north², but in Nariño, near the border with Ecuador, the species

was not recorded until 1996⁶. The highest altitudinal records are from Colombia: 2,600 m in the Bogotá savanna, and 2,100 m in Tolima^{1–3}.

The species has only recently been recorded in Ecuador, where it is known from two localities in the northern Andes: near Otavalo (where initially

discovered by C. Vogt and J. Nilsson in September 1996), Imbabura province (00°14'N 78°16'W; 2,600 m) and one found at Cosanga (by M. Lysinger in September 1998), Napo province (00°36'S 77°52'W; 1,900 m)³. Ridgely & Greenfield³ considered its status in Ecuador uncertain, as both records may have involved natural vagrants from Colombia, and indeed the Cosanga record probably does relate to a vagrant, supporting this hypothesis³.

On 17 November 2001, during a trip of the '2001 Protected Areas' group of the Universidad San Francisco de Quito, an adult and juvenile *M. gilvus* were observed on Padre Yerovi island, within Cuicocha Lagoon, Imbabura province (00°18'N 78°22'W; 3,100 m). The adult was feeding the juvenile within a patch of native bushes near the shore. This represents the first proof of breeding in Ecuador. The habitat was montane forest and elfin forest, dominated by shrubs and low trees.

On 5 April 2002, two adults were observed at Yaguarcocha Lagoon, near Ibarra, Imbabura province (00°22'N 78°07'W; 2,450 m). They were foraging in the ornamental garden of a tourist resort, on the north-west side of the lagoon, 50 m from the shore. Away from the garden, the dominant vegetation was xerophytic scrub, with scattered *Mimosa* trees, according with the species' known habitat requirements³, i.e. semi-open agricultural lands and suburban areas. The two were in flight together, and one was heard singing several times. This behaviour could suggest pair-formation and possible breeding activity. Identification was straightforward given the grey upperparts and white underparts, the white supercilium and tail pattern.

The new localities are also in the northern Andes of Ecuador, and suggest that the species may be currently colonising Ecuador from Colombia, a spread perhaps promoted by the modification of natural environments by human activity, as in Nicaragua⁴. The Cuicocha record is also the highest known site for the species, at 3,100 m, representing an altitudinal range extension of 500 m.

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Neotropical Notebook



Neotropical Notebook contains three sections. The first consists of short papers documenting records. Photos and descriptions are published where appropriate. The second section summarises records published elsewhere, following the format established in previous issues of *Cotinga*. The third lists unpublished and undocumented records. Please indicate, with submissions, in which section you wish your records to appear.

SHORT NOTES

New record of Hooded Antpitta *Grallarica cucullata* in the Western Cordillera of Colombia

Hooded Antpitta *Grallarica cucullata* is known from ten localities in the west, central and east Andes of Colombia²⁻⁴, and in Táchira and Apure states, Venezuela². The species is currently considered globally Vulnerable¹ although nationally Near Threatened in Colombia³. In the Western Cordillera of Colombia the species is known from the east slope near San Antonio, west of Cali, in 1898¹, and the national parks of Picachos and Tatamá³. Recent surveys of this area have failed to locate the species. On 2 September 2002, we confirmed the presence of Hooded Antpitta in a small area of subtropical forest near km 27 on the Cali–Buenaventura highway, at c.1,800 m on the west slope of the Western Cordillera. The bird was heard giving a di- or trisyllabic, high-pitched but quite liquid call, repeated 2–3 times, recalling that with which we were familiar from Ucumarí Regional Park, dpto. Risaralda. The bird was observed for some 15 minutes feeding from the forest floor to the underside of foliage up to 1.5 m above ground, occasionally making flycatcher-like sallies.

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The first Pale-winged Trumpeter *Psophia leucoptera* in Colombia

From February to July 2000 we conducted field work at Parque Nacional Natural (PNN) Amacayacu, 60 km from Leticia, Amazonas, in extreme south-east Colombia (03°02'–03°47'S 69°54'–70°25'W; the headquarters are in the south-east of the park, close to the village of Mocagua). During the first half of the year the *várzea* forest in this region is completely flooded because of high water levels in the Amazon. Our data

collection (concerning fruit dispersal strategies) was made from four small platforms at canopy height (c.20 m) up to 2 km from the park headquarters. On 27 April, around 09h30, CH videotaped a Pale-winged Trumpeter *Psophia leucoptera* from one of the platforms. The bird flew into view and landed in a tree in the flooded forest c.25 m away and c.17 m high in the lower canopy. It walked for c.2 minutes along some branches before flying out of view. Based on a still of the video (Fig. 1, p.85) and the observation by CH (from memory), the following description was made.

Large, about the size of a Speckled Chachalaca *Ortalis guttata*, and rather plump with a hunchback appearance (not obvious from Fig. 1). Long neck held in S shape. Tail not visible. The upper- and underparts were uniform black. The wings were black, with a sharply defined, large snow-white patch. The bird had a pale-coloured, short bill and dark eye. The leg colour was not visible through the branches.

Though of poor quality, Fig. 1 clearly shows a Pale-winged Trumpeter. The size and shape exclude all other landbirds except trumpeters, and neither Grey-winged *P. crepitans* or Dark-winged Trumpeters *P. viridis* have such obvious white wing patches^{1,3}. The record is the first for Colombia². Grey-winged Trumpeter is known to occur in the *terra firme* forest of PNN Amacayacu, where groups are regularly sighted by local hunters. Though Pale-winged Trumpeter is reportedly sympatric with Grey-winged Trumpeter north of the Amazon, near Iquitos, Peru³, evidence of their co-existence is still very rare. The location of the present record would suggest that the subspecies *ochroptera* (of Peru and Brazil north of the Amazon)

was involved; indeed, Hilty & Brown¹ suspected this form to occur in extreme east Amazonas or Vaupés. However, the pure white wing patch indicates the subspecies *leucoptera* (which generally occurs south of the Amazon³). If so, the bird probably crossed the Amazon from Peru. Though trumpeters are not known to cross large waterbodies³, such a hypothesis might explain why this lone individual was found in the canopy of flooded várzea forest, which is certainly not the species' usual preferred habitat.

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Nuevo registro altitudinal del Saltarín Cola de Lanza *Chiroxiphia lanceolata* en Venezuela

El Saltarín Cola de Lanza *Chiroxiphia lanceolata* es una especie que habita en un amplio espectro de ambientes en Venezuela que incluyen los bosques áridos al nivel del mar⁵, bosques deciduos^{2,10}, bosques semideciduos², plantaciones de cacao^{3,5} y otras formaciones más húmedas hasta alrededor de los 1.200 m, rara vez a 1.700 m^{2,5,7,8}.

El 22 de noviembre del 2002, una hembra de *C. lanceolata* fue

capturada con redes de neblina en las montañas de la Cordillera de la Costa al norte de Venezuela, en el área conocida como Pico Guacamaya (10°22'N 67°40'W), Parque Nacional Henri Pittier, estado Aragua, a 1.860 m de altitud. El área corresponde a un bosque nublado donde destacan árboles como *Pseudolmedia* sp. (Moraceae), *Croton* sp. (Euphorbiaceae), *Elaeagia* sp. (Rubiaceae), *Terstroemia* sp. (Theaceae), *Aspidosperma* sp. (Apocynaceae), *Inga* sp. (Mimosaceae), *Zanthoxylum* sp. (Rutaceae), *Micropholis* sp. (Sapotaceae), *Ocotea* spp. (Lauraceae), las palmas *Geonoma* spp., *Chamaedorea* sp., *Ceroxylon* sp., *Euterpes* sp., *Wettinia* sp., *Socratea* sp. (Arecaceae), así como arbustos y hierbas de *Psychotria* spp. (Rubiaceae), *Aphelandra* spp. (Acanthaceae), *Asplundia* sp. (Cyclanthaceae), *Arthrostylidium* sp. (Poaceae), *Becquerelia* sp. (Cyperaceae), *Miconia* spp. (Melastomataceae) y *Neurolepis* sp. (Gramineae)^{1,4}, entre muchos otros. Esta especie se ha registrado hasta los 850 m en Colombia³, 1.500 m en Costa Rica⁹ y 1.590 m en Panamá⁶. Este registro constituye hasta el presente, el dato más elevado en el cual se haya capturado u observado la especie dentro de su área de distribución.

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A nest of Rufescent (Colombian) Screech-owl *Otus ingens colombianus*, at Mindo, Ecuador

On 30 September 2002 while walking the cloud forest trail (commonly known as the Yellow House Trail) at Hacienda San Vicente, Mindo, Pichincha province, Ecuador, we encountered a Rufescent (Colombian) Screech-owl *Otus ingens colombianus* perched quietly in a tree c.2.5 m above ground. The bird appeared very tame and approachable. It

was perched beside a nest hole in a rather large tree by the trail c.200 m from the edge of the cloud forest. Realising the rarity of such an occurrence, several photographs of the bird (Fig. 2, p.85), the location of the nest (Fig. 3, p.85) and the sole egg (Fig. 4, p.85) were taken.

Subsequently, we consulted the standard texts¹⁻³ and found no reliable information concerning the breeding behaviour of the species, nor descriptions of its nest and eggs. This record therefore appears to represent one of the first nests of *Otus ingens colombianus* to be discovered.

The nest cavity was c.20 cm in diameter and the sole egg lay in the hollow c.30 cm below the hole. No nest material was visible. The egg was carefully removed for a couple of minutes to photograph it. It was pure white with no visible blotching but, as Fig. 3 shows, was somewhat soiled. Size was $4 \pm \text{cm} \times 3.6 \pm \text{cm}$. We subsequently learned from the San Vicente gardener that he had flushed the owl in the same place a couple of weeks earlier while maintaining the trail. This owl may therefore have only laid a single egg. Unfortunately, as we left Mindo the following day, we were unable to follow the nest's progress.

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Eye-ringed Thistletail *Schizoeaca palpebralis* and other bird species in dpto. Junin, central Peru

On 2–4 October 2001 I visited the old Huancayo–Satipo road, dpto. Junin, central Peru, with Joe Thompson, and Will & Gill Carter. The main focus was to investigate recent possible sightings of Eye-ringed Thistletail *Schizoeaca palpebralis* at Puente Carrizales on the eastern slope. Prior to arriving at Puente Carrizales, we stopped near a river just beyond the village of Comas (11°40'S 75°03'W) and searched a small 1–2 km stretch of humid montane scrub habitat (c.3,030–3,080 m elevation), surrounded by small agricultural plots. Here, we found a pair of Creamy-crested Spinetail *Cranioleuca albicapilla* and heard several other pairs in the vicinity. A Brown-flanked Tanager *Thlypopsis pectoralis* was observed foraging in small shrubs near the ground and atop small trees, following a small flock of Spectacled Whitestart *Myioborus melanocephalus*. A female Fire-throated Metaltail *Metallura eupogon* was feeding on a large red flowering shrub, near one end of this patch of habitat. Several individuals of a *Scytalopus* tapaculo were heard and one responded to playback by perching out of view in the top of a small dense shrub, emitting an alarm call, which was also recorded. We were unable to obtain views, but it possibly represents an undescribed form within the *S. magellanicus* group. The type locality for this unnamed tapaculo is dpto. Pasco², and its taxonomy and ecology are currently being determined (T. S. Schulenberg pers. comm.).

Further along the Satipo road, some distance before Carrizales, we found a small number of isolated patches of elfin forest within grazed puna grassland. Around Toldopampa village, these forest fragments appeared to be highly degraded as they were being cleared for firewood, and we encountered numerous groups of people carrying large bundles of freshly cut wood. Larger areas of

elfin forest, dominated by *Chusquea* bamboo, were noted directly below Carrizales, where the road descends a number of switchbacks on the east slope, and we also noted numerous small, scattered cropped plots, but overall these forests (at 3,100–3,400 m) appeared relatively intact.

At Puente Carrizales (3,245 m) we observed an Eye-ringed Thistletail for 15 minutes (from 05h45) on 3 October. Calls, song and response to playback were recorded using a Sony TCM 5000 tape-recorder and Sennheiser ME66 directional microphone, and the recordings have subsequently been deposited at Manchester Metropolitan University. The bird was observed foraging and perching on non-bamboo substrate, though bamboo dominated the vegetation. The bird often flew over 50 m to different woody shrubs, flying into the base of each and thereafter foraging acrobatically on either the outermost branches or the very top, often fully exposed when singing. We also observed two more Fire-throated Metaltail foraging on red flowers. Two Rufous Antpittas *Grallaria rufula obscura* were observed and recordings made of a third (this subspecies' song is vocally distinct from the three other forms found in Peru, and more than one species is probably involved: B. Walker pers. comm.). The first was seen feeding on earthworms on a trail leading to a small clearing behind the bridge. A second was observed beside the road above the bridge, probing the soil for prey. Tschudi's Tapaculo *Scytalopus acutirostris* was heard several times, calling from *Chusquea* bamboo thickets near the bridge.

Currently, *Schizoeaca palpebralis* is not considered globally threatened, despite the paucity of available records and its extremely limited range within Peru (being restricted to EBA 049, the North-east Peruvian Cordilleras³, and dpto. Junin). Its behaviour is reminiscent of Puna Thistletail *S. helleri* of south-east Peru, and Plenge's Thistletail *S.*

*fuliginosa plengei*¹ and Peruvian Thistletail *S. f. peruviana*¹ of central and northern Peru (pers. obs.). In April 2003 *S. palpebralis* was located in the wooded area near Comas, where three individuals proved relatively unresponsive to playback, when perched or foraging 1–6 m above ground in woody shrubs (B. Walker pers. comm.). Based on limited observations of the distance birds travel when foraging, it is possible that individuals occupy large territories, thus naturally occurring at low population densities.

That *S. palpebralis* has a limited range is not unusual for the genus. Large areas of habitat in close proximity to its known distribution have never been surveyed, and similar, but undescribed, populations that might prove to be genetically different or show slight plumage differences may well exist (J. P. O'Neill pers. comm.). At Puente Carrizales, the species occurs in slightly degraded habitat along a busy road within a somewhat populated area, perhaps indicating a degree of tolerance of habitat disturbance, but further surveys are required before drawing definitive conclusions regarding habitat preferences and conservation status. Throughout EBA 049 there has been moderate habitat loss through grazing and cultivation³. Along the Satipo road, logging for firewood and farming pressure are evident among the communities above Puente Carrizales. Below the latter, at 2,400–3,100 m, smaller areas of secondary cloud forest replace elfin forest, with epiphytic growth noticeably absent (though many trees are moss-covered). *Chusquea* bamboo is prominent at c.2,750 m but not in dense stands. At this elevation, small agricultural plots and areas cleared for firewood are fairly numerous, with newly cleared plots occupying higher areas, indicating that pressure on thistletail habitat along the Satipo road will also encroach from lower elevations.

Acknowledgements

Barry Walker planned the Satipo road exploration, provided recent observations of *S. palpebralis* and commented on the taxonomy of Rufous Antpitta; Tom Schulenberg commented on *Scytalopus* taxonomy; and John O'Neill reviewed and greatly improved the manuscript. Thanks also to Joe Thompson, Will Carter and Gill Carter for their help and enthusiasm.

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First record of White-banded Mockingbird *Mimus triurus* for Peru and a summary of known occurrence

On 20 December 2001 we were between the harbour and main square on the north side of Taquile (Taquili) Island, Lake Titicaca, Peru, at 3,840 m. The habitat is dry Andean farmland with scattered scrub, *Eucalyptus* and mud/corrugated-iron dwellings on a terraced slope c.250 m from the shore. At 10h30 a very distinctive and conspicuous, long-tailed, chat-like bird with white outertail feathers, a white wing-stripe and a

rufous rump was observed first by MEAS in direct sunlight c.30 m away. We observed the bird through binoculars for at least four minutes, initially perched on a stone wall, where it remained alert and active, giving regular wagtail *Motacilla*-like tail-flicks, for c.1.5 minutes before it flew c.10 m, fanning its tail and gliding, then landing on the ground. After a few minutes it flew low over another wall and out of sight.

Description

Shape and approximate size was similar to Chiguanco Thrush *Turdus chiguanco*, but more lightly built with a shorter bill and a proportionally slightly longer tail. Bill and legs black, underparts cream-white and upperparts pale grey, except the rump, which was pale pinkish brown. Pale cream supercilium extended more than the eye's width behind the eye. Tail large and wedge-shaped, with white outertail feathers and a small number of black inner feathers visible in flight. The wings had a distinct white stripe and other, smaller, patches of black, white and grey.

Whilst the bird was in view, it became clear that the bird was not depicted in Clements & Shany². On return to Puno the guide by de la Pe a & Rumboll⁴ was consulted. The bird most closely matched the illustration of White-banded Mockingbird *Mimus triurus* (Plate 84). Very clear contrast between the warm reddish-brown tones of the rump and lower back, and the colder grey tones of the upper back on the observed bird, in particular, is indicative of White-banded Mockingbird. Unfortunately, the distribution of white in the wing, which would have enabled qualm-free rejection of Brown-banded Mockingbird *M. dorsalis*, was not noted in detail.

Discussion

In the literature there is some confusion over the summer distribution of White-banded Mockingbird. The map in de la Pe a & Rumboll⁴ confined the breeding range to central-southern Argentina and a small area of

southern Chile. Brewer & MacKay¹ and Ridgely & Tudor⁵ emphasised that the breeding distribution in the north of the range is poorly known, and mapped the main breeding distribution as being in central and northern Argentina, with two smaller populations, in central-western Paraguay and in north-west Bolivia, but no Chilean population. M. Pearman (pers. comm.) considers White-banded Mockingbird to only definitely breed in seven Argentine provinces, namely Córdoba, San Luis, Mendoza, La Pampa and southern Buenos Aires to Río Negro and northern Chubut. Breeding in Chile, Paraguay and Bolivia is unconfirmed. Other sources suggest that the species oversummers but does not breed in the northern Argentine provinces.

It is worth noting that, as a breeder, Brown-banded Mockingbird occurs closer to Puno than White-banded, but the former is apparently wholly sedentary. In contrast, White-banded Mockingbird is a long-distance migrant with a strong history of vagrancy, particularly to Chile, where there are records in March–August (A. Jaramillo pers. comm.). In July 2001 D. Beadle, P. Burke and Jaramillo photographed one near San Pedro de Atacama, Chile, at c.2,500 m and during the same period there was another near the Peruvian border, at Socoroma (3,000 m). In addition, one was observed at Lago Pozuelos, Jujuy, Argentina, at 3,600 m (A. Jaramillo pers. comm.). Another record concerns a bird at Alto Tujsupaya, Sucre, Bolivia, at 2,860 m, on 28 August–6 September 2001 (T. E. Høgsås pers. comm.). In Santa Cruz, Bolivia (420 m) some birds apparently do oversummer. S. Mayer recorded an enthusiastically singing bird, on 18–19 February 1997, on the road to Santa Cruz close to Trinidad, Beni (two recordings of which are included on Mayer³).

Though Ridgely & Tudor⁵ and Brewer & MacKay¹ considered the species to mostly occur from sea level to 500 m, and up to 1,950 m in Bolivia, there are clearly

several records from considerably greater altitude. Though ours is a high record (perhaps the highest?), it is apparently not beyond the species' potential altitudinal range. Indeed, if all Chilean records concern vagrants, the species may visit high altitudes more regularly than currently suspected.

Our record may reinforce the bird's status as an occasional and unpredictable migrant, perhaps undermining the likelihood that resident northern populations exist, and supported by the fact that the nesting habitat in the species' southern range is highly specific and does not occur further north (M. Pearman pers. comm.). There was no indication that the bird might have been an escape, but this possibility cannot be eliminated. When MEAS questioned several local guides they all thought it improbable that someone living locally would keep a pet mockingbird. Nonetheless, members of the Mimidae are kept as cage birds throughout Central and South America (J. F. Clements pers. comm.), though others consider their presence in the particular context unlikely (M. Pearman pers. comm.).

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Notes on a nest of Black Bushbird *Neotantes niger* in Peru

Black Bushbird *Neotantes niger* is a secretive, scarce antbird that is widespread in western Amazonian lowland forests; its nest has never been described¹. On 14 April 2002 I disturbed a male Black Bushbird from beside a trail c.6 km north of Cocha Cashu Biological Station, in Manu National Park, Peru (11°54'S 71°18'W). A few minutes later, following playback of a very quiet rapid, rhythmic trilling call that I suspected belonged to the species, I briefly observed the bird at close quarters near its original position. The bird was very shy and flushed upon seeing me, yet c.15 minutes later I discovered it in almost the same place; it was repeatedly tapping and probing a narrow-diameter, rotting fallen branch within a few metres of the original location, c.1 m above ground. It flushed away again, but 20 minutes later, as I returned, the bird was disturbed in the same place, and upon searching the area I located a nest. Half an hour later, the male was observed sitting on the nest. During the brief observation periods, I never saw the female.

The nest was positioned c.30 cm above the edge of a small pool of water in a generally rather open area within low-lying, seasonally flooded forest. At this period, near the end of the wet season, parts of the area were still flooded. Heavy rain had regularly fallen during the first half of April and parts of the forest were flooded, but relatively little rain fell during the second half of the month. The nest was at the edge of an area of forest with many tree falls, and only scattered taller trees, thus lacking a canopy. The area was dominated

by rather dense vegetation, mostly only a few metres high and interspersed by more open ground. Scattered fallen logs were present throughout and, in the wettest parts *Heliconia* spp. dominated the understorey.

The nest was a very deep cup in which only the tip of the incubating adult's tail was clearly visible. The entrance was rather triangular in cross-section, though still rounded at all edges, being c.7.5 cm along two sides, and c.4.5 cm on the other. It was 7.5 cm deep. Although fairly obvious from directly above, the nest was well camouflaged from other angles, appearing (to me at least) like the debris from a recent flood. It was constructed almost entirely from longer pieces of dead *Heliconia* fronds, woven round the rachis of a small fern on one side, and around two twigs of a tree sapling with a more or less horizontal surface. Many pieces of *Heliconia* hung irregularly from the periphery of the nest, appearing as if they had been left there as floodwater had receded. The nest was lined at the bottom by a small cup of woven, thread-sized rootlets or fungal hyphae.

The nest contained a single pink egg well marked with dark purple lines, scribbles and spots. I did not disturb the nest to measure the egg, but it was nevertheless predated the following day; on 15 April when I returned the single egg had disappeared and parts of the nest lining had been pulled towards the top. Though it is impossible to ascertain the identity of the predator, I suspected an aracari, as several Ivory-billed Aracari *Pteroglossus azara mariae* were observed feeding on small fruit in the canopy of a low tree, from which I suspect the nest might have been visible.

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Flight display and interspecific aggressive behaviour in Chestnut-crested Cotinga

Ampelion rufaxilla

Chestnut-crested Cotinga *Ampelion rufaxilla* occurs in humid montane forests of the Western and Central Cordilleras of Colombia, and eastern slope of the Andes in Ecuador, Peru and Bolivia, in the latter country at 1,300–3,000 m³. The species' distribution is poorly known⁵ with apparently large gaps between populations in Ecuador and Peru^{5,6}. It is perceived as rare^{4,7}, uncommon⁵ or fairly common¹ within its range. Many Bolivian observations are of an individual perched on the highest point of a tree (pers. obs.). There have been no significant publications regarding the behaviour of *A. rufaxilla* (D. Snow pers. comm.).

I detected an *A. rufaxilla*, by its unusual call, at 13h30 on 6 July 2002, in the moist Yungas forest of Madidi National Park, dpto. La Paz, Bolivia, at 1,950 m. It was observed along the new Pata-Santa Cruz de Valle Ameno road (14°35'S 68°36'W; Apolo area). I watched the bird for c.10 minutes and made a sound recording (3.16 minutes) of 14 low-volume calls (every 4–14 seconds) and of the wing noise of three flight displays (to be archived at the Macaulay Library of Natural Sounds, Cornell). The calls were similar to those of White-tipped Plantcutter *Phytotoma rutila*, which recall the whirl of a fishing reel or the winding of an old-fashioned alarm clock².

The cotinga was seen to perform flight displays (N=3, duration 3.2, 3.4 and 2.8 seconds)

from the highest branch of a conical-shaped fruiting tree. The display reached c.15 m above the treetop, with the climb, stall and return following an arc, but the bird landed closer to the centre of the tree (see Fig. 1). The three displays had audible wingbeats during the ascent (c.2.0, 1.0 and 1.5 seconds), but the descent, during which a 'braking' wing noise could be heard, was more varied: one consisted of four rhythmically repeated wingbeats, and two of strong 'braking' wingbeats on final approach.

It was also observed aggressively chasing two tanagers of *Tangara* proportions and a *Turdus* sp. from the tree, which was on a c.55° slope, was c.35 m tall and contained many black fruits (c.1.5 cm diameter). I observed *A. rufaxilla* eat these fruits twice.

The species' reproductive behaviour is plausibly related to habitat, tree species and fruiting period. The *A. rufaxilla* presumably chased the other birds to protect the fruit resource, of which its display was perhaps an advertisement to a female. The species' discontinuous distribution and its apparent variation in abundance may be linked to its reproductive strategy in relation to fruiting trees. More data concerning the behaviour of this rare cotinga would be welcome.

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PUBLISHED RECORDS FROM THE LITERATURE

WEST INDIES

Bahamas

Several new species for the archipelago have been reported recently (all dates relate to 2003): an adult female **Eurasian Wigeon** *Anas penelope* was photographed on Grand Bahama, on 16–28 March; an injured tern that subsequently died was found alongside the Great Abaco Highway on Abaco, on 7 May, and proved to be an **Arctic Tern** *Sterna paradisaea*; a breeding-plumaged **Whiskered Tern** *Chlidonias hybrida* photographed on Great Inagua, on 1–2 May (the third record for the West Indies); and a possible **Common Grackle** *Quiscalus quiscula* was seen on Grand Bahama, on 23 March. In addition, a pair of nesting **Double-striped Thick-knees** *Burhinus bistriatus* found on Great Inagua, on 14 May, is a new addition to the breeding avifauna of the archipelago (*Bahamas/TCI Bird Report spring 2003*; compiler T. White).

Bermuda

Latest reports, from 2003, included another record-breaking year for breeding success among the **Cahow** *Pterodroma cahow* population, with 40 young apparently fledging. Interesting migrants and vagrants involved: both the **American White**

Pelican

Pelecanus erythrorhynchos and **Reddish Egret** *Egretta rufescens* remained well into the year, a **White-winged Scoter** *Melanitta fusca* for c.1 week from 7 February, a **Red Phalarope** *Phalaropus fulicarius* (photographed) with a broken wing found on 23 February and which subsequently died, a dead *Catharacta skua* (apparently a **South Polar Skua C. maccormicki**) photographed on 27 April, the earliest-ever **Eastern Kingbird** *Tyrannus tyrannus* present from the last week of March and a smattering of records of **Common Grackle** *Quiscalus quiscula*, involving up to 20+ individuals, from 7 March to 12 April (only about six had been recorded previously)⁵.

MIDDLE AMERICA

Costa Rica

Recent highlights have included the first report of **Large-billed Tern** *Phaetusa simplex* in the country, one photographed at Tortuguero between 10 and 15 March 2003; the second report of **Golden-cheeked Warbler** *Dendroica chrysoparia*, an adult female at La Paz Waterfall Gardens, on 4 April 2003; several records of **Yellow-rumped Warbler** *D. coronata* and **Cedar Waxwing** *Bombcilla cedrorum* in early 2003 (both are normally rare winter visitors); a **Wattled Jacana** *Jacana jacana* photographed at San Vito in mid-March 2003; three sightings of **Southern Lapwing** *Vanellus chilensis* in the first months of 2003, including two individuals documented with photographs; and two new records of **Tropical Mockingbird** *Mimus gilvus*, in January and March 2003¹¹.

Subsequent reports were led by a **Greater Ani** *Crotophaga major* photographed at Tortuguero, on 18 May 2003 (another first country record), whilst birds mist-netted at Las Cruces included: two male **Ruby-throated Hummingbirds** *Archilochus colubris* on 17 February, a **Yellow-breasted Chat** *Icteria virens* on 9 March,



Figure 1. Depiction of the display flight of Chestnut-crested Cotinga *Ampelion rufaxilla* (A. Bennett Hennessey)

and a male **Painted Bunting** *Passerina ciris* on 1 April¹².

Breeding data for the **Snowy Cotinga** *Carpodectes nitidus* are rather few; a recent paper has provided the first description of the species' egg, as well as additional information concerning the nest and nesting biology²⁹.

Guatemala

Three new species have recently been added to the national list:

Rufous-necked Wood-rail *Aramides axillaris*, **White-crowned Pigeon** *Columba leucocephala* and **Snowy Cotinga** *Carpodectes nitidus*⁶.

Panama

The first nest of **Barred Hawk** *Leucopternis princeps* in the country was recently reported²².

El Salvador

A recent paper on bird migration through the Pacific coastal region of El Salvador mentions the first photographic documentation of **Collared Plover** *Charadrius collaris*, **Stilt Sandpiper** *Calidris himantopus* and **Arctic Tern** *Sterna paradisaea* for the country, and the first sight record of **Chimney Swift** *Chaetura pelagica*¹⁷.

SOUTH AMERICA

Argentina

The origin of the oft-repeated comment that **Striped Woodpecker** *Picoides lignarius* has occurred in central Argentina, presumably as a result of seasonal migrations, has been refuted by Mazar Barnett²¹, who has demonstrated that the principal source of this statement resides in two misidentified specimens of Checkered Woodpecker *P. mixtus* from Córdoba. Fraga⁷ has reviewed the national distribution and conservation status of the globally threatened **Black-and-white Monjita** *Heteroxolmis dominicana*.

Bolivia

The nest and eggs of **Ochre-breasted Antpitta** *Grallaricula flavirostris* have recently been

described¹⁹, although contrary to the title of the paper the description does not constitute the first available (see *Cotinga* 19: 83).

Brazil

The inauguration of a new section within the Brazilian journal, *Ararajuba*, devoted entirely to new distributional records has led to the documentation of a host of interesting novel data, including the following first country records. A **Northern Royal Albatross** *Diomedea sanfordi* was photographed off Santa Catarina, on 2 July 2001²³; both **Grey-crowned Tyrannulet** *Serpophaga griseiceps* and **Lesser Canastero** *Asthenes pyrrholeuca* were observed in extreme western Rio Grande do Sul in late May 2001; single **Black-throated Green Warblers** *Dendroica virens* were seen at Fazenda Pindobas IV, Espírito Santo, on 12 April 2000, and at Itatiaia National Park, Rio de Janeiro, on 11 September 2001²⁶; and a **Mourning Sierra-finch** *Phrygilus fruticeti* was found dead at Banhado do Taim, Rio Grande do Sul, in 1971 (the only previous Brazilian records were sight observations from the same state)¹³. In addition, there were Bahian records of dead **Cape Verde Shearwaters** *Calonectris edwardsii* (in 1995 and 1998) and **White-faced Storm-petrel** *Pelagodroma marina* (1996) and the ring alone from an **Antarctic Shag** *Phalacrocorax bransfieldensis* (1996), the latter also a new record for Brazil¹⁸. Pacheco & Minns²⁵ have proven that **Buff-breasted Sabrewing** *Campylopterus duidae* should be 'restored' to the Brazilian list, on the basis of specimens taken in 1965, 1967 and 1970 (held in the Phelps Collection, Caracas) and Mallet-Rodrigues²⁰ that **Canada Warbler** *Wilsonia canadensis* should be excluded from the list of birds recorded in Brazil, as the only available specimen is from Venezuelan territory. Finally, although **Chilean Skua** *Catharacta chilensis* is frequently cited for Brazil there are actually rather few proven records: the

only specimens are from Rio Grande do Sul, Santa Catarina, Rio de Janeiro and Bahia³⁰.

The first record of **Picui Ground-dove** *Columbina picui strepitans* in Goiás state was made recently, being documented with a specimen⁴. Pacheco *et al.*²⁴ examined records of **Harpy Eagle** *Harpia harpyja* in the states of Rio de Janeiro and Espírito Santo since 1980. There is a total of 11 records, most of them from the reserves at Sooretama and Linhares. An active nest was found at Linhares in 1992. The few records from Rio de Janeiro are all undocumented and in some cases speculative. New records of **Sickle-winged Nightjar** *Eleothreptus anomalus* from Rio Grande do Sul have been published recently¹.

Chile

A small breeding colony of **Elliot's Storm-petrel** *Oceanites gracilis* was discovered, in January 2002, on Isla Chungungo, Coquimbo Region¹⁴. In addition, further south, an aerial survey of an island just off Evangelistas, at the Pacific entrance to the Strait of Magellan, revealed a new colony of at least 3,000 **Black-browed Albatross** *Thalassarche melanophris* (*World Birdwatch* 25 (1): 3). Between 1980 and 1995, Spear *et al.*³¹ studied the distribution and abundance of three species of albatrosses in the Humboldt Current off Chile and Peru: **Chatham** *Thalassarche [cauta] eremita* and **Salvin's Albatrosses** *T. [c.] salvini* occurred throughout the region, but **Buller's** *T. [bulleri] bulleri* was recorded almost exclusively in the south. Population estimates for the area were 26,700 individuals of Buller's, 6,790 for Chatham and 133,100 for Salvin's Albatross.

Ecuador

Freile *et al.*⁸ provide the first breeding data for **West Peruvian Screech-owl** *Otus roboratus* based on observations in 2001, and distribution and habitat data for **Cloud-forest Pygmy-owl** *Glaucidium nubicola* have also been presented recently⁹.

Falklands

Apparent hybrids between **Rockhopper** *Eudyptes chrysocome* and **Macaroni Penguins** *E. chrysolophus* have been discovered forming pairs with Rockhopper Penguins in recent years³⁴.

French Guiana

Ingels *et al.*¹⁶ offer interesting observations on 19 species in the country, including the second record of **Long-billed Curlew** *Numenius americanus*, further records of **Rufous Potoo** *Nyctibius bracteatus*, apparently the first record of **Speckled Tanager** *Tangara guttata* and the fourth record of **Red-capped Cardinal** *Paroaria gularis*.

Guyana

Robbins *et al.*²⁸ reported on the discovery, in April 2000, of a population of the globally threatened **Red Siskin** *Carduelis cucullata*, at the Rupununi savanna, in the south-west of the country. This population is 950 km from the nearest known, in the coastal cordilleras of Venezuela. Notes on vocalisations, breeding biology and immature plumage are also presented.

Paraguay

Zyskowski *et al.*³⁵ have reviewed the avifauna of the country's northern Chaco region. Two hundred and thirty-three species were recorded during surveys of five sites, including the first records of **Alder Flycatcher** *Empidonax alnorum* for the country, and the first Paraguayan specimens of **Green-cheeked Parakeet** *Pyrrhura molinae*, **Ochre-cheeked Spinetail** *Poecilurus scutatus* and **Bolivian Slaty-antshrike** *Thamnophilus sticturus*, whilst two more were new for the Paraguayan Chaco and 22 were new for the regions of Alto Chaco or Matogrosense.

Peru

The first record of a **Cape Gannet** *Morus capensis* in the Pacific Ocean was made at Macabí Island, in the north of country, where an adult was photographed

in July 1999¹⁰. Vasconcelos³³ presents natural history and dietary information for a number of species from observations in the Cordillera Blanca, as well as a new highest altitudinal record of **Ancash Tapaculo** *Scytalopus affinis*. Staus & Weast³² detail the results of surveys for **Torrent Ducks** *Merganetta armata* on two rivers in the country.

South Atlantic

Imberti¹⁵ has reported on sight records of **Spectacled Petrel** *Procellaria conspicillata*, **South Georgia Diving-petrel** *Pelecanoides georgicus* and **Leach's Storm-petrel** *Oceanodroma leucorhoa* from the south-west Atlantic.

Uruguay

The first records of the globally threatened **Entre Rios Seedeater** *Sporophila zelichi* in the country have been reported recently².

Venezuela

Pérez-Emán *et al.*²⁷ present a revised and updated list of the birds of the upper slopes and summit of Cerro Guaiquinima tepui, in Bolívar state. Among the more significant records are a range extension for **Fiery-shouldered Parakeet** *Pyrrhura egregia*, a new locality for **Stygian Owl** *Asio stygius*, the lowest published altitude for the little-known **Roraiman Nightjar** *Caprimulgus whitelyi* and a new highest altitude for **Black-chinned Antbird** *Hypocnemoides melanopogon*. Other useful data, particularly concerning moult and mass, are presented for a number of species.

OTHER RECORDS RECEIVED

Aruba (Netherlands Antilles)

Late March 2003 produced an exceptional number of significant records. At the Tierra del Sol golf course, noteworthy birds included: a breeding-plumaged **Little Egret** *Egretta garzetta* (first for

Aruba) on 25–30 March; two male **Northern Shoveler** *Anas clypeata* on 23 March; a male **Northern Pintail** *A. acuta* (third for Aruba) on 23–30 March; up to five **Green-winged Teal** *A. carolinensis* (first for Aruba) on 25–30 March; two **Southern Lapwing** *Vanellus chilensis* (first for Aruba) on 30 March; and a male **Red-breasted Blackbird** *Leistes militaris* (first for Aruba) on 28 March. At Bubali, a **Swallow-tailed Kite** *Elanoides forficatus* (first for Aruba) was present on 25–30 March. A **Tennessee Warbler** *Vermivora peregrina* (first for Aruba) was at Spanish Lagoon on 25 March. At least nine **Northern Parula** *Parula americana* (second plus for Aruba) were noted at four localities. Other noteworthy migrants included a **Cape May Warbler** *Dendroica tigrina* (third for Aruba) at Bubali on 24 March, an **Ovenbird** *Seiurus aurocapilla* (fourth for Aruba) at Bubali on 23 March, and a female **Hooded Warbler** *Wilsonia citrina* (third for Aruba) at Spanish Lagoon on 23 March and a male at Bubali on 24–30 March (all *per* Southeastern Caribbean Bird Alert 14).

Barbados

A four-hour pelagic on 18 April 2003 produced two **Black-capped Petrels** *Pterodroma lasitata* (first record) and a further trip on 28 April yielded a **storm-petrel** sp. and a probable **Long-tailed Jaeger** *Stercorarius longicaudus*. At Marshall's Swamp a female **Ruff** *Philomachus pugnax* was present (*per* Southeastern Caribbean Bird Alert 15).

Bolivia

Records of **Black-bellied Thorntail** *Popelaira langsdorffi*, **Chestnut-capped Puffbird** *Bucco macrodactylus* and **Spangled Cotinga** *Cotinga cayana* at Alto Madidi, in December 2001, appeared to be new for La Paz province and Madidi National Park. As noted in *Cotinga* 18: 110, **Berlepsch's Canastero** *Asthenes berlepschi* has become increasingly difficult to observe at the traditional site

(hillside above the cemetery at Sorata). However, in February 2003 it was still common on the opposite hillside, several kilometres along the road leading to La Paz, before and around the point at which Sorata village is finally lost from view. At Noel Kempff Mercado National Park, 1–2 **Rusty-necked Piculet**

Picumnus fuscus were found at the entrance to Lago Caiman, 30 minutes upstream of Flor de Oro Lodge (but none was seen around Flor de Oro itself) in December 2002. A **Black-girdled Barbet** *Capito dayi* at Lago Caiman, in December 2002 is apparently the first record since the RAP team discovered the species in Bolivia in 1992. **Tooth-billed Wren** *Odontorchilus cinereus* was common near El Encanto, in November 2002. A **Cryptic Forest-falcon** *Micrastur mintoni* (see Taxonomic Round-up, p. 11) was also observed at El Encanto, and several were heard around Los Fierros, in November 2002. At Samaipata, several flocks of **Rothschild's Swift** *Cypseloides rothschildi* were noted in January–February 2003 (all JT).

Chile

Approximately 30 **Tamarugo Conebill** *Conirostrum tamarugense* were found among roving flocks of Cinereous Conebill *C. cinereum* in riverside habitat near the roadbridge in the Chaca Valley, south of Arica, in March 2003. This appears to be a wintering site, as the species is rare there in the breeding season (*per* Mark Pearman). A flock of ten **Thick-billed Siskin** *Carduelis crassirostris* were present at the same site during the same period, at c.600 m, an unusually low altitude for this species (JT).

Cuba

Additional records to those reported for spring 2003 in *Cotinga* 20 included the latest-ever spring records of **Eastern Wood-pewee** *Contopus virens* (on Cayo Paredón Grande, on 23 April) and **Red-eyed Vireo** *Vireo olivaceus* (on Cayo Coco, on the same day; GMK, WS). In late

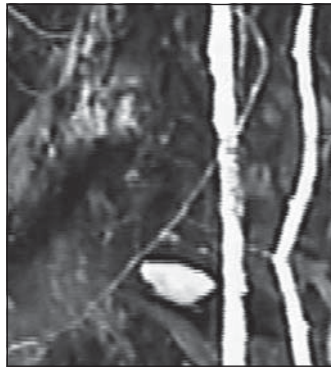


Figure 1. Pale-winged Trumpeter *Psophia leucoptera*, Parque Nacional Amacayacu, Colombia, 27 April 2001 (Colette Hoogeland)



Figure 2. Rufescent (Colombian) Screech-owl *Otus ingens colombianus*, Mindo, Pichincha province, Ecuador, 30 September 2002 (Antonio Salvadori)



Figure 3 Nest location of Rufescent (Colombian) Screech-owl *Otus ingens colombianus*, Mindo, Pichincha province, Ecuador, 30 September 2002 (Antonio Salvadori)



Figure 4. Egg of Rufescent (Colombian) Screech-owl *Otus ingens colombianus*, Mindo, Pichincha province, Ecuador, 30 September 2002 (Antonio Salvadori)

March, two range extensions were reported from Playa Guardalavaca, Holguín province: **Mangrove Cuckoo** *Coccyzus minor* and **Eurasian Collared-dove** *Streptopelia decaocto*, whilst records of **Blackburnian Warbler** *Dendroica fusca*, at Playa Guardalavaca on 29–30 March and 9 April, and **Prothonotary Warbler** *Protonotaria citrea*, in the same

place on 8 April, were also significant (BM *et al.*). Two more of the latter species were at Trinidad, on 6 April. One of the **American White Pelicans** *Pelecanus erythrorhynchos* at Las Salinas was still present on 4 April, when there were also two **Black Skimmers** *Rynchops niger* present there (PvdW *et al.*). At Pálpite, in the Ciénaga de Zapata, the following were present on 2

May: **Orange-crowned Warbler** *Vermivora celata* (the fifth country record), **Great Crested Flycatcher** *Myiarchus crinitus* (the latest spring record of this rare migrant) and a female **Blackburnian Warbler** (GMK).

Dominica

A **Yellow-throated Vireo** *Vireo flavifrons* was seen on the northern peninsula on 22 April 2003 (per Southeastern Caribbean Bird Alert 14).

Ecuador

Interesting sightings at Yasuni Research Station, in September 2002, included:

Lunulated Antbird *Gymnophytus lunulata*, **Black-necked Red-cotinga** *Phoenicircus nigricollis*, **Orange-eyed Flycatcher** *Tolmomyias taylori*, **Fiery Topaz Topaza pyra**, **White-chinned Swift** *Cypseloides cryptus* and a pair of **Mottled Owls** *Strix virgata* (supposedly rare in eastern Ecuador). Also in September 2002, a **Pale-tailed Barbthroat** *Threnetes leucurus*, at 1,900 m on the Huacamayos ridge, appears to be an altitudinal record. At La Ye de la Laguna, Esmeraldas, in October 2002, a **Spotted Rail** *Pardirallus maculatus* at 400 m was the highest altitudinal record in the country (previously only to 100 m). At nearby Bilsa Biological Station, a **Brown Wood-rail** *Aramides wolfi* was seen in October 2002, on a trail near the station buildings, representing apparently the first confirmed sighting there for several years. The normally rare **Sapphire Quail-dove** *Geotrygon saphirina* was fairly common and vocal at Bilsa the same month (all JT).

Jamaica

A group of 12–20 **Cedar Waxwing** *Bombycilla cedrorum* at Marshall's Pen, Mandeville, for at least three weeks in March–April 2003, was a rare record for the island (BH, GMK, PvdW *et al.*).

Peru

Black-billed Seed-finch *Oryzoborus atrirostris*, **Velvet-fronted Grackle** *Lamprosar tanagrinus*, **Blue-tailed Emerald** *Chlorostilbon mellisugus* and **Selva Cacique** *Cacicus koepckeae* were new records for Cocha Cashu Biological Station, Manu National Park, in August–September 2001. **Yellow-rumped Antwren** *Terenura sharpei* was regular in a canopy flock just uphill from the Cock-of-the-Rock Lodge, on the Manu Road, in November 2001 (JT).

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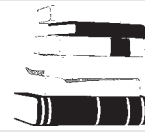
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Reviews



Threatened birds of the world edited by Alison J. Stattersfield and David R. Capper, 2000. Cambridge, UK: BirdLife International & Barcelona: Lynx Edicions. 852 pp, many colour paintings and maps. UK£70.

To summarise bird species threatened around the world is certainly a monumental challenge. The BirdLife team has taken on this task, and to a remarkable degree achieved success in what is certainly a monumental volume (852 pages!). The information contained here will serve a critical role in orienting conservation efforts around the world, and Stattersfield, Capper and their colleagues must be congratulated for their efforts.

The volume treats 1,186 threatened or endangered species, three conservation-dependent species, a large number of lower risk, near threatened or least concern species, as well as data-deficient and extinct taxa. For each threatened or endangered species, the volume provides attractive and well-scaled maps; geographic distributions summarised with countries conveniently highlighted; population estimates; identification pointers (perhaps not terribly useful); and comments on ecology, threats and recommended conservation steps. The book is well organised and quite accessible visually; the editing appears to have been thorough, as typographical errors are few.

As might be expected in a work of this scope, a few details could have been dealt with more effectively. For instance, whereas most of the maps are developed with impressive detail, many maps for island birds in the Philippines and a few for Madagascar and Indonesia consist simply of the entire island illuminated; although these species are rare and poorly known, some degree of refinement (e.g., highland versus lowland) would have helped. Many of the 'hypothetical extinct species' are simply synonyms—they may rank among the more curious and fascinating ones, but many are really not worthy of mention. Two 'species' are treated in the absence of type specimens and appropriate descriptions (*Caprimulgus maculosus*, *Laniarius liberatus*), yet several undescribed taxa for which specimens do exist were not mentioned (e.g., the then undescribed *Scolopax* in montane Mindanao), in spite of their likely threatened status. Some of the status categories are rather poorly defined, making their limits somewhat difficult to evaluate; for instance, Near Threatened is defined as 'Species which do not qualify for Conservation Dependent, but which are

close to qualifying for Vulnerable'. The 'targets' section is curious at best, with suggestions that are quite informal, impractical, or under-informed, e.g., 'research the causes of variation in birth rates, death rates, and spatial/temporal movement patterns' for *Aphelocoma coerulescens*, which is subject to one of the most detailed ongoing studies of the population biology and demography of any bird species in the world^{4!} These details, however, are indeed relatively minor, and should not detract overmuch from the quality of the book.

More serious, however, are two considerations that focus on the science that underlies this broad summary. First, I see a tendency to focus on information coming from the birding and conservation communities, ignoring sources in the systematic community. See, for example, the entries for two recently described species, *Pyrrhura orcesi* and *Herpsilochmus parkeri*. For neither is the formal description of the species cited, despite excellent detail on natural history, distribution, and characteristics. Too often, secondary sources (e.g., *Handbook of the birds of the world* or regional field guides) are cited as sources of information, when the primary sources would have been much more informative. The book demonstrates a slight aversion to the systematic literature (e.g., see accounts for *Thalurania ridgwayi* and *Lophornis brachylopha*, each of which omits recent systematic treatments); shifting taxonomic opinions, as exemplified by those two species, which were recently split from other non-endangered taxa, nevertheless make this literature important.

Second, the taxonomic basis for the species taxa treated in this volume is inconsistent and variable. Some groups are split, whereas others presenting equivalent variation over the same geographic area are not. For instance, the authors treat *Amaurospiza relictus* as a species separate from *A. concolor* on the basis of extremely scant evidence, none involving systematic study. Nevertheless, the *Chlorospingus ophthalmicus* complex shows clear patterns of differentiation across the same region², and nevertheless is treated as one widely distributed species under no threat. Even more dramatic are the tarctic hornbills (*Penelopides* spp.) in the Philippines: in this volume, the complex is treated as a suite of species¹. However, numerous other groups showing equal or greater differentiation in the Philippines are not split, and therefore are not included among threatened taxa; examples include *Turdus poliocephalus*, *Chrysocolaptes lucidus*,

Nectarinia sperata and *Lophozosterops goodfellowi*. The implications of inconsistent taxonomies for conservation planning are serious³—lumped 'biological species' taxonomies tend to emphasise central, species-rich areas, whereas more finely split taxonomies emphasise isolated, peripheral areas.

In sum, the Stattersfield volume is an excellent resource that will clearly prove indispensable for efforts to conserve birds worldwide. The book is a storehouse of valuable information, and should be part of every ornithological library. My only complaints with the volume revolve around its systematic basis; this volume will certainly see a series of revisions and editions, and it would be well to see it evolve into a more vibrant collaboration between the systematics and conservation communities. The result would certainly be a solid step forward for bird conservation.

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A. T. Peterson

Aves del Valle de Aburrá by Sociedad Antioqueña de Ornitología, Medellín, Colombia. 136 pp, 27 colour plates, 1 map. Available from Sociedad Antioqueña de Ornitología. E-mail Sergio Jaramillo, sergioj@cis.net.co. \$20,000 pesos (c.US\$5) plus postage.

This book, dealing with the avifauna of Medellín, one of Colombia's two second-cities, and the surrounding río Aburrá valley, has recently been updated and published in its second edition. *Aves del Valle de Aburrá* comprises two substantial and

quite different principal sections. The first is a field guide to the 115 commonest species of the region and is aimed as an introductory or beginners' guide. It is certainly the best introductory bird guide published to date in Colombia, with a simple, clear text and large plates, and ignores Colombia's 1,700 or so other bird species, which would doubtless have overwhelmed many a newcomer to birding. For each species, the scientific, Spanish and English names, and a succinct etymology of the scientific name are provided. Species accounts by Tomás Cuadros and Walter Weber are short, containing a summary of main identification features, plumage, habitat and status in the region. The plates by Dana Gardner, Iván Bernal, Catalina Londoño and Adriana Sanín are large, clear and of excellent quality. The second part of the book is an annotated checklist to the 436 species recorded in the region (31 more than in the first edition), compiled by Tomás Cuadros of Universidad de Antioquia. For each species, notes on status and abundance within the Valle de Aburrá and sites at which species may be or have been encountered are presented.

There is some room for improvement in future editions. The book broadly follows taxonomic order, but falls into the trap of grouping some species by habitat, a shortcoming more common in some European bird guides. As just four species, on average, are treated on each plate, this approach still inevitably separates birds likely to occur together. For example, the two *Aves de praderas* plates are separated by a plate of largely nocturnal birds and from the *Pájaros de praderas* plate by 15 others. Following taxonomic order would smooth the transition for beginners to more substantial works, such as Hilty & Brown's recently translated *Aves de Colombia*. A further small criticism is the significant amount of white paper in this field guide, although it is by no means a heavy or cumbersome book to carry. Finally, information on vocalisations would be welcome in future editions, helpful to beginners and not difficult to compile for the species treated.

Aves del Valle de Aburrá has a dual audience of both beginners and experts. Whilst the field guide section is likely to provide little new to readers of *Cotinga*, the annotated checklist amounts to an important reference work. This book is available at an extremely reasonable price and comes highly recommended to those with an interest in Colombian ornithology and the Medellín region in particular.

Thomas Donegan

Corrigenda

The following table was erroneously omitted from the paper by Sônia Aline Roda and Caio José Carlos, New records for some poorly known birds of the Atlantic Forest in north-east Brazil, published in *Cotinga* 20: 17–20. The editors apologise for this error.

Appendix. Localities mentioned in the text and their coordinates. States: Alagoas = AL, Paraíba = PB and Pernambuco = PE.

Municipality/Locality	State	Coordinates
Ibateguara, Engenho Coimbra	AL	09°59'S 35°50'W
Murici	AL	09°18'S 35°56'W
Murici, Serra Branca	AL	09°47'S 36°50'W
Murici, Reserva Biológica de Murici	AL	09°47'S 36°50'W
Quebrangulo, Reserva Biológica de Pedra Talhada	AL	09°17'S 36°25'W
São José da Laje, Mata do Pinto	AL	09°01'S 36°03'W
São Miguel dos Campos	AL	09°47'S 36°05'W
São Miguel dos Campos, Fazenda do Prata	AL	09°52'S 36°09'W
Mamanguape	PB	06°50'S 35°07'W
Mamanguape, Reserva Biológica Guaribas	PB	06°45'S 35°12'W
Água Preta, Engenho Sacramento	PE	08°41'S 35°24'W
Camaragibe, Aldeia	PE	c.08°01'S 34°58'W
Igarassú, Refúgio Charles Darwin	PE	07°48'S 34°27'W
Igarassú, Usina São José	PE	07°50'S 34°54'W
Jaqueira, Usina Frei Caneca	PE	08°42'S 35°50'W
Paulista, Reserva Ecológica de Caetés	PE	07°55'S 34°55'W
Recife	PE	08°03'S 34°54'W
Recife, Parque Dois Irmãos	PE	07°55'S 34°52'W
São Lourenço da Mata	PE	08°00'S 35°03'W
São Lourenço da Mata, Estação Ecológica do Tapacurá	PE	08°03'S 35°13'W
São Vicente Férrer, Engenho Triunfo	PE	07°37'S 35°27'W
São Vicente Férrer, Mata do Estado	PE	07°37'S 35°30'W
Tamandaré, Reserva Biológica de Salinho	PE	08°31'S 34°52'W
Tapera, Fazenda São Bento	PE	08°08'S 35°13'W
Timbaúba, Engenho Água Azul	PE	07°35'S 35°22'W
Vicência, Engenho Independência	PE	07°39'S 35°26'W

On p.48 of *Cotinga* 20, it is stated that the holotype of *Lepidotrix (Pipra) vilasboasi* is held in the Museu Nacional in Rio de Janeiro. In fact the specimen in that institution is a lectotype (per Luiz Gonzaga & Marcos Raposo); this also affects the caption on p.49. The caption to Fig. 4 on p.61 in *Cotinga* 20 referred to a male Slender Antbird *Rhopornis ardesiacus*, but the bird portrayed is a female. Further, the *Pyrrhura* parakeets depicted in Fig. 15 on p.62 are Madeira Parakeets *P. snethlageae*, which appears to be the first indication that this taxon occurs outside the Madeira drainage (L. Joseph *in litt.*)



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- channel efforts towards priority species and sites, drawing attention to conservation needs
- publicise the activities of local groups and individuals, and improve liaison and collaboration between these same people and other birdwatchers

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Cover illustration

Swallow-tailed Cotinga *Phibalura flavirostris boliviana* by Oscar Tintaya

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