



nature notes

Journal of Webster Groves Nature Study Society

April 1998 Vol. 70, No. 4

Counting Crows: A Point-Count Survey of Birds in Forest Park

How important are urban parks to wildlife? As part of implementation of the Forest Park Master Plan, a number of changes will occur in Forest Park over the next few years that should lead to an increase in use of the park by birds and other wildlife. Most importantly, water quality should improve when the various lakes and lagoons that exist now are connected to form a "linear water system" flowing from west to east through the park. New plantings in and around the water system should be more attractive to wildlife than the present golf-course-with-water-traps look.

To establish a baseline in order to monitor the improvements, the Master Plan team contracted Dave Tylka, biologist at Meramec College, to do biological surveys along the water system during 1997. Dave, in turn, asked me to help census birds. We selected ten survey points. Eight were along the linear water system, beginning at the far west end of Post-Dispatch Lake near Skinker Blvd. and ending at Bowl Lake near Kingshighway and US-40. Point 9 was along an intermittent tributary creek in the successional forest west of the Jewel Box and point 10

Randy Korotev was in the Kennedy Forest adjacent to the proposed location of a constructed wetland called a "green tree reservoir." One of us did a survey of the ten points at least once each month from February 1997 through January 1998. We each did a survey in February 1997 in order to calibrate our techniques and we did three surveys in June to get good information about the birds present during the breeding season. In total, we did 15 surveys, all in the early morning. On each survey we recorded all birds seen and heard during a 5-minute interval at each of the ten points.

We found a total of 64 species of birds (Table 1). About 36% are year-round residents of the park. Perhaps the most surprising among these was Belted Kingfisher. Two individuals
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Spring Dinner Thursday, May 7 Eden Commons

Mark your calendars for the WGNSS annual meeting and dinner on Thurs., May 7. This year's speaker, Don Kurz of the Missouri Department of Conservation, will present "Wild Plants and Sites of Missouri." Don has written several books and will have his latest, *Wild Shrubs and Vines of Missouri* available.

- ☆ To help with the dinner contact Vicki Flier at 968-9166.
- ☆ Please make your check payable to: Webster Groves Nature Study Society.
- ☆ Send it with your name and address to:
- ☆ Vicki Flier, 18 Algonquin Wood, Glendale, MO 63122-2013
- ☆ 6:00 Social hour
- ☆ 7:00 Dinner
- ☆ 8:00 Speaker: author Don Kurz of MDC
- ☆ Cost: \$13 per person. ∞

April Officer Elections

The Nominating Committee

Three of our five elected officers will be elected this April at the general meeting held on Friday, April 10. This year we are electing the President, First Vice President and Second Vice President. The nominating committee consisting of Jack Harris, John Loomis, and Ed Emery is pleased to nominate the following:

- President: Sue Gustafson
- 1st Vice President: Doug Corbett
- 2nd Vice President: Vicki Flier ∞

WGNSS April Ornithology Meeting

Join us on Sunday, April 19 at the home of Vicki and Ron Flier for an informal social get-together to discuss everyone's winter birding—anyone take any interesting trips?—and to review warbler songs for spring with Kevin Renick. Bring your binoculars, since the Fliers have a great backyard for birding. We'll meet at 4:00 PM at 18 Algonquin Woods in Glendale, off Berry Rd., south of Manchester. Bring a snack or hors d'oeuvres. Hope to see you there. Call Kevin Renick at 918-1085, Sue Gustafson at 968-8128, or Vicki Flier at 968-9166 if you need more information. ∞

Savanna Planned for Kennedy Woods

Ken Cohen

The Forest Park Master Plan includes 10 acres proposed for savanna restoration. There are two "fields" which make up the ten acres. One is located along Skinker Blvd. between a stand of pines on its south end and the golf course on the north. This site will bend east around the woods to Valley Drive. The other field is behind the art museum.

Site Management

The St. Louis Parks Department (SLPD) has an agreement with the Missouri Department of Conservation (MDC) to manage the Kennedy Woods area. The MDC will review and approve the savanna restoration plan. A consultant will be employed and advice sought from organizations actively involved in prairie/savanna restoration. Volunteers will be actively recruited to collect seeds, do planting, and monitor the sites. Signage will make visitors aware of the basic ecology of savannas, how much has been lost, and of the value of restoration projects.

Schedule

Restoration should begin on part of the site late in 1998. Progress will depend on how fast funds can be raised.

Funding

The SLPD is asking the environmental community to provide the initial funding for this project. Ten organizations have been contacted for both financial and in-kind support. The Webster Groves Nature Study Society has given \$200. WGNSS members can also help make the savanna restoration plans a reality by sending a contribution to: WGNSS, c/o WGNSS Treasurer Randy Korotev, 400 Oakbrook, St. Louis, MO 63132. Clearly indicate your contribution is for the Kennedy Woods Savanna. We'd like all contributions by April 15. ∞

Forest Park Savannah/Prairie

Project Update

The WGNSS Board thanks the following members for contributing donations to the Forest Park Savannah/Prairie Project:

Diane Benjamin

Randy Korotev

Betty Lobos

As President Sue Gustafson described in the last issue, the plan is to convert about 10 acres of what is now viciously mowed grass with occasional golf balls to a savannah containing native prairie plants. The areas under consideration lies west (between the Kennedy Forest and Skinker Boulevard) and north (behind the Art Museum) of the Kennedy Forest. Soil tests show that there is nearly two feet of topsoil in the western area, suggesting that a restoration project may be highly successful.

Why should WGNSS members contribute their hard-earned money to improving a city park? Over the last few years "environmental groups" have earned a bit of a negative reputation with the cultural institutions in Forest Park for being obstructionist—we actively lobby against more parking lots! In an effort to show that we can also be constructive, WGNSS and other organizations want to demonstrate member interest by putting our wallets where our petition clipboards are. As will be detailed in subsequent updates, several thousand dollars has already been accumulated toward this project. The WGNSS goal is to contribute \$1000, and about \$300 has been obtained thus far.

If you would like to make a donation to this project, please send a check (pay to the order of "WGNSS") by April 15 to:

Forest Park Savannah Project

c/o Randy Korotev,

WGNSS Treasurer

800 Oakbrook Lane

St. Louis, MO 63132 ∞

February Birding In St. Louis

Rose Ann Bodman

At the beginning of February one or two Ross' Geese remained at Baldwin Lake amid a large flock of Snow Geese. Unusually large numbers of Greater White-fronted Geese were seen frequently at Riverlands. At times there were as many as 200 in the flock. Up to 11 Black-crowned Night Herons were wintering at Horseshoe Lake. And there was even an early report of Fish Crows near Fisherman's Pond, Horseshoe Lake. Lincoln Sparrows were found along the road to the pump at Mark Twain National Wildlife Refuge (MTNWR). Reports continued of Hermit Thrushes, Eastern Towhees and Brown Thrashers at Busch Conservation Area (BCA) and elsewhere.

The three Eurasian Collared Doves at Governor's Run Golf Course, Carlyle Lake, were observed by Connie Alwood, Kent Lannert and Jack Van Benthuyzen on Feb. 3. The trio of birders continued down the road to Honker's Point when they found four Long-eared Owls.

Charlene Malone called in a hotline when she found a Harris' Sparrow near Bunker 6, BCA, on Feb. 6. However, the bird couldn't be located again.

Marjorie Richardson found a Barred Owl and a Hermit Thrush at Queeny Park on Feb. 8. On the 15th Yvonne Homeyer and Jim Ziebol had a Greater White-fronted Goose at Hampton Lake, BCA. They saw large numbers of Yellow-rumped Warblers at BCA that day.

Mild weather made for slim pickings for Missouri Audubon's Gull Workshop on the 8th. The group was able to find a few Thayer's Gulls among the Ring-billed flocks. Bill Rowe and others did find a Western Meadowlark at Riverlands. On Sunday many participants went to Carlyle where some saw the Eurasian Collared

Doves and others saw eight Long-eared Owls at Honker's Point.

Dan Kassabaum discovered a Saw-whet Owl a few days later in the cedar grove near the office at Eldon Hazlet State Park. By the 15th there was a second Saw-whet in the cedar grove and from 6 to 8 Long eareds at the Point. By Feb. 24th or 25th the Saw-whets had disappeared.

Although the White-winged Crossbills deserted the Shaw Arboretum, Gray Summit, by the end of December, there were still some good birds to be found. Two Red-shouldered Hawks have been seen there. Jack Chain found the pair near the Manor House on the 14th and George and Terry Barker and others have seen them in the wetlands and elsewhere.

Jim and Charlene Malone counted 30 White Pelicans at Creve Coeur Lake on Feb. 15.

Michael Botts had a singing Red-winged Blackbird at Jefferson and Clark in downtown St. Louis on Feb. 1. Outside the city the blackbird flocks seemed to increase in size daily.

Two separate Western Meadowlarks were singing at Riverlands on Feb. 20, where there were large mixed rafts of Canvasbacks, Common Goldeneye, Lesser Scaup and a few Ring-necked Ducks. That day Lou Haines reported an early Blue-winged Teal at the pump road, MTNWR. Helen Wuestenfeld discovered 2 Long-eared Owls at Sandridge Road, MTNWR, on the 20th. There were four on the 24th and one on the 25th. The road is public and the birds perch in the evergreens near the road.

Fish Crows were heard at Castlewood State Park on Feb. 28 during the Saturday field trip led by Dave Becher. A single Eastern Phoebe was seen at the park office. A few Turkey Vultures were seen as well as Brown Creeper, Kingfisher, Eastern Bluebirds and Carolina Wrens.

By the end of February, Water Pipits were seen at the impoundment and Tamalco Road, Carlyle Lake. Killdeer had returned and could be heard at many places. The mild winter weather failed to bring the hoped for invasion of winter finches. Pine Siskins, a few Crossbills and a single report of a Red Poll were all we could stir up. ~

Winter Botanizing

Carl Darigo

Except for the annual luncheon, holidays and minor interruptions, the Botany Group continued their Thursday outings, with the following attending one or more times, Father James Sullivan, Adrienne & Paul Biesterfeldt, David Bruns, Marge Chappuis, Jeanne Clauson, Dorothy Cole, Dolly & Carl Darigo, Catherine Filla, Karen Haller, Pat & Jack Harris, Betty & Bob Nellums, Tom O'Gorman, Marge & Jim Ruschill, Lila Traeger and James Trager.

December 4, Busch Conservation Area, St. Charles County—considering the 35°, cloudy day with potential snow predicted later, a surprisingly good crowd of nine came out to tour the middle section of Busch Hiking Trail. Father Sullivan pointed out the black, hairy bud and “smiley-face” leaf scar of persimmon (*Diospyros virginiana*) and yellow, male catkins of red cedar (*Juniperus virginiana*). A tiny *Lepidium virginicum* (poor man's pepper grass) plant was still bravely showing a flower, while in front of several old ammunition bunkers, accumulated moisture was hosting clumps of gooey *Nostoc* algae. A stand of dried grass still contained enough spikelets and leaves to be determined as *Muhlenbergia bushii* (short leaved muhly). Some other plants showed unique, dried fruiting displays, tall *Eupatorium purpureum* (green-stemmed Joe-Pye weed) with large round bunches on top, *Dasistoma microphylla* with small, sphere-like capsules, “candleabra” spikes of *Agastache*

nepetoides (giant yellow hyssop), thin sprays of *Verbena urticifolia* (white vervain), “tear drop” capsules of *Penstemon digitalis* (smooth beard tongue) and *Anemone virginiana* (thimbleweed) with cotton-like accumulations.

December 18, Rockwoods Reservation, St. Louis County—seven persons enjoyed a sunny, 55° day, while traversing the hills and valleys of a part of the Green Rock Trail. David Bruns, Botany Group member and a Rockwoods naturalist, along with Tom Meister and Stan Wyatt, also of the Rockwoods staff, accompanied the group. Near a utility pole along the road, Tom provided an interesting tidbit for future reference, explaining that some poles are branded with the name of the source tree. David identified several polypore mushrooms, then dissected an Ohio buckeye (*Aesculus glabra*) bud to show the miniature formation of the characteristic five-leaflet pinnate leaf. Father Sullivan demonstrated the difference between two very large, adjacent and old vines, with the grape vine (*Vitis* sp.) having thin, peeling bark and raccoon grape (*Ampelopsis cordata*) with thick, firm, woody bark. No flowering plants were found, but *Carex albursina* (white bear sedge) gray-green, lily-like leaves up to two inches wide were abundant, as well as thinner green leaves of *C. blanda* (woodland sedge); the common name has nothing to do with “white bears,” but apparently is derived from association with White Bear Lake, Minnesota. Several bright red scarlet cap mushrooms (*Sarcosypha coccinea*) were hiding under leaves. This fungus is one of first to appear in spring, but seemed to be off to an early start.

January 8, Babler State Park, St. Louis County—the new year opened with an unusual event, as due to continuous rain during the week, Father Sullivan had scheduled a “twig identification” session for the group

in a Visitor Center meeting room. However, the rain suddenly turned to snow early in the morning and the ominous radio weather and traffic reports convinced all but two faithful to remain home. The park was a winter fairyland, with wet snow hanging on branches, but the same snow concealed even twig buds, so no walks were taken. Nevertheless, an interesting plant discussion was held, along with preliminary planning for the annual spring trip. The park held a special hunt in December to reduce population of deer, which have been destroying vegetation and a second hunt is scheduled during the forthcoming weekend. Park Naturalist Dale Kannawurf is sharpening his scalpel skills, as tissue samples will be taken from several animals. Only deer over a certain age will be tested and Dale demonstrated the age determination using molars, on a jawbone specimen. Too bad the deer, which unfortunately seem to prefer native plants including orchids, cannot be convinced to consume the invasive, non-native bush honeysuckle (*Lonicera maackii*) and sericea lespedeza (*Lespedeza cuneata*).

January 15, Missouri Botanical Garden—due to possible icy trail conditions, six people instead opted for the friendly confines of the Missouri Botanical Garden. A Ridgway Center display of currently flowering plants had some unique species, *Rubus phoenicolasius* (wineberry) with copious red bristly hairs and thorns, *Rosa xanthina* (Chinese rose) armed with vicious-appearing triangular sword-like thorns and the yellow flowers of *Hamamelis mollis* (Chinese witch hazel). On a path to the Climatron, Father Sullivan identified a loose twig on the ground as *Quercus shumardii* (Shumard's oak), before spotting the identifying tree sign. Many tropical plants were observed inside the Climatron, most having Missouri relatives, with some of the more interesting being tropical butterfly weed (*Asclepias curassavica*), manioc

(*Manihot esculenta*) called "yuca" in the tropics, spiny leaves of bear's breath (*Acanthus montanus*), and thalia (*Thalia dealbata*), which does grow in Missouri. Father Sullivan demonstrated to a passing group of school children, how the leaves of sensitive brier (*Mimosa pudica*) fold when touched. In the Schoenberg Temperate House, kermes oak (*Quercus coccifera*), an unusual Portugal oak tree with holly-look-alike spine-tipped leaves was seen, while Jack Harris pointed out a climbing California pipevine (*Aristolochia californica*) plant with flowers very similar to the Missouri species. The group then met with the *Flora of Missouri* team, George Yatskievych and Bill Summers, for a nice lunch at the Ridgeway cafeteria.

January 22, Busch Conservation Area, St. Charles County—five people just beat a snowfall on a 35°, murky winter day, while circling Lake 20. This habitat produced several interesting wetland plants, such as *Alisma subcordatum* (small flowered water plantain) sporting a delicate fruiting pattern, *Ammannia coccinea* (long leaved toothcup) with a doughnut shaped fruit, designated "podhole" by Father Sullivan, *Rotala ramosior* (toothcup) having four fruits on the stem at each leaf axil, striking red-orange colored *Penthorum sedoides* (ditch stonecrop) and "tractor seat" fruits of *Scutellaria lateriflora* (mad dog skullcap). A unique "mystery" plant was later identified as *Hypericum mutilum* (dwarf St. John's wort). Near a deciduous holly (*Ilex decidua*) tree bearing many red berries, new branches were sprouting from a sister tree felled by beavers. *Cuscuta gronovii* (Gronovius' dodder) was again found trying to dispose of *Lespedeza cuneata* (sericea lespedeza). Father Sullivan demonstrated the long zig-zag rachis which had contained seeds of wild rye (*Elymus* sp.), while Jack Harris took honors for the day by correctly answering tests on three awn grass (*Aristida*

sp.) and persimmon buds (*Diospyros virginiana*).

January 29, Pea Ridge Conservation Area, Washington County—recent spring-like weather prompted six persons to check out the witch hazel along Indian Creek. Although the more normal January mid-40's temperature reduced the fragrance, *Hamamelis vernalis* (Ozark witch hazel) did put on a pleasant flowering display. Also seen on the gravel bar were *Polanisia dodocandra* (clammy weed) with tiny, brown, snail-like fruits, large fruiting inflorescences and narrow bracts of *Vernonia arkansana* (great ironweed), and *Salix caroliniana*, barely identified by a few, residual dried leaves. Along a gravel road, Father Sullivan pointed out the lower split stems of *Pycnanthemum tenuifolium* (slender mountain mint), confirming that this species does produce frost flowers. Although non-native and not exactly exciting, the new year's first flowering plants (omitting witch hazel), *Capsella bursa-pastoris* (shepherd's purse) and *Taraxacum officinale* (common dandelion), were duly recorded. In the forest, just prior to passing a huge cow skeleton, a nice stand of *Andropogon elliottii* (Elliott's broomsedge) was found; the striking "bird of paradise" similarity should probably lead to a more descriptive common name. The interesting day was capped with a "first," finding several Ozark witch hazel plants in the forest, at least several hundred yards from the stream; this species has previously been seen only in gravel bars of streams.

February 5, Shaw Arboretum, Franklin County—six persons covered portions of the Labadie Trace and West Valley Trail on a dreary, windy day in the 30's. No flowers were seen, but several interesting dried plants included two *Blephilia* species, *B. ciliata* (Ohio horse mint) and *B. hirsuta* (wood mint), plus the white stone-like fruits of the aptly named marbleseed

(*Onosmodium molle*). Father Sullivan pointed out that the American bladder nut (*Staphylea trifolia*) tree has twin lateral buds instead of one terminal bud and appearance of twig bark resembles the speckled king snake. Arboretum Naturalist James Trager found a dried prairie dock (*Silphium terebinthinaceum*) leaf sticking out of a vole hole and said that the animals love to eat roots of this plant. James also challenged the group to a test of Indian paintbrush (*Castilleja coccinea*) rosette leaves, but got no winners.

February 19, Busch Conservation Area, St. Charles County—a steady, misting rain in the 40's kept the crowd down to two, who had an interesting time traversing the new Hackberry Trail, a joint venture of the Francis Howell High School Outdoor Classroom and Department of Conservation. The trail which passed through both open and forested habitat, was loaded with surprises, including a marsh, short grass and tall grass prairies, plant succession test plots, two ponds, several benches, birdhouses, native tree arboretum, tree identification signs, a bottomland creek with bridges, amphitheater complete with seats and podium, wildlife viewing blind and secluded Cypress Lake, accessible only by foot. Huge hackberry (*Celtis* sp.) trees with unusually smooth bark dominated the entrance and undoubtedly accounted for the trail's name. The marsh had many cattails (*Typha latifolia*), with stands of switch grass (*Panicum virgatum*) along the border. The colorful *Candelaria concolor* (yellow candle lichen) was prevalent on many tree trunks and a tiny leafy liverwort, *Frullania inflata* (smooth cell frullania), was tenaciously clinging to bark of a *Quercus alba* (white oak) tree near one of the ponds, whose surface was covered with *Lemna minor* (lesser duckweed). Red fruits of wahoo (*Euonymus atropurpureus*) and coral berry

(*Symphoricarpos orbiculatus*) added bright color to the trail.

February 26, Missouri Botanical Garden—a nice crowd of 10, including first-timer Marge Chappuis, took advantage of a rain-threatened forecast to tour the Orchid Show, then parts of the Climatron and Schoenberg Temperate House. The majority of orchids displayed were hybrids, but some interesting natural species were seen. The genus *Oncidium* (dancing lady orchids), native to Central and South America, had numerous species, including *O. maculatum* with yellow-brown speckled petals, *O. splendidum* having large spade-like bright yellow petals and the smaller brown flowers of *O. sphacelatum*. Another Central American species, *Rhyncholaelia digbyana*, sported large whitish-green petals, with heavily fringed, almost hairy edges. Father Sullivan pointed out that the lower petal of an orchid flower generally is constructed differently, such as wrinkled, fringed, bent, etc., designed to attract pollinating insects. Observers questioned a large, oddly-shaped flower on a banana (*Musa acuminata*) tree, which Adrienne Biesterfeldt explained was the male flower; on commercial plantations this flower is removed from the tree after pollination of the female flowers. In the Temperate House wetland display, a flowering pondberry (*Lindera melissifolia*) bush drew comments. This rare plant, related to the common spice bush (*Lindera benzoin*), occurs in Missouri only in a protected preserve near the Arkansas border.

Many thanks to Pat Harris for helping with this article. ~

Tyson Nature Line

Call 935-8432 for a summary of the latest bird sightings in the St. Louis area. Please report any unusual birds to Jack Van Benthuisen, 961-3390 ~

1998 Shaw Arboretum Native Plant Conference June 5-7, 1998

The native plant conference organized by Shaw Arboretum of the MO Botanical Garden and co-sponsored by MO Dept of Conservation will be held at Powder Valley Nature Center in St. Louis, Mo., June 5-7. Registration is required; please contact : Shaw Arboretum, PO Box 38, Gray Summit MO 63039—314-451-3512 ~

Ornithological Conference in St. Louis April 6-12

The 1998 North American Ornithological Conference will take place April 6-12 in St. Louis. For information, contact the Committee on Local Arrangements, Bette A. Loiselle, 314-516-6224, or John G. Blake, 314-516-6578.

Bette Loiselle has also requested that we provide local volunteers to help with registration during the conventions. Call her at the number above. Help is also needed to escort local field trips. Call Paul Bauer at 314-921-3972. Volunteers may get free passes to the convention sessions and social events. ~

Audubon Society Of Missouri Spring Meeting: Mingo 4/24-26

Paul Bauer

All details for this trip are available in a mail out package that you can request from Paul Bauer at 314-921-3972, or: PO Box 2085, Florissant, MO 63032. ~

Welcome to new members...

Janet Bouffard..... Belleville, IL
Jim & Andrea Kennedy Portland, MO
Marcia Tuchel University City
June Walitzer..... Hazelwood
Linda Yust Des Peres
Michael Zeloski Ballwin
Don Masker..... Crestwood

Our Wintering Robin Redbreasts

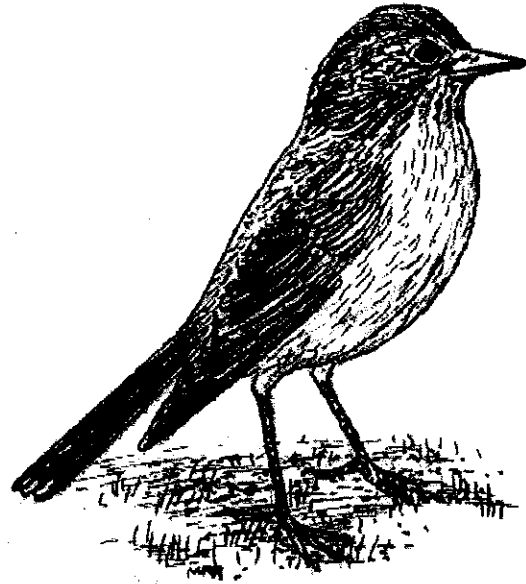
J. Earl Comfort

Traditionally the "first robin of the spring" has been reported and announced in local papers as a harbinger of better weather in the offing. I hate to disillusion those who believe this bird has always come back from the South where it has enjoyed cozy temperatures. In fact, it may or may not be a true migrant from the Sunny Southland. Chances are it was wintering in the area with relatives ranging from small to large flocks. This hardy species is known to winter well up into Canada, especially when fruit is available and the winter is mild. This also applies to his cousin our bluebird. Those American Robins who sensibly fly to convenient southern areas in the fall, return to us in the spring. I'm pointing out the facts of bird life. Some of them do remain in winter to feed on the fruit of the hawthorn, persimmon and cedar (Juniper) trees, to mention a few of their food sources. It is agreed most of our migrant wintering robins have replaced our summering birds, which, in turn, have headed south. This also applies to many of our so-called permanent birds, such as crows, jays, titmice and chickadees. Banding backs this up.

Noted contenders for their natural food are wandering flocks of greedy Cedar Waxwings, which are fond of the blue berries of the cedars, as their name implies. When the flock is huge, the trees may be completely stripped, before the wanderers pass on to greener (bluer) pastures. Around St. Louis we eagerly check the colorful birds in hopes of finding one of their rare Bohemian Waxwing relatives, a slightly larger bird.

During late March and early April in the Bourbon area these redbreasts may be encountered in large numbers, as robins in the northward migration drop off to join those

that had wintered and left us our quota. These April robins in our yards are likely



to be our summer visitant birds that will cheer us by their songs which are a means of establishing a territory and enticing a mate to share in the nesting chores. With this mission accomplished, we will enjoy their serenading throughout the summer as "Cock Robin" continues to warn possible interlopers he means business. We are all familiar with their probing for worms in our lawns and their mud gathering for a foundation for nests, usually straddled between limbs of a tree in or near our yards. Few kinds of birds are as friendly as these "yard birds."

The ten-inch robin scarcely needs a description. In detail the adult males average a bit darker. The breast is red, giving it the title of robin redbreast. This red is not as vivid as the red of a male cardinal, being more rusty than deep red. The head is dark, the upper parts dark gray, the under tail coverts white, with some white showing in the outer tail feathers. There is a prominent white eye ring and a white chin streaked with dark. The nest is of plant stems and grass on the mud platform mentioned earlier. The three or four "robin's-egg blue" eggs are well described. There will be two or more nestlings normally. Unfortunately,

the young, which develop rapidly, may leave the nest before they are capable of flight. At such times, cats are prone to get in their licks.

Robins are insect eaters, and young robins will demand and receive these insect enemies by the score. Their consumption of valuable earthworms serves to prevent this ally from becoming too numerous for its own good.

No doubt you are familiar with a robin's harsh alarm call when one of its progeny has grounded itself too early and an enemy, or fancied enemy, appears on the scene. You are definitely included on the enemy list at such times.

During the fall season, robins join other kinds of birds that feast on wild cherries, poke berries, sumac and other wild fruits. On our Christmas bird counts, we may list the robin in fantastic numbers when our route happens to include this bird's chosen winter quarters. Incidentally, why did the sparrows kill cock robin?

This article & drawing by Marjorie Richardson, appeared in *Bourbon Beacon*, Jan. 20, 1977.

Ecology And History As Determinants Of Rarity In Birds: A Case Study With *Drymophila* And *Hypocnemis*

The following article is a report from the recipient of the Mickey Scudder Scholarship in Field Biology for 1997, awarded by WGNSS.

Jaqueline M. Goerk

In an attempt to improve our understanding of the phenomenon of rarity (in terms of restricted geographic distributions), I have studied the natural history of six species of the Atlantic Forest antbird genus *Drymophila* (Formicariidae, Aves).

However, because simultaneous evaluation of historical and ecological factors are necessary to truly understand rarity (Endler 1982), this study will be complemented with studies on the natural histories of four

additional species, and the recovery of the evolutionary history of this group. A phylogenetic hypothesis of relationships in the genus *Drymophila* and *Hypocnemis* will be developed using Mitochondrial DNA (mtDNA) sequences of two protein-coding genes.

The main goals of the proposed research are: 1) to ascertain if restricted geographic distributions can be explained by the relative age of species; 2) to verify if existing physical barriers prevent the expansion of species' geographic distributions; and 3) to determine if ecological specialization explains restricted geographic distributions in species. An additional goal of this study is to assess the extent to which anthropogenic disturbance has affected geographic distributions of antbird species in the Atlantic Forest of Brazil. This information will help on the identification of potentially threatened species of birds. Specific objectives for this last field season were to: 1) collect individuals of different populations of each of the Atlantic Forest *Drymophila* species: *D. genei*, *D. ochropyga*, *D. rubricollis*, *D. squamata*, *D. ferruginea*, and *D. malura*; and 2) obtain additional foraging behavior and microhabitat use information on the species mentioned above.

The proposed research was conducted at nine sites along the Atlantic Forest of Brazil, in the following states: Sao Paulo, Rio de Janeiro, Espirito Santo, Minas Gerais, and Bahia. A collecting permit was granted by the Brazilian Institute of the Environment (IBAMA; see attached copy of permit). Collections were made mainly with mist-nets placed in sequence of up to eight nets. Nets were open just before dawn (approximately at 0500 hrs.) until 1100 hrs., or until study species were captured. Collected *Drymophila* specimens are listed on Table 1.

In order to test the hypothesis that the size of species' geographic ranges decreases

with increasing degree of ecological specialization I conducted observations on foraging maneuver and substrate, as well as microhabitat use for each *Drymophila* species. Individuals were followed and observed from the moment of first sight until they were "lost" ("focal animal sampling" techniques, see Altmann 1974). Foraging maneuvers and substrate were classified following the scheme proposed by Remsen and Robinson (1990). I attempted to obtain a minimum of five foraging observations for each individual, of a total of 30 individuals. Morrison (1984) suggested that sample sizes of at least 30 independent bouts (observations) are necessary to minimize biases due to non-independence of foraging maneuvers. Foraging observations obtained for each species are as follows: *Drymophila genei* - 278; *D. ochropyga* 206; *D. rubricollis* - 210; *D. squamata* - 258; *D. ferruginea* - 253; *D. malura* - 190. This data will be analyzed using ordination techniques, such

as correspondence analysis (see Miles e Ricklefs 1984).

The aim of this study is to have a better understanding on what factors, or which combination of factors best explain rarity in species. In addition, this study is expected to contribute to the understanding of avian biogeographical patterns in the Neotropics and to practical aspects of conservation of endangered species with small geographic distributions.

Bibliography

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Table 1. *Drymophila* specimens collected in the Atlantic Forest of Brazil.

Species	Population (collection locality)		
	Northern	Central	Southern
<i>Drymophila genei</i>	Caparao	Itatiaia	S.Orgaos
<i>Drymophila ochropyga</i>	Boa Nova	S.Orgaos	Intervales
<i>Drymophila rubricollis</i>	S.Orgaos	Itatiaia	Intervales
<i>Drymophila squamata</i>	Una	Sooretama	Intervales
<i>Drymophila ferruginea</i>	Ubatuba	Itatiaia	Intervales
<i>Drymophila malura</i>	Bocaina	Intervales	Paraná

1: collected by M. Bornschein and B. Reinert

Katy Trail Meetings

March 31, the MO Dept. of Natural Resources will hold a meeting to discuss plans for the Katy Trail at Francis Howell High School, 7-9 PM. Other meetings will be held in 5 other cities in late March and early April. For more information, call: 1-800-334-6946 ~



DEADLINE: APRIL 10

Submissions—handwritten, typed, IBM or Mac to: Anne McCormack, 587 Andrews, St. Louis MO 63122 ~

Sigma Xi Seminars

Wed. evenings, 7:30-9 PM, at the Living World, on the north side of the zoo. All events are free. For more info, call 768-5466 or 533-8083.

March 25, River Engineering ~

Need directions?

Arboretum, Gray Summit

- Take 44 west to Gray Summit (100) exit, left over highway, right onto service road and immediately left into Arboretum.
- Meet at Brushy Creek trail head.

Busch Wildlife Area

- Take 40 west toward St. Charles Co., left on 94, right on D, follow signs
- Hampton Lake—usual meeting spot—is the first beyond headquarters

Forest Park, Kennedy Forest

- Highway 40 to Hampton north, follow signs to St. Louis Zoo's Living World. Kennedy Forest is about 1/4 mi. West.

Tower Grove Park

- Take 44 to Kingshighway south, east (left) on Magnolia, 1st right into park.
- In park, 1st right (west), past tennis courts & stable to 1st picnic area on right (Gus Foyt Site).

Counting Crows Continued

were seen together on surveys done in both February and June, so the species may breed in the park. Five species (8%) were only seen during the cold months (Black Duck, Red-tailed Hawk, Ring-billed Gull, White-throated Sparrow, Dark-eyed Junco). Another 20 species (31%) were summer visitors, many of which breed in the park. The remaining 16 species (25%) were migrants seen only in the spring and fall. The most commonly encountered species was the well-named Common Crow, which was seen or heard at 85% of the points (Table 1). The next most commonly found species were European Starling (76%), Mallard (59%), and Blue Jay (53%). The most numerous species was Canada Goose, perhaps because geese are big and hard to miss. The Dec. survey yielded 880 geese.

We found five species of herons during the summer months, including Yellow-crowned Night-Heron in July. Other unexpected summer birds were a Yellow-billed Cuckoo in late June and a Pied-billed Grebe (same bird?) that was on Jefferson Lake on several surveys between late April and mid-November. Herons and grebes both might become more numerous with the improvements in habitat.

Our surveys convinced me of one thing that I had suspected for a while: Forest Park is the best place in St. Louis to see Wood Ducks. Each survey from February through October yielded between 9 and 33 adults, as well as many young during the summer. A few Wood Ducks can usually be found every winter if the water is open.

This type of survey does not provide a complete list of the birds that use the water system. However, the surveys were done in such a way that in 5, 10, or 20 years from now someone can repeat the same process to see what changes have occurred. Anyone wanting a complete report of the biological surveys can contact Dave Tylka or me. ~

Table 1. Summary of survey results.

	number of				number of		
	birds (1)	surveys (2)	points (3)		birds (1)	surveys (2)	points (3)
Pied-billed Grebe	7	6	7	American Crow	381	15	127
Great Blue Heron	3	2	2	Carolina Chickadee	19	10	15
Great Egret	14	7	11	Tufted Titmouse	15	9	14
Little Blue Heron	1	1	1	Carolina Wren	6	5	6
Green Heron	32	7	20	House Wren	3	3	3
Bl.-crowned Night-Heron	19	5	8	American Robin	139	14	66
Y.-crowned Night-Heron	2	1	2	Gray Catbird	5	4	4
Canada Goose	3011	14	56	Northern Mockingbird	3	2	2
Wood Duck	263	13	47	Cedar Waxwing	25	1	1
American Black Duck	2	1	1	European Starling	873	15	114
Mallard	1025	15	88	Yellow-throated Vireo	1	1	1
Hooded Merganser	4	2	2	Warbling Vireo	17	7	16
Sharp-shinned Hawk	1	1	1	Red-eyed Vireo	1	1	1
Red-tailed Hawk	5	3	4	Golden-winged Warbler	1	1	1
American Coot	1	1	1	Tennessee Warbler	4	1	3
Killdeer	16	8	13	Nashville Warbler	1	1	1
Ring-billed Gull	12	1	1	Magnolia Warbler	1	1	1
Rock Dove	200	12	33	Yellow-rumped Warbler	3	1	3
Mourning Dove	86	14	41	Black-and-white Warbler	1	1	1
Yellow-billed Cuckoo	1	1	1	Common Yellowthroat	1	1	1
Chimney Swift	204	8	40	Northern Cardinal	35	13	27
Belted Kingfisher	11	9	9	Chipping Sparrow	1	1	1
Red-headed Woodpecker	11	5	10	Song Sparrow	5	4	5
Red-bellied Woodpecker	10	7	10	White-throated Sparrow	1	1	1
Downy Woodpecker	14	10	12	Dark-eyed Junco	5	2	2
Northern Flicker	24	10	23	Red-winged Blackbird	181	11	55
Great Crested Flycatcher	3	2	3	Common Grackle	221	12	59
Eastern Kingbird	14	5	9	Brown-headed Cowbird	1	1	1
Purple Martin	3	2	2	Baltimore Oriole	3	2	3
N. Rough-winged Swallow	9	2	2	House Finch	7	4	4
Barn Swallow	113	7	27	American Goldfinch	12	6	7
Blue Jay	178	15	80	House Sparrow	58	9	21

Column: (1) Total number of birds observed on all surveys; (2) number of surveys on which the species was observed (total: 15); (3) number of survey points at which the species was observed (total: 150).

1997-8 WGNSS Board

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Webster Groves Nature Study Society



Meetings

Wednesday, April 1:

7:00-8:30 PM Board meeting, Kirkwood Public Library. All members welcome.

Friday, April 10:

8:00 at St. Louis Co. Library HQ; Tom Liefeld of MO Dept. of Cons., will give a presentation on the Columbia Bottoms, a new wildlife area. Open forum with our speaker and Mike Arduser.

Botany

Beginners are welcome. Bring lunch, drink, insect repellent & weather gear.

Thursdays in March and April:

Field trips usually meet at 9:30 AM; trip is normally 3-5 hr. plus travel time. Led by Fr. James Sullivan. Call Catherine Filla, 481-5298, after 5 PM Wed. for location.

Entomology

Sunday, March 22:

7:00-9 PM Bring favorite books about insects to show, sell or trade. Meeting at the home of George Diehl, 1005 South 18th Street, St. Louis 63104; 843-5874.

Sunday, May 24:

7-9:00 PM at Magner's, 516 Bacon Ave., Webster Groves, 961-4588. Jane Walker will present "Beginning Dragonflies."

Deadline

Deadline for submissions to May "Nature Notes Events" is April 10.

Join WGNSS

Send \$15 yearly dues to Randy Korotey, 800 Oakbrook Ln., St. Louis MO 63132.

Birding

Open to all. For more information, call David Becher 576-1146. Bring lunch.

Thursdays in March and April:

8:30 AM meet at West County shopping center, south lower lot behind Penney's, lamp post #1.

Saturdays March 21, 28, April 4:

8:00 AM West County. Destination: Where the Birds Are! Bring lunch.

Saturday, March 28:

8:00 AM Riverlands. Meet at Teal Pond parking lot. Call Paul Bauer 314-921-3972 for further information.

Saturday, April 11:

8:00 AM Busch Wildlife Area. Meet at Hampton Lake. Bring lunch.

Saturday, April 18:

7:30 AM Tower Grove Park. Meet at first picnic area west of the stables.

Saturday, April 18:

6:30 PM Busch Conservation Area. Special woodcock/owl prowl conducted by Jim Malone. Bring flashlight, boots, and dress for weather.

Sunday, April 19:

4:00 PM Get-together at the Flier's, 18 Algonquin Woods in Glendale, off Berry Rd., south of Manchester. Bring a snack or hors d'oeuvres. Bring binoculars. Call Vicki Flier: 968-9166

Saturday, April 25:

7:30 AM Birding at Arboretum, Gray Summit. Entrance fee \$3. Day spent walking. Meet at entrance to Brush Creek Trail. Bring a lunch to carry.

Saturday, May 2:

















8:00 AM WGNSS/Aud. at Arboretum.

Saturday, May 9 Big Day!

April 1998

Webster Groves Nature Study Society

Sun Mon Tue Wed Thu Fri Sat


			1 7:00 PM board meet Kirkwood Library 	2 bird West Co 8:30 botany 9am 	3	4 bird West Co 8:00 
5 Daylight Savings Time 	6	7	8	9 bird West Co 8:30 botany 9am 	10 8:00 PM gen meet- Library HQ Nature N deadline 	11 bird Busch 8:00 Passover 
12 Easter 	13	14	15	16 bird West Co 8:30 botany 9am 	17	18 bird Tower Grove 7:30am woodcock/owl Busch 6:30pm 
19 bird group meet Flier's 4pm 	20 Nature N mailing 10am 	21	22 Earth Day 	23 bird West Co 8:30 botany 9am 	24	25 bird Arboretum 7:30 
26	27	28	29	30 bird West Co 8:30 botany 9am 		

March 1998

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

May 1998

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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

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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.

established in 1920