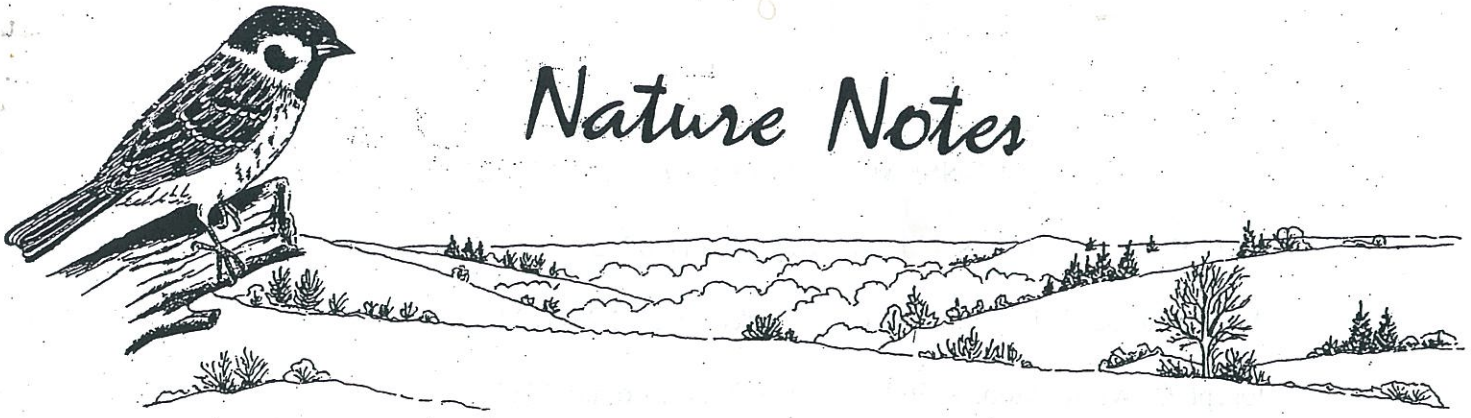

Nature Notes

Call the Nature Line (314) 935-8432 for meeting times & bird sightings
Journal of the Webster Groves Nature Study Society, October 2007, Vol. 79, No. 8
First Issue November, 1929

PRESIDENT'S CORNER – Ann Earley

Fall is a great time in this part of the country to get out and experience the changing sights and sounds of our natural world. As always, WGNSS provides many opportunities to broaden your knowledge and appreciation of nature with various field trips and programs. Details and schedules may be found elsewhere in this newsletter.

In September, WGNSS members enjoyed a special program by Randy Korotev, Society Webmaster and former Treasurer. Randy's presentation on "Birding North Dakota in June" featured his interesting and humorous experiences and wonderful photography from his summer visit up north. Attendees gained a greater appreciation of the opportunities for birding and recreation in North Dakota.

Another special program is planned by the Ornithology Group in October. The topic for this program is closer to home and features Jim Ziebol and Yvonne Homeyer presenting **"Hawks of the St. Louis Area."** This program will be held on **Tuesday** evening, **October 2**, at 7 p.m. at the St. Louis County Library Headquarters on Lindbergh. All WGNSS members and friends are encouraged to attend. Don't miss it!

Volunteering has been in the news recently with the release of former President Clinton's book Giving: How Each of Us Can Change the World, a look at how individuals and nonprofit groups are making a positive impact. WGNSS could not survive and offer the range of activities it does without the knowledge, dedication, and enthusiasm of many committed volunteers. It is an honor to be associated with such a fine group of people, whose efforts certainly make our world a better place. Many thanks to you all. But we can always use more volunteers! If you would like more information on how you can help make WGNSS (and the world) even better, please contact me or one of the other officers or Board members.

Whether your interests include unusual birds enroute to warmer climes, native asters and goldenrod species in bloom, or migrating monarch butterflies, I hope you will enjoy all the natural events of the autumn season.

DUES RENEWAL – Mike Olson, Treasurer

Please note the dues expiration date on your *Nature Notes* mailing label. If the date is 31-08-2007 your membership has expired, and we invite you to renew your membership by mailing your dues check to the WGNSS post office box.

WGNSS WELCOMES NEW MEMBERS

Carol Brown, 4904 West Hill, Godfrey Illinois, 62035

Anne Munroe, 721 Cranbrook Dr., , Kirkwood, MO 63122

Joseph C. Whittington, 7656 Lindbergh Dr., St. Louis, 63117

ANOTHER HONOR FOR MARSHALL MAGNER

Mashall Magner's name has been added (posthumously) to the Webster Groves High School 2007 Wall of Fame Inductees. (WGNSS member Dr. Ann Johanson was previously added to this Wall of Fame).

THE STATE PARK SYSTEM RETURNS TO THE CURRENT RIVER

In July Governor Blunt blessed the transfer of the former Alton Club property just upstream from Round Spring from the Dept. of Conservation to the State Park System. Negotiations are in progress for transfer of 800 acres west of Highway 19 for a new state park with frontage on the river. (From *Heritage*, Newsletter of the Missouri Parks Assn., August 2007, p. 1.)

NOT ALL BAMBOO GROWS IN CHINA!

An article in the June 2007 issue of *Smithsonian* (p. 14) reports the discovery of a new species of bamboo in the Southern Appalachian Mountains, This discovery gives North America three bamboo species. Worldwide there are 1,400 known species. It has long been known to local people as "hill cane".

NEW BOOK ABOUT MISSOURI'S WONDERS – Linda Virga

Show Me Natural Wonders – A Guide to Scenic Treasures in the Missouri Regions – Don Corrigan, J. B Thias, Illustrator – R. E. Reedy Press, St. Louis, Missouri, May 2007

WGNSS contributors listed include Jim Ziebol, Yvonne Homeyer, Dennis Bozzay, and Sue Gustafson,

THE NORTH FORK WILDERNESS AREA – John Karel and Scott Merritt

The North Fork Wilderness is one of seven "sensitive areas in the NTNF that the Missouri Coalition for the Environment (MCE)has worked to protect for over thirty years. The North Fork is one of the finest and most beloved of the Ozark float streams. A large block of wild forest cradles the North Fork in the Willow Springs unit of the MTNF Recently issues regarding full federal designation have been resolved, and MCE and other Missouri conservation organizations have begun a campaign to enter the North Fork and six other sensitive areas into the National Wilderness system. (MCE *Alert*, Summer 2007)

HISTORIAN'S CORNER - Jim Adams

This past May I attended the wedding of a granddaughter to a newly-minted landscape architect in Omaha. I had no idea that this experience would provide the inspiration for this month's Corner. But I subsequently read a biography of Frederick Law Olmsted (1822-1903), the great landscape architect, and decided that he would be a fitting subject.

Frederick's father John had a great love for nature, passing this love of nature to to Frederick who totally designed and served as field construction superintendent for the acclaimed Central Park in New York City. After completion, he was hired away to California to manage California's Mariposa gold-mining property. This was a principality of seventy square miles in the western foothills of the Sierra Mountains, within sight of the precipices of the Yosemite Valley. While in California he fell in love with the Yosemite area and in 1884 was the co-author of a proposal to convert the Yosemite valley area to a natural park. Senator Conness of California submitted a bill ceding the Yosemite Valley and the Mariposa Big Tree Grove to California for such use. Once the bill was approved by Congress, Olmsted, as a loving analyst of natural scenery with fifteen years prior experience in park administration, was appointed to direct the development of the new park.

Olmsted and later partner, Calvert Vaux, created a park for Buffalo and laid out the site for Chicago's 1892 Columbian Exposition, and the grounds layout for the Leland Stanford Junior University in California.. Olmsted also created the the Biltmore mansion in a pristine forest setting near Asheville, North Carolina, The firm landscaped the nation's capitol building in Washington, D. C and over the years it also executed many and varied projects around the nation. Olmsted is widely recognized today as possibly the greatest landscape architect of all times.

(The above information was abstracted from FLO--A BIOGRAPHY OF FREDERICK LAW OLMSTED by Laura Wood Cooper, The Johns Hopkins University Press, Baltimore and London, 1973)

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Literature is strewn with the wreckage of men who have minded beyond reason the opinion of others.

Virginia Woolf 1882-1941 - English Novelist

WHAT'S AHEAD?

ALSO IN THIS ISSUE

****

The great tragedy of the classical languages is to have born twins.

Geoffrey Madan - 1895-1947

Winston Churchill mobilized the English language and sent it into battle to steady his fellow countrymen and hearten those Europeans upon whom the long dark night of tyranny had descended.

Edward R. Murrow - 1908-1965

JULY BOTANY GROUP REPORT – George R. Van Brunt

July 2, 2007 Botany Field Trip

Fourteen botanists met on a beautiful, sunny summer day at Klondike County Park in St. Charles County. Father Sullivan arranged for the head of park maintenance to accompany us to the old Klondike Sandstone Quarry, which is normally not open to the public. The quarry was in operation from the 1920's until the 1960's and was a large area surrounded on three sides by cliffs and open on the fourth side. The soil was sandy and there was standing water in several places and evidence that an even greater area is covered with water for at least part of the year. As expected in a heavily disturbed area, many invasive species were present. They included *Daucus carota* (Queen Anne's lace), *Typha angustifolia* (narrow-leaved cat-tail), *Medicago lupulina* (black medic), *Securigera varia* (crown vetch, *Chamaecrista fasciculata* (partridge pea), and *Lespedeza cuneata* (sericea lespedeza). However, we also identified many interesting native plants including *Leucospora multifida* (narrowleaf paleseed), *Hieracium longipilum* (long-haired hawkweed), *Ludwigia alternifolia* (seedbox), *Croton monanthogynus* (croton), *Croton glandulosus* var. *septentrionalis* (sand croton), *Sabatia angularis* (rose pink), *Asclepias incarnata* (swamp milkweed), *Hypericum mutilum* (dwarf St. John's wort), *Diodia teres* (rough buttonweed), and *Pyrrhopappus carolinianus* (pale false dandelion). We also identified three species of the genus *Pycnanthemum*: *P. virginianum* (common mountain mint), *P. tenuifolium* (slender mountain mint), and *P. pilosum* (hairy mountain mint). The common name "mountain mint" refers to the icy appearance of the inflorescence which looks like the top of a mountain.

July 9, 2007 Botany Field Trip

Twenty one sweaty botanists met on a typical sunny, hot, humid, St. Louis summer morning at Lost Valley Trail, Weldon Springs Conservation Area, St. Charles County. We botanized along the trail to the beaver pond and back, walking very slowly and staying in the shade as much as possible. Along the way we identified many native species in bloom including *Stachys tenuifolia* (smooth hedgenettle), *Campsis radicans* (trumpet creeper), *Verbena urticifolia* (white vervain), *Vernonia baldwinii* (Baldwin's ironweed), *Heliopsis helianthoides* (ox-eye sunflower), *Geum canadense* (white avens), *Blephilia hirsuta* (pagoda plant), *Scrophularia marilandica* (late figwort), *Impatiens pallida* (pale touch-me-not), *Campanula americana* (tall bellflower), *Euphorbia dentata* (toothed surge), *Mimulus alatus* (winged monkey-flower), *Penthorum sedoides* (ditch stonecrop), and *Cephalanthus occidentalis* (buttonbush).

Stachys tenuifolia flowers each have a curved petal that looks like a roof over the rest of the flower. This can be used to distinguish it from *Teucrium canadense* (American germander) which is lacking this "roof". The genus name, *Stachys*, comes from classical Greek and means ear of corn. Of course, the classical Greeks did not have corn as we know it because corn is a New World plant. In classical Greek, corn meant any kind of grain. When Europeans came to the Americas, they applied the word corn to what Native Americans called maize. This member of the mint family is named *Stachys* because its calyces cause its inflorescences to resemble the spikes of grains.

The species name of *Verbena urticifolia* can help one distinguish this plant from other species in the genus *Verbena*, provided you know what a nettle looks like. The genus name of nettle is *Urtica,* and *urticifolia* means "nettle-leaved". The leaves of *Verbena urticifolia* look somewhat like those of *Urtica dioica* ssp. *gracilis* (tall nettle).

Finally, it is worthwhile noting that one native species we identified was *Mentha arvensis* (field mint), the only native *Mentha* in Missouri. In addition to having a very pleasant and penetrating odor, it has one of the oldest continuously used plant names. Various Greek and

Latin forms of this name (mintha, menthe, menta, and mentha) have been used for this plant and its relatives for as long as 4000 years.

July 16, 2007 Botany Field Trip

On a very warm, partly cloudy day, 16 botanists explored the Blue Heron Trail at Onondaga Cave State Park in Crawford County. This trail is one that Father Sullivan has called "the most species-rich botanical trail in Missouri". It didn't disappoint. We identified some introduced species along the trail, but most blooming plants we saw were native species. These included *Hedyotis nigricans* (slender-leaved bluets), *Silphium integrifolium* (rosinweed), *Passiflora lutea* var. *glabriflora* (small passion flower), *Samolus parviflorus* (brookweed), *Vernonia gigantea* (tall ironweed), *Lycopus americanus* (common water horehound), *Dasistoma macrophylla* (mullein foxglove), *Heliopsis helianthoides* (ox-eye sunflower), *Silene stellata* (starry campion), *Persicaria virginiana* (jumpseed), *Campanula americana* (tall bellflower), *Ipomoea pandurata* (wild potato vine), *Croton monanthogynus* (croton), *Campsis radicans* (trumpet creeper), *Hydrangea arborescens* (wild hydrangea), *Ruellia humilis* (wild petunia), *Tradescantia ohiensis* (Ohio spiderwort), *Phlox paniculata* (perennial phlox), *Tradescantia subaspera* (broad-leaved spiderwort), *Geum canadense* (white avens), *Verbena urticifolia* (white vervain), *Euonymus atropurpureus* (wahoo), *Justicia americana* (water willow), *Calystegia silvatica* ssp. *fraterniflora* (short-stemmed bindweed), *Stachys tenuifolia* (smooth hedgenettle), and *Alisma subcordatum* (southern water plantain). And those were only the plants in bloom! We identified many other species that were fruiting or had not bloomed yet.

We also identified *Hydrophyllum appendiculatum* (woolen breeches) in bloom. This was a suprise as this species usually blooms in April and May, although it has been seen to bloom in July. We speculated that the killing frost in March may have delayed this plant from its usual flowering time.

Calystegia silvatica has two subspecies, *Calystegia silvatica* ssp. *fraterniflora*, native to North America, and *Calystegia silvatica* ssp. *silvatica*, native to Europe. The North American subspecies tends to produce 2 flowers in each leaf axil, while the European subspecies produces only one. The subspecies name, fraterniflora, means "brother flowers" and refers to the two flowers in each leaf axil.

The species epithet of *Verbesina alternifolia* (yellow ironweed) means that the leaves are arranged alternately on the stem. Interestingly, if *Verbesina alternifolia* grows in a shady place the leaves are produced opposite each other on the stem. We observed a yellow ironweed plant on the Blue Heron Trail which was growing in a shady place and had opposite leaves.

July 23, 2007 Botany Field Trip

Marais Temps Claire Conservation Area in St. Charles County was the destination for 14 WGNSS botanists on a warm, sunny Monday morning. This area is part of the Missouri River floodplain and, as such, has deep, rich, moist soil. Although the area is heavily disturbed, it has an abundance of native plant species. We identified some species that do best in a wet habitat including *Sium suave* (water parsnip), *Persicaria amphibia* var. *emersa* (longroot smartweed), *Bidens aristosa* (swamp marigold), *Asclepias incarnata* (swamp milkweed), and *Hibiscus lasiocarpos* (rose mallow). We also identified *Potentilla norvegica*, which despite its species epithet, *norvegica* (Norwegian), is a native plant. Also blooming were the native species *Silphium integrifolium* (rosinweed), *Teucrium canadense* (American germander), *Stachys pilosa* var. *arenicola* (marsh betony), *Cynanchum laeve* (anglepod), *Lythrum alatum* (winged

loosestrife), *Verbena hastata* (blue vervain), *Solanum carolinense* (horse nettle), *Senna marilandica* (Maryland senna), *Chamaecrista fasciculata* (partridge pea), *Phyla lanceolata* (fog fruit), *Desmanthus illinoensis* (Illinois bundleflower), *Astragalus canadensis* (rattleweed), and *Verbena urticifolia* (white vervain). We also saw huge numbers of *Ambrosia trifida* (giant ragweed) not yet blooming, but well over 6 feet tall.

Lythrum alatum is closely related to the highly invasive *Lythrum salicaria* (purple loosestrife). Fortunately, we did not see any *Lythrum salicaria*.

The species epithet of *Sium suave* means "sweet" or "agreeable to the taste". Parts of this plant have a sweet fennel-like fragrance, but the stems, leaves, and flowers are toxic and will kill livestock. There is some question about whether Native Americans ate the roots of this plant. The plant is quite variable in form and sometimes can be confused with *Cicuta maculata* (water hemlock), a deadly poisonous plant. Eating any part of *Sium suave* is not recommended!!

On an entomological note, Pat Harris photographed a fritillary, not realizing at the time what kind it was. The butterfly was identified from the photograph as *Boloria bellona* (meadow fritillary). While common in some parts of our country, it is seldom seen in Missouri; it has only been reported in Putnam, Lewis, St. Louis, and St. Charles Counties. Violets are the food plants for the caterpillars, while the adults feed upon the nectar of Asteraceae. *Boloria bellona* disappeared from this area following the flood of 1993 and is just now returning.

July 30, 2007 Botany Field Trip

Fourteen WGNSS botanists met at Lower Meramec County Park, St. Louis County, at 9 am on a warm, sunny morning. We had planned to meet here on May 14th, but the park was closed due to flooding on the Meramec River. We found no evidence of the flood, in fact, normally wet areas were dry. We walked about a mile on the paved path identifying the smorgasbord of bottomland plants, and then returned the same way. We didn't even have to leave the path to find the following native species in bloom: *Blephilia hirsuta* (pagoda plant), *Scrophularia marilandica* (late figwort), *Rudbeckia triloba* (brown-eyed Susan), *Stachys tenuifolia* (smooth hedgenettle), *Impatiens capensis* (jewelweed), *Ipomoea pandurata* (wild potato vine), *Desmodium paniculatum* (panicled tick-trefoil), *Ludwigia alternifolia* (rattlebox), *Prunella vulgaris* (self-heal), *Phyla lanceolata* (fog-fruit), *Conoclinium coelestinum* (blue mist flower), *Senna marilandica* (Maryland senna), *Spermacoce glabra* (smooth buttonweed), *Laportea canadensis* (wood nettle), *Commelina virginica* (Virginia dayflower), *Desmodium cuspidatum* (longleaf tick clover), *Solidago gigantea* (giant goldenrod), *Lobelia inflata* (Indian tobacco), *Verbena urticifolia* (white vervain), *Pyrrhopappus carolinianus* (pale false dandelion), *Hibiscus lasiocarpos* (rose mallow), *Oenothera biennis* (common evening primrose), *Eupatorium serotinum* (late boneset), *Campanula americana* (tall bellflower), *Dasistoma macrophylla* (mullein foxglove), *Smallanthus uvedalius* (bear's-foot), *Persicaria virginiana* (jumpseed), and *Eclipta prostrata* (yerba de tajo). We also found *Vitis aestivalis* (summer grape) and *Dioscorea villosa* (wild yam) in fruit.

We found three species in the Urticaceae (nettle family). They were *Laportea canadensis* (wood nettle), *Boehmeria cylindrica* (false nettle), and *Pilea pumila* (clearweed). Of these three, only *Laportea canadensis* stings, and its sting is worse that that of *Urtica dioica* ssp. *gracilis* (stinging nettle).

AUGUST BIRD REPORT – Jim Ziebol & Yvonne Homeyer

Introduction: Jim Adams invited comments about Rachel Carson. The Xerces Society is an organization dedicated to invertebrate conservation, particularly pollinators. Its members include Thomas Eisner, E. O. Wilson, Paul Ehrlich, Robert Michael Pyle, Jeffrey Glassberg, and their current president May Berenbaum. Dr. Berenbaum is a biologist and entomologist at the Univ. of Illinois, Champagne-Urbana. Quoting her from the Spring 2004 issue of *Wings*, "Synthetic pesticides, for example, target basic physiological processes but are so crudely nonspecific in their application that, each year pesticide use results in about 22 million human poisonings and 220,000 fatalities worldwide. By one estimate, the environmental and public health costs of pesticides exceed $9 Billion a year in the United States alone." Dr. Berenbaum has testified before Congress on these matters. Several recent authorities have published the fact that we've lost 70% of the Neotropical migrant songbirds since the 1960s. For the first time ever, in my backyard, the Robins and Cardinals failed to fledge young, due to the fact that there aren't any insects to feed the young.

Undoubtedly the best birds of August was an adult Rufous Hummingbird that briefly visited Kraig Paradise's yard in north County.

Sightings: Mike Pinnell reported 6 Common Moorhens at HL on 8/14. Two Blue-winged Teal were seen at HL on 8/15 (FH) and one was seen at Riverlands on 8/26 (JU). The first Shoveler to appear this fall was at HL on 8/23 (FH). On 8/25, 5 Avocets were seen at very close range at the HL Causeway (m. ob.). A Willet, seen at Alta Villa on 8/30, was a good find for Connie Alwood. On 8/28, a Red Knot, 3 Ruddy Turnstones, and a Black-bellied Plover were also seen at Alta Villa (CM). A visit to Riverlands on 8/29 produced 2 Sanderlings, 12 Black Terns, and a Least Tern. Three Buff-breasted Sandpipers were seen near Keeteman Road on 8/6 (CM). The Thursday Group paid a visit to the Hwy. 79 corridor on 8/9 and found Pectorals, Semipalmated Plover, Yellowlegs, Spotted Sandpiper, Killdeer, peeps and a Buff-breasted (J Chain). On 8/19, Frank Holmes located a Caspian Tern at HL. Forster's Terns, Black Terns, and 12 Caspian Terns were found at Riverlands on 8/26 (JU). Four Least Terns were seen at the HL Causeway on 8/24 (FH). A trip to CL on 8/25 produced 4 apparent Least Terns and 5 Caspian Terns (J Chain). The Thursday Group located an Osprey and 2 Loggerhead Shrikes at CL on 8/23 (J Chain). Jackie and Jane Allen also found a Mississippi Kite in Maplewood on 8/25. A pair of kites was seen throughout August in Brentwood (YH).

On 8/23, a male Rufous Hummingbird was briefly observed at a feeder in Kraig Paradise's yard in north county. Throughout the end of August, up to 6 Ruby-throated Hummingbirds were seen in his garden. Flocks of Nighthawks were reported, with 20 in Clayton on 8/24 (J Cook) and about 50 in University City on 8/25 (MT). Clarence Zacher reported 2 immature Red-headed Woodpeckers, a Kingbird, and a Kestrel in FP on 8/26. Two calling Yellow-bellied Flycatchers were reported at Cuivre River SP on 8/9 (J Chain). As many as 25 Fish Crows were flocking along Bend Road on 8/26 (FH). A Sedge Wren was located at HL on July 31 (FH). Kraig and Mark Paradise carried out a

Bluebird Project at North County Recreational Area, and 10 Bluebirds fledged there in August. On 8/24, a Plumbeous Vireo was seen in TGP (CA, Sue Schoening, m. ob.) This is only the second Plumbeous Vireo observed in TGP. On 8/31, a male Golden-winged Warbler appeared in TGP (Lori Vitt, RAB). On 8/24, a Worm-eating Warbler was videotaped at close range at Young C.A. (JZ). The Saturday Group reported Redstart, Canada Warbler, Chestnut-sided, Ovenbird, Red-eyed Vireo, and Blue-headed Vireo at TGP on 8/25 (D Becher). A female Mourning Warbler and a Blue-winged Warbler were seen in TGP on 8/26 (J Chain, RW). On 8/30, 13 species of warblers were present in TGP, including a female Black-throated Blue (PB, LJ). A Lark Sparrow was found at the first parking lot at MTC on 8/5 (JZ). A White-throated Sparrow, seen by Mike Brady at CSP on 8/4, was either a post-breeding dispersal bird or an injured bird that didn't migrate out.

A typical day at CSP on 8/8 included several Indigo Buntings, Common Yellowthroat, House Wren, Scarlet Tanager, Summer Tanager, 3 Kentucky, and Yellow-throated Vireo; 2 White-eyed Vireos were drinking at pools along Kiefer Creek (MB). Castlewood State Park is one of our finest areas for breeding birds.

Back Yard Birds: On 8/1, an adult Crow brought 2 young to Jim Ziebol's yard; these are the first crows seen in his neighborhood in several years. A Sharp-shinned Hawk flew over Mike Thelen's yard on 8/7. On 8/22, Margy Terpstra saw her first fall migrants – a Redstart and a Canada Warbler. Tina Weyman saw a possible N. Parula there that day.

Contributors: Connie Alwood, Paul Bauer, David Becher, Rose Ann Bodman, Tom Bormann, Mike Brady, Jackie Chain, Jean Cook, Frank Holmes, Yvonne Homeyer, Les Jenkins, Dan Kassebaum, Randy Korotev, Jim & Charlene, Mike Thelen, Josh Uffman, Rad Widmer, Clarence Zacher, Jim Ziebol.

Abbreviations: BCA, Busch Conservation Area; CC, Clarence Cannon NWR; CL, Carlyle Lake; CSP, Castlewood State Park; CB, Columbia Bottoms; FP, Forest Park; HL, Horseshoe Lake; LP, Lafayette Park; LCCL, Little Creve Coeur Lake; MTC, Marais Temps Clair; RMBS, Riverlands Migratory Bird Sanctuary, SNR, Shaw Nature Reserve, TGP, Tower Grove Park.

BUTTERFLIES AND MOTHS OF NORTH AMERICA – Phil Koenig

Successful butterfly
and moth management and conservation efforts are limited
by access
to distribution data.

Importance of Pollinators

Pollinators play a crucial role in sustaining agricultural production and biodiversity around the world by enabling plants to reproduce. Bees, bats, birds, butterflies, moths, and many other species perform these economic and ecological functions every day.
Unfortunately, many butterfly and moth species have been declining, partially due to the loss of

habitat, including migratory and nectar corridors. Attempts to reverse this trend are underway, but successful butterfly and moth management and conservation efforts are limited by access to distribution data and other important information. Information about habitat requirements of even the most common species are scattered in published literature or limited to generalized distribution maps available in paper field guides.

Providing Access to Butterfly and Moth Data

Butterflies and Moths of North America (BAMONA) <www.butterfliesandmoths.org> is a user-friendly database that contains the most comprehensive online distribution record of butterfly and moth species available for this region. More than 215,000 records and nearly 2,800 species accounts are accessible via the Web site through dynamic distribution maps, checklists, and species accounts that are generated in "real time," offering users the most up-to-date information with each visit.

The data-rich Web site was unveiled in June 2006. BAMONA has since drawn rave reviews from professional lepidopterists to backyard bug-catchers and has attracted up to 40,000 visits and half a million page views per month.

Features

- **Dynamic distribution maps** showing verified species occurrences;
- **Species checklists** for each county in the United States and each state in Mexico;
- **Species accounts** that describe size, identifying characteristics, life history, flight, caterpillar hosts, adult food, habitat, species range, conservation status, and management needs;
- **Photographs** of more than 1500 adults and caterpillars;
- A **glossary** that defines entomological terms utilized in species accounts; and
- **Links** to other regional butterfly and moth distributions.

Data Collection

BAMONA data come from a variety of sources, including museum and personal collections, field observations, literature, and citizen scientists. The BAMONA database incorporates data and photographs collected by the U.S. Geological Survey Northern Prairie Wildlife Research Center (NPWRC) <www.npwrc.usgs.gov> from 1995-2005.

Today, partnerships between thirty volunteer regional coordinators and MPIN are central to the ongoing data collection effort, especially for data submitted by the public. A team of three lead coordinators, including renowned lepidopterist Dr. Paul A. Opler, work with the regional coordinators to provide valuable quality control for data collection by reviewing the required photograph submissions and by verifying species occurrence data and identification.

Standardized data collection methods lay the groundwork for future capabilities. Pertinent metadata such as date, specific location details and geographic coordinates, source, and species status are collected for each new record, where available.

Since the BAMONA site was launched, over 10,000 new county records have been added to the database. More than 200 high-quality photographs taken by amateur and professional photographers have also been added to species pages and image galleries.

Future

BAMONA was developed to ensure the ongoing availability of key distribution data. Long-term priorities include data download capabilities; incorporation of data from The Lepidopterists' Society, Art Shapiro, and other new partners; improved identification tools; and finer-scale mapping of individual points for researchers to integrate with mapping and modeling software. Partnerships with state coordinators, scientists, volunteers, photographers, and database managers are central to this endeavor, and MPIN and BSI are eager to explore additional ways to continue this important work. If you are interested in participating, please contact the BAMONA team.

For More Information

Phillip Koenig
Missouri Coordinator
E-mail: LepsofMO@yahoo.com

THREE NEW SPECIES OF LICHEN, ONE FUNGUS DISCOVERED IN THE OZARKS – Joe Estes

(From August 30, 2007 News Release by The Nature Conservancy)

ST. LOUIS— The Nature Conservancy's Doug Ladd, working with a team of scientists from the New York Botanical Garden, recently discovered three new species of lichen and one species of fungus in the Ozarks. Three of these species were so different from their nearest relatives that each was classified in its own new genus. This discovery followed a 10-year Ozark lichen study partially funded by the National Science Foundation; it reinforces the biological importance of this unique region.

The three genera and species of lichens, *Pachyphysis ozarkana*, *Phoebus hydrophobius* and *Xyleborus sporodochifer* and one lichenicolous fungus, *Opergrapha diffractiola*, are described as new to science in a recent paper authored by Ladd, director of conservation science in Missouri, and Richard Harris, a researcher at the New York Botanical Garden and considered a premier lichenologist in North America. The organisms are widely distributed throughout the Ozark Highlands, a region that covers large portions of Arkansas, Missouri and Oklahoma, and smaller areas of southeastern Kansas and southwestern Illinois. While each species was initially discovered within the Ozark region, all were found to occur outside the Ozarks as well, usually to the south and west of the region.

"It demonstrates just how little we know about what's right under our feet," said Ladd, who predicts that up to 50 new species may be identified as a result of this study. "Every species plays an integral part in the ecosystem. As conservationists, the more we know about the diversity of life around us, the better equipped we are to make the right decisions on the ground for every species," Ladd said.

Lichens are an abundant and pervasive component of the Ozark landscape and virtually every major landscape in the world. The hardy little organisms, responsible for most of the coloring that can be seen on rocks, cliffs sides and tree trunks, are capable of growing in fresh water, salt water, deserts, tropical forests, alpine summits and even in Antarctica. Despite their widespread distribution and abundance, much about the diversity and habitats of lichens is unknown, due in part to a lack of adequate field work, especially in the Midwest and Great Plains.

What is known is that lichens are an important part of a healthy habitat. Locally, deer eat small quantities of lichen when food supplies are low in the winter, and many birds such as the ruby-throated hummingbird, eastern wood-pewee and blue-gray gnatcatcher use lichens for nest building. Lichens play a crucial role in mineral nutrient cycling in many forests, and some are even capable of using, or "fixing" atmospheric nitrogen, a rare ability to take nitrogen gas from the air and turn it into a usable compound in the soil. Additionally, lichens are extremely sensitive to air pollution. Lichen populations are observed in the Ozarks and throughout the world to monitor and assess air quality.

The Ozarks are an unglaciated landscape dating back 1.5 billion years. Once a tall volcanic mountain range, a billion years of erosion has worn the Ozarks down to the rounded knobs that most Americans associate with the popular vacation and outdoor recreation area. Nine hundred million years ago most of the surrounding area was covered in shallow seas. However, parts of the Ozarks have been continuously exposed for more than 225 million years, making them among the oldest continuously inhabitable landscape for plant and animal species in the central United States.

The Ozarks are home to 407 species targeted by the Conservancy and other agencies for conservation, with more than 160 species that are endemic, occurring nowhere else in the world. These Ozarks provide critical habitat for neotropical migratory birds, and a number of rare fish species. Nearly 500 species of lichen can be found in the Ozarks, many of which are unique to the Ozark landscape. Critical ecological threats to the Ozarks include: suppression of naturally occurring fires, altered water flows, loss of forest and woodlands, changes in water quality and unsustainable development.

Today, in the Ozarks there is a growing pressure in favor of inappropriate development or damaging land management practices. If this continues at the present rate, these watersheds will be irreparably degraded within the next 10 to 20 years. Research projects such as the Ozark lichen study help not only to identify the variety and abundance of species in the Ozarks, but help to build a complete picture of our global ecological landscape, and allow for the implementation of effective conservation of our natural heritage.

2007-08 SCIENCE SEMINAR SERIES

Sponsored by the St. Louis Zoo and The Academy of Science of St. Louis
Free, Open to the Public, Living World, North side of Zoo, Free Parking in North Lot,
7:30 -9 PM – For further information, call 314-768-5466 or 314-533-8083

Emergence: Nature's Mode of Creativity
Wednesday, October 10; 7:30 – 9 p.m.
Ursula W. Goodenough, Ph.D., Professor of Biology, Washington University

Scientists have had spectacular success with reductionism, taking natural processes and reducing them to ever smaller components and ever simpler laws. Response to this success has been mixed, with many decrying, and some rejecting, the Humpty-Dumpty fragments that appear to be all that remains of their whole-egg world where the human is the point. In fact, by starting from wholes and moving "down" into parts, one is moving in the opposite direction from the way matters actually arise. In fact, as atoms and molecules interact, new properties emerge — one encounters "something-more-from-nothing-but" as a consequence of increasingly complex relationships. In this talk, Goodenough will explain, in language accessible to non-initiates, how emergent properties arise in non-living and living systems, with a focus on the dynamics of emergence in the origin and evolution of life and awareness. She will extend these concepts to human forms of consciousness, and apply them to the urgent project of sustainability and habitat preservation. The concept of emergence, she will suggest, puts Humpty Dumpty back together again in ways that are wonderfully resonant with our existential yearnings.

A Multidisciplinary Approach to Advancing Research into climate change, natural hazards, sustainable development and biodiversity

Wednesday, November 14; 7:30 – 9 p.m.
Panel Discussion – Saint Louis University Center for Environmental Science Moderator: Tim Kusky, Ph.D., Director, Center for Environmental Sciences, Saint Louis University, Panelists: Associate Directors from Departments of Biology, Earth & Atmospheric Sciences, Chemistry, Administration, Public Policy, Public Health, and Political Science

PUBLICATIONS BY MEMBERS

MacRae, T. 2007. Biological and distributional observations of North American Cerambycidae (Coleoptera). The Coleopterists Bulletin, 61(2):227-263.

Webster Groves Nature Study Society – Founded 1920

GROUP ACTIVITY/WALK SCHEDULES

October 2007 Update

Date	Meeting Place	Time	Leader

ORNITHOLOGY – SATURDAY BIRD WALKS – David Becher (314-576-1146)
(If destination not given, it's "Where the Birds Are". Always bring lunch.)

Sept. 22	Tower Grove Park Gaddy Bird Garden Entrance	8 AM	Becher
Sept. 29	Riverlands Teal Pond	8 AM	Becher
Oct. 6	Des Peres Park	8 AM	Becher
Oct. 13	Riverlands Teal Pond	8 AM	Becher
Oct. 20	Des Peres Park	8 AM	Becher
Oct. 27	Riverlands Teal Pond	8 AM	Becher
Nov. 3	Des Peres Park	8 AM	Becher
Nov. 10	Riverlands Teal Pond	8 AM	Becher
Nov. 17	Riverlands Teal Pond	8 AM	Becher
Nov. 24	Des Park	8 AM	Becher
Dec. 1	Riverlands Teal Pond	8 AM	Becher
Dec. 8	Des Peres Park	8 AM	Becher

ORNITHOLOGY – THURSDAY BIRD WALKS – Jackie Chain – Leader (314-644-5998)

Beginning Thursday, 3 May 2007, the group will begin meeting at 8 AM instead of 8:30 AM. For the first four May Thursdays we will meet at Tower Grove Park at the Maddy Bird Garden in the northwest corner of the park. We suggest parking on Magnolia Avenue. Those "westerners" who wish to carpool may meet at 8 AM at Des Peres Park. Beginning on 31 May **throughout the summer**, we will all resume meeting at Des Peres Park and proceed to where we hope there are birds.

Starting Thursday, 6 September, we will revert to the 8:30 AM meeting time due to school traffic.

For questions prior to birding days, my home phone is 314-644-5998 and my email is chainjac@sbcglobal.net. Beginning by 7:30 AM on birding days, my cell phone should be turned on at 314-497-1628.

There may need to be changes made down the line due to traffic problems with the onset of I-64/Hwy 40 construction, so stay tuned.

ORNITHOLOGY - SUNDAY BIRD WALKS – Jim Ziebol (314-781-7372)
(New birders are **cautioned** to dress for the weather. Bring binoculars if you have them.)

(Cont'd next page)

Sept 23	Tower Grove Park Gaddy Bird Garden Entrance	8 AM	David Rabenau
Oct. 14	Castlewood St. Park Park Headquarters	8 AM	Sherry McCowan (Margy Terpstra)
Oct. 28	Riverlands MBS* Headquarters	8 AM	Ian Hunt
Nov. 4	Busch Conservation Area Jim Ziebol Butterfly Garden	8 AM	Tom Parmeter
Nov. 11	Riverlands MBS Headquarters	8 AM	Mike Thelen

*Riverlands MBS – Riverlands Migratory Bird Sanctuary

BOTANY WALKS – Jeannie Moe – Co-Chair , Co-Leader (636-946-9802)

George Yatskievych – Co-Chair (314-577-9522) – Work Phone
Leader – Fr. James Sullivan (starting his 41st yr. in January, 2007)

Botany walks are on Monday. The Botany group visits many of the same locations as the Bird and Butterfly Groups: Busch Conservation Area, Shaw Nature Preserve, the Missouri Botanical Garden, Babler State Park and Cuivre River State Park. Learning plants will help you learn butterfly host plants. Sign up for Botany Group E-mails from Jack Harris (jahar@mac.com) or 314-368-0655 and receive an E-mail every Sunday, sometimes earlier, about the next Monday's trip.

ENTOMOLOGY GROUP ACTIVITIES – Rich Thoma, Chair (314-965-6744)

Sunday, October 28 at 7PM - Mark Deering, senior insect curator of the Sophia M. Sachs Butterfly House will give a talk, titled "*Buggin' in Arizona*". He will be talking about the butterflies and other insects he encountered on a trip to southern Arizona this past summer. During the talk, Mark will also present information about the, "2007 Invertebrates in Captivity Conference" he participated in on the same trip. We will be meeting at the Sophia M. Sachs Butterfly House, St. Louis County Faust Park, on Olive Blvd. just north of Highway 40. For directions to this event, feel free to contact Richard Thoma at (314-965-6744) or thomarkas4@sbcglobal.net.

Sunday, November 18 at 7PM - Joe Fortier, St. Louis University professor and WGNSS member will give a talk, titled "*Microcosmos: photographing tiny insect diversity*". This is a great opportunity to see the invisible world of very small insects and to discover their beauty. We will be meeting in Room 142, Biology Department, MacElwane Hall on the campus of St. Louis University. For directions to this event, feel free to contact Richard Thoma at (314-965-6744) or thomarkas4@sbcglobal.net.

Sunday, December 16 at 7PM - Keefe Reuther, winner of the 2006 WGNSS Menke scholarship will give a talk, titled "*Spiders, aphids, and roaches, Oh My!" -- Tales of the other social arthropods of North America*". When people think of insect societies, they think of a bee hive, or an ant nest or a termite colony. Keefe will show us that there are many other insects that also have social organizations too. We will be meeting in Room 142, Biology Department, MacElwane Hall on the campus of St. Louis University. For directions to this event, feel free to contact Richard Thoma at (314-965-6744) or thomarkas4@sbcglobal.net.

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ADMINISRATIVE INFORMATION (Cont'd)

Making Nature Notes Useful

Nature Notes, the Journal of the Webster Groves Nature Study Society, has long been published because of its utility in furthering the work of the Society. Its most important function is bringing the monthly program of the Society to the members - Stuart O'Byrne, June 1948 issue.

Supporting Staff

Marjorie Richardson - Newsletter Distribution
Randy Korotev - Website Manager
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Jim Adams - Historian
Jim Ziebol - Bird Report Compiler
Jim Ziebol - Busch WA Breeding Bird Survey Coordinator
Jack Harris - Botany Walk Coordinator
George Van Brunt - Botany Report Compiler
Sherry McCowan - Nature Line Coordinator

Call The Nature Line!

Call (314) 935-8432 for a summary of the latest bird sightings in the St. Louis Area and dates and times of bird and botany walks; there are occasional schedule changes. Please report any unusual birds to Sherry McCowan (314) 664-2381 and press "3" or wait for the prompt. You can also leave a message at the end of the Nature Line recording.

Nature Notes Deadline and Mailing Info.

The mailing party meets at the Oak Bend Library, 842 S. Holmes, Kirkwood at time noted to prepare N.N. mailings. We could use your help! Call Marjorie Richardson (314) 965-8974 to volunteer. Deadline and mailing party dates for future months are below

NN Deadline	Mailing Party
Fri. 10/5	Mon. 10/15, 10-1, A/P
Fri. 11/9	Mon. 11/19, 10-1, A/P
Fri. 12/7	Mon. 12/17, 10-1, A/P

Next Board Meeting

Wednesday, Oct. 3. 2007, 7 PM, at Powder Valley Nature Center, 11715 Cragwold, 63122, Tel. 314-301-1500. Near I-44/I-270 intersection, enter from Geyer Road. Visitors are welcome. Come see your Board in action!
(If snowy or icy conditions prevail, call ahead to find if the meeting has been canceled.)

Publication Policy

Notices/Proposed Articles/Letters to the Editor must be signed to be considered. They will be considered for publication based on content and availability of of space. Some editing may be done. Communications from non-member individuals or organizations must include the name and title (if any) of the sender along with a mailing address and telephone number. Send communications to the Editor, 35 Tulip Drive, Webster Groves, MO or transmit via E-mail to adams9054@sbcglobal.net

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Society Objectives

The objectives of the Society are: to stimulate interest in nature study on the part of adults and children; to cooperate with other organizations in nature study; to encourage amateur research in the natural sciences; to promote conservation of wildlife and natural beauty. Open to all with an interest in nature.

webster groves nature study society ***

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Call the Nature Line at 314-935-8432 for meetings and bird sightings

Membership categories (circle one):
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For 1st class mail……..add $8
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Attn: Michael Olson