

The

BLUEBIRD



THE AUDUBON SOCIETY OF MISSOURI

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Spring and Summer 1965



The Audubon Society of Missouri

Founded 1904

It is the purpose of the Audubon Society of Missouri to further conservation education in all its aspects with particular emphasis on wildlife. This purpose will be implemented by assisting in securing legislative controls, when necessary, the establishment of refuges and in the promotion of habitat improvement. The Audubon Society of Missouri is dedicated to the proposition that only through education can a total conservation consciousness be insured and will constantly try to further this education at all levels.

MEMBERSHIP

Membership in the Audubon Society is open to all.

Application should be made to the Treasurer.

Dues—\$2.00 per year.

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An Open Letter From the President to Members And Friends of The Audubon Society of Missouri

Dear members and friends:

Last fall at our annual state meeting, Don Christisen of the Missouri Conservation Commission spoke to us about the ecology of the native prairie and the prairie chicken. You will recall that he expressed concern about the ever dwindling acreage of prairie and our loss of prairie chicken habitat. As recently as 1942 there were 2,500 square miles of prairie chicken range in the state. The area has shrunk to less than 900 square miles; along with this deterioration of range, a corresponding decline from 15,000 to 7,000 birds has occurred. In the days of early settlement, the prairie chicken population was likely near 175,000.

So there is danger that this bird may become extirpated. It has disappeared from most of northern Missouri. Since permanent grass is essential to prairie chicken habitat and native prairie constitutes the bulk of this type of grass, the need is evident. Steps must be taken to insure the preservation of as much native prairie in Missouri as possible.

In cooperation with the Missouri Conservation Commission, I wish to inform you of the opportunity to join in organizing support for the preservation of native prairies in Missouri. Such a program and organization would be in the best interest of the objectives of our own Audubon Society.

If you would like to participate in the organization of such a program, please write to Don Christisen at the Jefferson City office of the Conservation Commission.

Lisle Jeffrey, President The Audubon Society of Missouri

Notice to All Members Regarding The 1965 Annual Meeting

- (1) The 1965 Annual Meeting will take place at Camp Sunrise, Lake of the Ozarks State Park, October 9 and 10. It is the only suitable weekend available and, unfortunately, we will miss those members who are to attend the National Audubon Society meeting to be held at the same time, in Boston, Massachusetts.
- (2) To provide funds for publishing *The Bluebird* on time, and to keep up the funds for projects already traditional with The Audubon Society of Missouri, dues must be increased. Costs of paper, printing, postage and bare essentials for operation of the Society make this mandatory. This is official notice that the question of dues will be discussed and voted upon at the Annual Meeting.
- (3) A constitutional change will be presented at the Annual Meeting. It will deal with the wording of by-laws relating to property of the Society and gifts to the Society. The present wording makes it questionable in interpretations by the Internal Revenue Code.

Lisle Jeffrey, President The Audubon Society of Missouri

THE BLUEBIRD

Volume 32

Nos. 1 and 2

PAST ISSUES

Is *THE BLUEBIRD* quite late in arriving at your house? Did you miss an issue somewhere along the way? Yes, you are correct on both counts but will also note that this issue serves double duty. We have combined Spring and Summer issues. All this confusion results from problems in the printing and from a change in editorship.

We will not spell out the problems of printing here except to remind members that it is expensive to print any publication which has such a limited circulation as ours. A major cost of printing necessarily involves typesetting and preparation of the press; thus the fewer copies are printed, the higher is the unit cost. As far as this problem is concerned, we offer two possible solutions. One is to gain more members and thus increase our circulation; the other is to substantially increase our dues. Membership in our society could easily be twice as large as at present. Meanwhile, before we can double our numbers, we will surely have to make some upward adjustment in the dues. In other words, to solve our past financial problems, to continue furnishing members with a good-quality printed publication, we may have to work on both possible solutions.

With regard to the change in editorship, I accept the job with some trepidation. James F. Comfort has been an able and conscientious editor for over ten years but has resigned for a number of personal reasons. Members should recall that *THE BLUEBIRD* would not now be printed had it not been for Jim's efforts to "promote" it from earlier mimeographed form when he became editor. We owe you a big debt of gratitude, Jim, but will not let you go scott free. You will surely be called upon in an advisory capacity.

THE PRESENT ISSUE

This issue brings us up to date on statewide trends in bird life as ably reported by Richard A. Anderson. This is a valuable, regular feature of *THE BLUEBIRD* and Dick needs all the help he can muster in compiling reports from all corners of Missouri. Members can help by sending him their reports as early as possible in the months of March, June, September and December, respectively.

Our lead article, reprinted from the *WEBSTER GROVES NATURE NOTES*, is by a young man who recently graduated from Washington, Missouri, High School and is to enter Missouri University in the fall. His report was prepared without any help whatsoever from his advisor. It is a commendable job. It represents a type of reporting which we would like to see more often in *THE BLUEBIRD*.

Also in this issue is an article by John L. Hamilton, an active and enthusiastic member from St. Joseph. John and his wife, Julie, took a birding vacation in the spring of 1964. The highlight of their adventure was identification of a species never before recorded in the United States. They learned that in Texas, as we've always heard, things truly are big — even

their state bird list. Furthermore, John reminds us that Texas even boasts its own high-quality, illustrated bird identification guide, by Peterson, no less.

On more item of note: the line illustrations of shore birds which accompany Dick Anderson's report were done by the same Don Hayes who wrote the lead article. We'll be looking for more of your work, Don.

AND FUTURE ISSUES

If our organization is to grow and our publication to continue, we must give special encouragement to young people — particularly those with biological interests. We all know that both on high school and college levels, there are high-caliber students who conduct limited, individual studies in natural history. It matters not whether such studies are for academic credit, nor the age and academic levels of participants — they demand encouragement. Your editor feels that with the help of members we can provide these young people with a measure of encouragement. With adequate publicity we can let them know that here, in *THE BLUEBIRD*, they can have results of their studies published. As an added incentive, each student who has a report worthy of publication can be awarded a year's free or "honorary" membership in The Audubon Society of Missouri. The intention would of course not be to fill our pages with trivial or badly-written compositions. Our hope would be to get enough response to publish one high-quality report per issue, four per year.

Can this be done successfully and to the satisfaction of readers of *THE BLUEBIRD*? Your editor plans to write to key persons in Missouri colleges biology departments on this plan. In the meantime opinions and suggestions of members on this matter will be greatly appreciated.

ATTEND THE ANNUAL MEETING LAKE OF THE OZARKS STATE PARK OCTOBER 9 AND 10, 1965

THE BLUEBIRD is the official quarterly publication of the Audubon Society of Missouri. Articles, essays and reports on all phases of natural history and conservation are welcomed and will be printed within limits of space available. Manuscripts should be typed, double-space, on one side of 8½x11 paper. Illustrations should be in the form of glossy prints, 5x7 or larger, or as original drawings. Send articles and other correspondence to the editor: James P. Jackson, 105 Terry Lane, Washington, Mo. 63090.

A STUDY OF THE WINTER FOOD PREFERENCES OF THE ROBIN

By Donald R. Hays

What does a robin eat in the winter? Many an amateur ornithologist has asked this question and was given an answer to the effect of, "Oh, berries or sumpthin', I guess." I, too, have asked this question and upon finding no positive answer available, set out to answer it myself.

When the "robin roost" in the Potosi, Missouri, area was discovered, I took full advantage of the opportunity to determine just what a robin's food preferences are.

A study of this type was feasible only because of the large concentration of robins in such a small area. Because of this fact, the large number of birds would ward off any would-be intruders of the area. Therefore, the droppings found in the area would be of a true robin nature. Anyone who visited the roost area probably noticed the blackbirds in the area, too. The droppings of a blackbird cannot be confused with those of a robin because of the fact that blackbirds are grain-eaters and consumers of various other types of wholly digestible materials. The robin, however, eats fruits of the type which have a non-digestible seed and have food habits which can be determined by simply identifying the type of fruit consumed by examining the seed.

The first and most unscientific step of this experiment was the collection of droppings from various parts of the roost area. In this part of the experiment I was ably assisted by my brother Bill and Mr. Jim Jackson, who, incidentally, was my constant critic and advisor without whose advice I could not have completed this study.

After a considerable sample of droppings, representing the entire roost area, had been collected (about one pound), I proceeded to dry out and crush the droppings in such a manner that the seeds contained therein would not be damaged, and in a way that the seeds would become unattached from the bulk of the droppings.

Next came the tedious task of separating the various types of seeds from the crushed droppings. As the seeds were separated from the droppings, they were also sorted as to structure, color, size, and texture. I did not, because of the lack of comprehensive material concerning the identification of flora by their seeds structure, try to identify the seeds myself. Instead I sent a sample of each type separated to Mr. Leroy J. Korschgen, a research biologist specializing in the diets of animals. When Mr. Korschgen identified and returned the seeds to me, I was ready for the last step in my study of the winter food preferences of robins.

This step was the calculation of the percentages of each type of food consumed by the robins. This was accomplished by the use of these formulae:

x—average no. of seeds per fruit of one species
y—total of all R's

FORMULA No. 1

$$\frac{t}{x} = R$$

R—average no. of fruits of one species consumed
Q—per cent of one species as compared with the total no. of fruits consumed

FORMULA No. 2

$$\frac{R}{y} = Q$$

$$y = 1550.6$$

$$\text{Total no. of seeds found} = 2318$$

DATA FOR FOOD PREFERENCES

Species and Scientific Name	Total Seeds	Av. per Fruit	Per Cent
Eastern Redcedar— <i>Juniperus virginiana</i>	983	2.5	20.7%
Dwarf Sumac— <i>Rhus copallina</i> ***	} 1118	1	70.7%
Smooth Sumac— <i>Rhus glabra</i> ***			
Wild Grape— <i>Vitis</i> (sp.)*	55	2.5	2.4%
Black Haw— <i>Viburnum rufidulum</i>	7	1	.5%
Possumhaw— <i>Ilex decidua</i>	13	1	.1% or less
Pokeweed— <i>Phytolacca americana</i>	2	5	.1% or less
Flowering Dogwood— <i>Cornus florida</i>	41	2.5	2.7%
Hackberry— <i>Celtis</i> (sp.)	46	1	2.9%
Buckthorn— <i>Rhamus caroliniana</i>	4	2.5	.1% or less
Persimmon— <i>Diosypros virginiana</i>	7	4.5	.1% or less
Sassafras— <i>Sassafras albidum</i>	2	1	.1% or less
Bristly Greenbriar— <i>Smilax tamnoides</i>	3	1.5	.1% or less
Spice Bush— <i>Lindera Benzoin</i>	2	1	.1% or less
Poison Ivy— <i>Rhus radicans</i>	6	1	.1% or less
Common Ragweed— <i>Ambrosia artemisiifolia</i>	1	1	.1% or less
Wild Rose— <i>Rosa</i> (sp.)**	6	2.5	.1% or less
Horsenettle— <i>Solanum carolinense</i>	22	32.5	.1% or less
	2318	1550.6	100.7%

* The seeds of four species of wild Missouri grapes are indistinguishable.

** The wild rose in Missouri is of many species.

*** The seeds of the dwarf and smooth sumacs are indistinguishable.

I conclude that:

1. Obviously robins prefer sumacs and cedar berries over the others.
2. That in general they prefer the fruits that are of a tree grown nature, that is they do not in winter usually forage about on the ground.
3. That my experiment had produced some concrete answers to the question "What are the winter food preferences of robins?"

(Reprinted from *Webster Groves Nature Notes*)

Recently your editor and his family took a train ride to Jefferson City in order to visit the Missouri State Capitol. We enjoyed wandering its halls and examining exhibits of the Capitol museum. But, oh, those bird exhibits! It's not that they were terribly old or falling apart but, alas, a good many of them were wrongly identified on the labels. This shouldn't happen to our native Missouri birds. Would some member in the Jefferson City area make note of this, contact the museum curator, and kindly offer some technical assistance?

Winter Survey — December 1 to March 1

Compiled by Richard Anderson

1147 Grenshaw Dr., St. Louis 37, Mo.

Winter in Missouri was on the whole tolerable. Cold spells were felt in early December, mid-January, late January, early February and again late February, but in between were mild periods with temperatures sometimes in the 60's and 70's. This fluctuation had its greatest effect on waterfowl which showed much back and forth movement. In contrast to last year there was little actual migration until the first of March. The hardest freeze-ups on the rivers did not occur until late January. The effect there was a rather late season for eagles and gulls. Precipitation during this period was generally a little below normal, although northern Missouri received much more snow than southern Missouri.

The most popular comment was that birding was "poor" or "not very good." Translated, this means there were few rare birds compared with last year's northern invasion. There were no crossbills, grosbeaks, snowy owls, Bohemian waxwings, redpolls or snow buntings, but there was no shortage of birds. Many species were up from last year or much above normal. Very rare is the opportunity that we may mention "millions" of birds in one place in Missouri. A robin roost and a blackbird roost both numbering in the millions are worth special notation in the year's winter survey.

* * * * *

Loons through Herons—There were no reports of wintering loons. The open waters of Lake of the Ozarks attracted 17 horned grebes on Dec. 28 (D.E.). Two eared grebes on Fellows Lake in late February were probably early migrants (I.F.). The only pied-billed grebes were one at St. Louis Dec. 7 and two at Duck Creek Dec. 30 (S.H.) and on the Kansas City census Jan. 3 (D.E.).

Waterfowl—In contrast to last winter the hardest freeze-up did not occur until late January. Also there was no gradual influx of waterfowl in late January and all of February as last year. It was more of a case of up and down as cold fronts drove back the birds that had wandered north with the mild weather. It was not until early March before a true spring movement was under way.

In the Springfield area Irvin Fay reports all ducks in normal numbers except mallards, which were down 75%. Present at Fellows Lake throughout the winter were mallards, gadwall, widgeons, pintails, green-winged teal, 12 redheads, ring-necks, canvas-backs, lesser scaup, goldeneyes, buffleheads, hooded and common mergansers. A high count of 29 hooded mergansers in late February notes a spring influx.

From the Kansas City area an immature whistling swan has been wintering at Schell-Osage since Dec. 8. It was seen there Feb. 22 by Kelly and Cozette. Of special interest on the Kansas City count Jan. 3 was an adult male oldsquaw at Wyandotte Lake. Also noted were goldeneyes, buffleheads and shovellers. Wintering geese, as reported by Refuge Manager Burgess, were close to last year's numbers. Six thousand large and 70 small Canada geese were noted. Twenty-five white-fronted geese lingered until Jan. 21 and 28 were again noted Feb. 6. Fifty-thousand blue-snow geese were noted in early December, but had dropped to 10,000 in January. There was an influx by Feb. 18 but "winter weather soon chased them south again." Wintering ducks included 100,000 mallards, 400 blacks, 1200 widgeons, 70 pintails,

50 green-winged teals and 100 common mergansers. On Feb. 18, 1,000 pintails returned along with 17 wood ducks (H.B.).

The Mingo count on Dec. 30 included 8,500 mallards, 20 blacks, 68 gadwalls, 150 widgeons, 2,000 pintails, 3 green-winged teals, 15 shovellers, 8 wood ducks and 3 common mergansers (S.H.). Jim Haw reports an almost complete absence of waterfowl in Mississippi County. At St. Louis Canada geese numbered 1,300 at the Busch Wildlife area (above normal) and 1,000 at Gilbert Lake (S.V.). The snow-blue goose population on the Swan Lake, Illinois, Refuge ranged from 5,000 to 8,000 during the winter. Mallards were down on all three St. Louis Christmas counts, which was probably due to the lack of freeze-ups. Although canvas-backs were legally hunted last fall, a count of 987 on the Mississippi River Dec. 26 was the highest in many years (E.C.). Numbers of wintering canvas-backs, common mergansers, goldeneyes, and mallards on the Mississippi River fluctuated greatly with the weather changes. Our only report from Swan Lake, Missouri, was a winter population of 10,000 Canada geese (J.R.).

Vultures and Hawks—Dan Hatch found turkey vultures at Columbia on Jan. 1, Feb. 18, 26 and 28. His opinion was that they were not actually wintering, but were taking advantage of warm southerly winds to sortie into the area (J.R.). However, vultures did winter in southeast Missouri as the Mingo-Duck Creek census will testify. On the Dec. 30 count the total of 106 turkey vultures was most surprising. However, a total of 23 black vultures was more surprising. This is the first winter record for the black vulture in Missouri that we are aware of.

The only goshawk reported was one on Jan. 3 at Shawnee-Mission Park (Isenberger fide D.E.). Harlan's hawks were common at St. Joseph this winter with as many as four at one time at Squaw Creek Feb. 21 (F.L.). One was reported at Kansas City Jan. 3 (D.E.), one at St. Charles County Feb. 6 (S.H.) and one at Swan Lake, Illinois, Feb. 13 (S.V.). Over 50% of the rough-legged hawks at St. Joseph were of the dark phase (F.L.). Bald eagle counts included 8 at Mingo Dec. 30 (S.H.), 10 at Swan Lake, Missouri, Dec. 13 (J.R.) and 18 at Gravois Mills Dec. 28 (D.E.). Counts at Squaw Creek show 40 on Jan. 1 (H.B.) and 42 (18 adults) on Jan. 10 (F.L.). The high for Swan Lake, Illinois, was 66 on Dec. 27 (S.V.). This is only half the numbers of last year, but is actually more near normal. This decrease is probably due to the lack of a concentration of ducks as last winter. With a more open winter eagles were probably more scattered up the river. A count here on Feb. 13 showed 45 eagles of which 22 were adults. Mrs. Henry writes of a reduction of winter eagles at Clarksville, but puts the blame on the construction of a cement plant which took a large portion of a refuge. The refuge is managed by the Missouri Conservation Commission, but the land was leased by the Corps of Engineers. The deal with the cement company was by the Corps of Engineers before the Missouri Conservation Commission or Fish and Wildlife people could protest. The only duck hawk was one at Shawnee on Dec. 15 (M.L.M.).

Turkeys through Owls—Wild turkeys with help from the Conservation Commission are still on the increase. As high as 34 birds were noted at Mingo in late December. A citizen of St. Francois County was fined \$500 plus costs for an illegally shot turkey in December. About 200 coots wintered at Fellows Lake (I.F.). One or two killdeer were noted at Hannibal Dec. 22 (J.R.) and at St. Louis until Jan. 7 (S.H.). They were driven south by mid-January, but had returned to St. Louis and Columbia by mid-February.

A common snipe was noted at Squaw Creek Jan. 1 (H.B.) and another near St. Joseph on Feb. 3 (F.L.).

Gulls were near normal except for the timing. In St. Louis herring gulls usually outnumbered ring-bills during January, but this year it was almost mid-February before they took over. Only one glaucous gull made it to St. Louis and then not until Jan. 23. It was last seen Feb. 13. Mourning doves were more common over most of the state, even at St. Joseph where Lawhon counted 85 doves in a few miles of Missouri River bottoms. The snowy owl invasion this year failed to reach Missouri. Short-eared owls were almost non-existent compared to last winter. Only one was noted at St. Joseph Dec. 27, two at St. Louis December and January (S.H.) and two at Columbia Jan. 3-9 (J.R.). Two long-eared owls were found on the Missouri River bottom at Columbia (J.R.).

Woodpeckers through Wrens—A red-shafted flicker was noted on the Gray Summit census Dec. 24 (S.H.). This was to be a good year in the red-headed woodpecker cycle and sure enough all reporters, including Lawhon, reported goodly numbers all winter. A count of 350 red-heads at Mingo apparently was the high count. Yellow-bellied sapsuckers were likewise above normal from all stations. Horned larks were down at St. Joseph (F.L.), but were near normal elsewhere. Although an off-year in the red-breasted nuthatch cycle, two showed up at Pere Marquette Park Dec. 27 (S.V.) and Gray Summit Dec. 24 (D.H.). Brown creepers were reported common by all observers. Carolina wrens have apparently survived the winter nicely. Winter wrens were more common to most observers.

Thrushes through Waxwings—The wintering robin picture was anything but uniform. Robins were down at St. Joseph (F.L.). They were reported in various sized flocks as far north as the Missouri River, but not any further. The exception to this was along the Mississippi River valley where they were numerous at least as far as Bowling Green (Mrs. Henry). They were present in many suburban yards of St. Louis all winter. A robin roost was reported on the property of Mr. Edward Todd just off Highway 21 near Washington State Park. The roost was viewed on Jan. 3 by a dozen Webster Groves Nature Study Society birders and a study was made in subsequent visits by Dick Anderson. A conservative estimate of 3,500,000 robins used the roost from late December until Jan. 16. These numbers slacked off greatly during late January and was used very little by mid-February. Dave Plank and others report an influx during February to indicate a major movement at that time.

Bluebirds were reported up by most reporters. Hermit thrush reports were non-existent. As usual, golden-crowned kinglets were reported, but the observance of ruby-crowned kinglets, which are rare in winter, was unusual. Ruby-crowned kinglets were at Kansas City Jan. 3 (D.E.), four at Mingo Dec. 30, and one at Washington, Missouri, Dec. 31 (S.H.). Good sized cedar waxwing flocks were common throughout Missouri all winter. There were no Bohemian waxwing reports.

Warblers through blackbirds—Wintering myrtle warblers numbered as high as 65 at Gray Summit Dec. 24, and 11 were found on the Washington, Missouri, count Dec. 31 (S.H.). A myrtle near Salem, Missouri, on Feb. 20 (D.P.) was probably an early migrant. A most unusual record was the wintering pine warbler in the Kansas City area. The bird was observed by all active Kansas City birders at the Biewener's residence in Merriam, Kansas, from Nov. 28 to Mar. 2. Meadowlarks wintered in goodly numbers. Lawhon re-

ports both eastern and western more common with 132 counted near Trimble Wildlife Refuge on Jan. 24. A high count of 420 easterns was made at Mingo Dec. 30 (S.H.). Blackbirds wintered in normal numbers. Cowbirds were above normal in some areas in eastern Missouri. Big news in southeast Missouri, was the blackbird roost at Dexter. The roost was called a starling roost by local people, although it is now estimated that no more than 2% of the seven million birds are starling. Red-wings, grackles and some cowbirds make up almost all numbers. The local people have asked that the birds be destroyed and the Missouri Conservation Commission has countered by suggesting they destroy the roost area with bulldozers. At this writing no action has been taken. Residents were concerned with a supposed threat of histoplasmosis, although local physicians have reported no cases in the area. This same roost numbered some 15,000,000 blackbirds two years ago.

Finches—There were no reports of northern erratic finches. Purple finches were reported common from most all reporters. A high count of 108 rufous-sided towhees at Mingo on Dec. 30 seems worth mentioning (S.H.). Sparrows, including Harris, were plentiful near Salem with tree sparrows most numerous (D.P.). Most finches were present at Columbia all winter, but not in large numbers (J.R.). Sally Vasse reports 15 to 20 field sparrows Jan. 1, which is unusually high. Irving Fay reports Lincoln's sparrows down at Springfield, but maybe because they were reported in Kansas City (D.E.) and even St. Joseph (F.L.). High sparrow counts at Mingo included 101 white-crowned, 897 white-throated, 347 swamp and 342 song. Lapland longspurs were rare or missing throughout most of the state. Only Easterla reports between 1,500 and 3,000 during February at the Fairfax Bridge area.

E. C. — Earl Comfort
 D. E. — David Easterla
 I. F. — Irving Fay
 S. H. — Steve Hanselmann
 F. L. — Floyd Lawhon

M. L. M. — Mary L. Myers
 D. P. — David Plank
 J. R. — Joe Roller
 S. V. — Sally Vasse

Spring Survey — March 1 to June 1

Compiled by Richard Anderson

1147 Grenshaw Dr., St. Louis 37, Mo.

March in Missouri was cold with a large majority of days much below normal in temperature. Precipitation varied from above normal in northern Missouri to below normal in most of southern Missouri. April was the reverse with about half of the days above normal, but many of these were 80's and 90's. May was more like summer with all but four days warmer than usual. Precipitation varied considerably with the heavy thunderstorm systems. St. Louis was three inches below normal, but 20 miles away it was over normal. Since March was cold and changeable, the only big buildups or noticeable movements concerned waterfowl, early shorebirds, etc. April and May brought a more gradual movement. For instance, eared grebes near Kansas City were present for almost a solid month.

The flood, which caused much damage in our northern neighbor's state, was devastating as far south as the Missouri River. Since the Missouri was very low, there was little flooding past this point. To see the damage to the Mark Twain National Wildlife Refuge along the Mississippi River and to the Calhoun County unit along the Illinois River would have been a most depressing sight.

Last spring we had somewhat of an eastern flavor to migration, as an example, the unusual numbers of Cape May warblers. This year there was a definite western flavor. Eared grebes invaded western Missouri with one at St. Louis. White-fronted geese were above normal at Swan Lake, Illinois. Hudsonian godwits (a total of 11) came as far east as the St. Louis area. There were two cinnamon teals and a burrowing owl at Kansas City. Our only northern finch was an evening grosbeak. Other rarities of this report include a flamingo, surf scoter and snowy plover.

Loons through Cormorants—Common loons were generally scarce this spring. This makes us wonder if the thousands of loons found dead on northern lakes the last two falls are showing its effects in our area. Only one adult was recorded for the state and this was at Creve Coeur Lake on April 26 (S.J.H., J.W.). Unusual, however, were several late loons still in winter plumage. These are assumed to be first year birds. One was near Squaw Creek May 16 (F.L.), one caught in a fisherman's net at Swan Lake, Illinois, on May 27 (S.V.) and two more at St. Louis the end of May (D.A., K.A.).

Horned grebes were commonly reported from all over the state. A few in early March were in winter plumage, but the majority were lingering birds during April in full breeding plumage. Eared grebes were much above normal. One was at Grand Marais State Park, East St. Louis, Illinois, on April 13 (D.A., K.A.), and at Springfield on April 5 (F.S.). Six stayed at Lake Jacomo in late April (D.E.). As many as ten visited Squaw Creek in mid-April with two staying until May 13 (H.B.). Pied-billed grebes were reported scarce or below normal by all reporters. White pelicans peaked at 5,000 birds at Squaw Creek April 9-15 (H.B.). This is considerably higher than last spring's flight. Cormorants remain very low with most observers reporting less than six birds for the spring. The only exception was Squaw Creek with 140 April 6-15 (H.B.).

Hérons—The spring heron flight was very similar to last year in dates and numbers. The Bertrand heronry in southeast Missouri was in full operation by April 20 with four species present. Cattle egrets arrived in early May and this is still the only known nesting area in Missouri. An early green heron was noted in St. Louis on April 11 (D.A.). Green herons were normal except at St. Joseph where they were scarce (F.L.). Little blues were as last year, with an early bird at Lake Contrary on April 3. As many as four cattle egrets were seen in the levee area south of St. Louis on May 21 (E.C.), but there were no signs of nesting. In the past, spring snowy egrets were never expected. Now, of course, they are known to nest at the Bertrand heronry and are regular at St. Louis. The first St. Louis snowy egret was on May 11 (S.J.H.). Black-crowned night herons were late and scarce. They were down noticeably in the St. Louis area where yellow-crowned herons outnumbered them. This was especially true at Swan Lake, Illinois, where no black-crowns were noted. They were near normal at Kansas City and Squaw Creek, but still down. As last spring, least bitterns were scarce or missing throughout the state. In contrast, American bitterns were commonly reported. They were unusually plentiful at St. Louis (E.C.), where one was found in the Forest Park woods on May 5 (S.J.H.).

Flamingo—A wild free-flying flamingo in normal plumage was first found by Harold Burgess at the Squaw Creek National Wildlife Refuge on the morning of May 13. The bird was still present on May 30. Don Reynolds of the St. Joseph Museum obtained photographs with a 400 power lens.

The bird was observed by birders from St. Joseph, Kansas City, Columbia and St. Louis.

Naturally, the first thought is that it is an escapee from a zoo and, of course, this may be the case. However, the bird was extremely wary and would fly when approached within 400 yards. The bird was also observed bugling in flight. Another theory suggested is that it may be one of the many Florida escapees gone wild.

Waterfowl—The cold, changeable March weather resulted in more concentration in waterfowl than last year. The peak of ducks and geese at Squaw Creek was March 19 to 25 when over one-half million birds were using the refuge (H.B.). In the way of rarities a surf scoter near Kansas City is the only standout.

Swans, as usual, were rare with the exception of Jack Van Benthuisen's sighting of six whistlers flying over St. Louis County in late April. A late flock of Canada geese were noted flying over Columbia on May 1 (J.R.). White-fronted geese were above normal in eastern Missouri. Sixteen were found near Washington, Missouri, on March 13 and 24 (D.H.). Seven were first noted at Swan Lake, Illinois, on March 21 (S.V.), but increased to 132 on March 29 (S.J.H.). Two hundred were at Beverly Lake on March 28 (D.E.) and peaked at Squaw Creek by March 25 at 2,010 (H.B.). Flocks of snow and blue geese were noted at Springfield March 12-16 (I.F.) and at Camp Towanyak March 12-15 (M.L.M.). Most ducks were normal. The most populous duck at Squaw Creek was pintails, which peaked at 145,000 on March 25 (H.B.). Two sightings of the rare cinnamon teal were made. The first was found on May 8 at Squaw Creek by John Hamilton and seen later by many. Dave Easterla found another adult male cinnamon teal at the Trimble Wildlife Area May 10-13. The nesting wood ducks were disturbed by the high water in the Mississippi River as far south as the Missouri River. Redheads and canvasbacks were in good numbers on the Mississippi River at St. Louis. Lesser scaup ducks peaked at the usual 30,000 to 50,000 at St. Louis. The only scoter at St. Louis was a white-winged on March 7 (D.A.). An adult male surf scoter was found at Lake Jacomo by Dave Easterla and his Missouri University (Kansas City branch) ornithology class. It was observed later by other Kansas City birders. Hooded mergansers were spotty, apparently passing through quickly. Twenty were seen on March 27 at St. Louis (D.A.), but few were seen after that date.

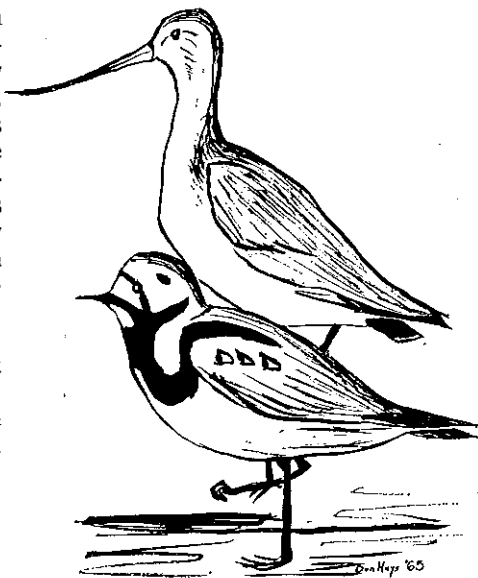
Of interest was the arrest of five southeast Missouri persons charged with the killing of 121 wild ducks. The sales at \$1.50 to \$2.00 per bird was disclosed following a two-year investigation by fish and wildlife agents.

Hawks—Turkey vultures returned as usual in early March. Mississippi kites had returned to the St. Louis levee area by mid-May. Accipiters were scarce, but buteos were plentiful in most areas. Broad-winged hawks first appeared at St. Joseph on April 10. They were commonly noted at St. Louis during the last week of April and the first week of May. Swainson's hawks were fairly common in western Missouri after April 11 (F.L., D.E.). One seen on June 4 at Appleton, Missouri, indicates a probable nester (D.E.). Both a bald and golden eagle stayed until March 30 at Squaw Creek. A female marsh hawk with eggs was found on Tucker Prairie during Joe Roller's study of the prairie. Another nesting marsh hawk was found at Taberville Prairie on June 4 (D.E.). One or two peregrine hawks were commonly seen at Squaw Creek during April and into mid-May. Several were noted at St. Louis during this period. Pigeon hawks were scarce with two reported at St. Louis.

Turkey through Rails—A wild turkey was reported near Salem, Missouri, on April 18 (D.E.). Steve Henselmann reports a rare sandhill crane from St. Charles County on March 30. Rails were normal at St. Louis, where there was suitable habitat. Virginia rails were numerous in late April at Kansas City (D.E.). Soras were very common, particularly at St. Louis where they were noted in unprecedented numbers. Gallinules were down on the levees at St. Louis due to the lack of habitat, but were noted at Stump Lake, Illinois (S.V.).

Shorebirds—As usual Squaw Creek took the honors for shorebirds. However, due to high water, St. Louis had its best spring shorebirding in many years. Fern Shumate reported a good list of shorebirds from Schell-Osage on May 2. A long piping plover appeared at Beverly Lake on May 5 (D.E.) and Squaw Creek May 2 and 5 (H.B., F.L., D.E.). Again a snowy plover was found at Squaw Creek. This, the fourth state record, was studied on May 2 by Lawhon, Rositzky and Brown. Golden plovers were not seen in large numbers, but their migration extended for two months from mid-March to mid-May. Black-bellied plovers peaked at Squaw Creek May 14-20 at 60 (H.B.). Seventeen were seen at St. Louis on May 18 (S.J.H., J.W.). There was only one ruddy turnstone report from St. Louis and that was on May 27 in St. Charles County (J.W.). Turnstones were common at Trimble and Squaw Creek during May (up to eight individuals) (D.E., H.B., F.L.).

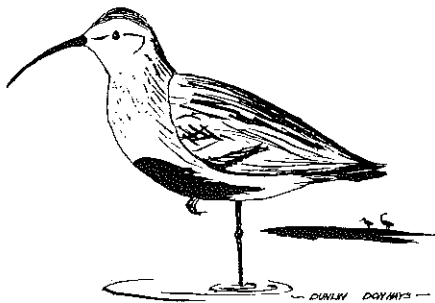
Our only whimbrel was one at Squaw Creek on May 26 (H.B.). Two willets were at Beverly Lake on April 25 (D.E.) and one at Mud Lake on April 25 (F.L.). Another willet was seen at Grand Marais State Park on May 2 by Paul Bauer and an injured willet at the same place on May 29-30 (E.C., K.A., D.A.). Five hundred white-rumped sandpipers peaked at Squaw Creek in early May and 30 birds were present at St. Louis until June (S.J.H.). Dunlins were down at Squaw Creek but were up to 150 in St. Charles County on May 27. Do-



Upper: *Hudsonian Godwit*
Lower: *Ruddy Turnstone*

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witchers were numerous in the state from late March through May. All of the early birds and most of the late birds were the long-billed species. However, some short-billed dowitchers were present in St. Charles County in May (S.J.H., K.A., D.A.) and Squaw Creek on May 15 (D.E., D.A.). Stilt sandpipers were very common. The only buff-breasted sandpipers were five at Squaw Creek on May 13 (F.L.). Single marbled godwits were reported at Mud Lake on May 25 and Lake Contrary on May 1. Two were at Squaw Creek on May 6. Hudsonian godwits peaked near 100 at Squaw Creek in early May. This species, rare at St. Louis, was found twice, three in St. Charles County on May 10 (K.A.) and eight on the levees on May 18 (S.J.H., J.W.). Sanderlings numbered eight to 20 in mid-May at Squaw Creek (H.B., F.L.). Up to three avocets visited Squaw Creek April 25 to May 20 (H.B., D.E., F.L.). Wilson's phalaropes peaked at 600 to 1,000 birds at Squaw Creek in early May. Five northern phalaropes were found at Squaw Creek on May 16 (F.L., D.E., D.A.).



Gulls and Terns—Cold weather in March held ring-billed gulls by the thousands at St. Louis. An adult glaucous gull was recorded on the Mississippi River above St. Louis on the late date of March 21 (D.A.). Franklin's gulls were very common at Squaw Creek in April and May with a peak of 2,000 in late April. Three were seen in St. Charles County on April 13 (S.J.H.). Bonaparte's gulls were seen in late April at St. Louis, Gravois Mills, Beverly Lake and Squaw Creek. Terns were normal with all five species seen on both sides of the state.

Cuckoos through Woodpeckers—Both cuckoos were late with few before mid-May. Black-billed cuckoos were scarce but several were seen at Salem, Missouri, on May 3 (D.P.). Irving Fay reports roadrunner sightings at Willard (northwest of Springfield), Oldfield (southeast of Ozark) on the west edge of Springfield and actually within the city limits of Springfield.

An injured burrowing owl was found on April 21 by Dave Easterla one mile west of the Fairfax Bridge in Platte County, Missouri. This is apparently the third state record. All three goatsuckers were about one week late in arrival. A whip-poor-will nest with two eggs were found on May 2 near Salem, Missouri (D.P.). Sapsuckers were numerous at Kansas City (D.E.) and unusually abundant near Warrensburg, Missouri, from March 13 until April 21.

Flycatchers through Nuthatches—Western kingbirds were common and stayed to nest in the St. Joseph-Squaw Creek area (F.L.). Scissor-tailed flycatchers continue to expand. A very early date at St. Joseph was April 11 and Floyd Lawhon reports four sightings in the St. Joseph area, where one is generally unusual. A scissor-tailed was seen twice at Little Dixie south of Columbia on April 24 and 26 (J.R.). Trail's flycatchers nested at Wyandotte County Lake (D.E.) and were common nesters in St. Louis (S.J.H., D.A.). An early pewee was found at Big Oak State Park on April 18 (J.H.). An early olive-sided flycatcher was at St. Louis on May 8 (J.W.) and six were found after that date in St. Louis (S.J.H., D.H.). Swallows were near

normal except cliff, which was way down from previous years. Cliff and tree swallows did breed at Duck Creek (D.E.). Several partial albinos were reported at Kansas City and an all albino crow was reported by Robert Kays at Montrose. Fish crows were again found at Big Oak and one was collected (details in the summer survey). Another sight record on the levees was made on May 8 by Mike Flieg. Although an off year for red-breasted nuthatches, several were seen. One at Memorial Park Cemetery on March 7 and April 7 (D.E.), one at Wyand Lake on April 4 by the Burrough's Club and one in Forest Park at St. Louis on April 26 (S.J.H., J.W.).

Wrens through Waxwings—Wrens were about normal. The Bewick's that wintered at Elizabeth Cole's home started nest building on March 30. Mockingbirds are increasing at St. Joseph (F.L.). Robins and bluebirds were reported in good numbers. Other thrushes were normal, but down at St. Joseph. As many as seven veerys were seen at Forest Park the second week of May (S.J.H.). Floyd Lawhon reports more gnatcatchers this spring than he has ever seen. Water pipits have been rare in St. Louis in recent years, but were common this year thanks mainly to high water in St. Charles County. They were seen in Kansas City during the same period—late March until the third week of April.

Vireos and Warblers—The vireo-warbler flight was unspectacular at best. Floyd Lawhon saw a few, assuming they rushed through during mid-week. Joe Roller reports few warblers at Columbia with a small wave on May 4. At Kansas City there were no waves until May 15. Then Mary L. Myers found a good listing of birds, particularly warblers on the cooler, windless days of May 15 through May 19. Myrtle warblers were very late on May 19, then on May 20 the wave had passed and few birds were seen.

At St. Louis there were no real waves, but simply built up to a peak from May 8 (36 species of warblers) to about May 12. There were no rarities and mourning and Canada warblers were down from last year. Cape May warblers were rare, but this is normal in contrast to the many Cape Mays of last year. Chestnut-sided warblers were reported abundant at Warrensburg May 7-15 (S.H.). A Swainson's warbler was first seen at Big Oak State Park on April 18 (J.H.). Pine Warblers are nesting at Roaring River State Park. At Salem Dave Plank reports yellow-throated warblers on April 2, a Myrtle wave April 21-25 and prairie warblers nesting in greater numbers than before. As usual in the Springfield area, most migrant warblers were reported in the city. Rural nesters included prairie near Garrison.

Bobolinks through Tanagers—Bobolinks were at Beverly Lake on May 8 (D.E.) and were common in the levee area throughout May. Western meadowlarks were a common nester at Trimble (D.E.) and are increasing as a nester at St. Joseph (F.L.). Yellow-headed blackbirds were observed at Beverly Lake and Squaw Creek and are nesting at Lake Contrary. One was seen at Clarksville by Mrs. H. Lammert. Blackbirds were pretty much normal, except rusties, and Brewers were rare or missing at St. Louis. Resident redwinged blackbirds were singing at Salem on March 10, although there was still snow on the ground. Both tanagers were commonly reported.

Seedeaters—Rose-breasted grosbeaks were very common in late April and early May. Blue grosbeaks were found fairly common as far north as St. Joseph. An early discckissel was at Big Lake near Charleston, Missouri, on April 19 (J.H.). An evening grosbeak appeared at the feeder of Mr. Mac Elrey of Kansas City on March 13. A wave of hundreds of grasshopper sparrows was noted at Fairfax Bridge on April 21 (D.E.). The sharp-tailed

sparrows were all rare this spring. "Dozens" of pairs of Henslow's sparrows are breeding at Taberville Prairie (D.E.). Fifty vesper sparrows were found in one field near Salem on April 4 (D.P.). The first Bachman's sparrow at Salem was on April 7 (D.P.). A pair of Bachman's sparrows were breeding at Gravois Mills where they had not previously bred (D.E.). Clay-colored sparrow reports include one at Beverly Lake on April 25 and two at Squaw Creek on May 19 (D.E.) and one at Camp Towanyak on May 1 which grew to 25 or 30 by May 12 (M.L.M.). Singing Harris' sparrows stayed at Salem March through April 16 (D.P.). A few also stayed at Weldon Springs until early April. White-crowned and white-throated sparrows were common to abundant, except at Camp Towanyak, where only one white-crowned sparrow appeared on April 22 which is most unusual. Fox sparrows were common and peaked at Salem on April 4. Fifty or more Lincoln's sparrows peaked at Camp Towanyak on April 22 (M.L.M.). A breeding song sparrow was noted at Trimble on May 15 (D.E., D.A.) and at Big Oak Park in southeast Missouri. This probably represents the southern extreme for this species. Song sparrows were numerous in winter and early spring at Salem, but the last one was noted on April 10 (D.P.). A peak of 10,000 Lapland longspurs was noted at Fairfax Bridge on March 28. Many were in flight-song. Five Smith's longspurs were found on April 9 at the St. Charles County Airport (E.C., K.A., et al.). One bird stayed a week longer (S.J.H., D.A.). One Smith's longspur was at Fairfax Bridge at Kansas City on March 12 (D.E.).

D. A. — Dick Anderson

K. A. — Kathryn Arhos

H. B. — Harold Burgess

E. C. — Earl Comfort

D. E. — David Easterla

I. F. — Irving Fay

S. H. — Steve Hilty

S. J. H. — Steven J. Hanselmann

D. H. — Don Hays

F. L. — Floyd Lawhon

M. L. M. — Mary L. Myers

D. P. — David Plank

J. R. — Joe Roller

F. S. — Fern Shumate

S. V. — Sally Vasse

J. W. — John Willets

TEXAS-SIZE BIRDING

By John L. Hamilton

Although we were aware, as we began our 1964 Texas field trip, that this great state contains some three-quarters of all the bird species known from the United States, my wife Julie and I had little idea of the success and good fortune we would have before our return from two weeks in this area. The state list of 540 species seemed, in fact, more forbidding than promising, as we contemplated the huge land areas and varieties of habitat from which these had been recorded. No two week trip could, of course, begin to cover more than a small portion of the state and further, being total strangers to the area, we were only too familiar with the handicaps this imposes. On counting up our trip list of 225 birds on our return though, (*including one entirely new species for the United States*) we were ready to concede that the Texas birding potential is every bit as great as it appears in print and, moreover, that the possibilities for really unusual and interesting species are so strong that this area must not be missed by any serious field observer. With its huge bulk sitting astride the migration routes of so many species and its Southern tip lying along the Mexican border in the lush Rio Grande Valley, almost any sighting seems possible and occasionally these hoped for "miracles" are realized.

I am sure many of our readers have birded through Texas, some no doubt on several occasions, but often I believe these trips have been "on the way" to Mexico with its incredibly rich variety of avifauna which is, of course, renowned in its own right. I would like to suggest, however, that Texas in itself is extremely interesting and exciting, and a worthy subject for the study permitted by a full-length trip. In fact, we found that two weeks was only enough for us to cover with relative thoroughness the sector from Austin down through the Rockport Coast area and the lower Rio Grande Valley. The interesting and completely different lands to the Northwest that we hoped to visit from Del Rio through Big Bend National Park to El Paso we found impossible to reach in the time we had. This Trans-Pecos Region by itself could well be covered by an entirely different two to three week trip I am sure, with sighting results so different it would be difficult to imagine they were all made in the same state.

All of this is, if anything, completely in the realm of understatement as a serious ornithological study of an area this large and varied is a life's work. I am speaking, of course, only of the possibilities offered by necessarily short vacations in which we can only do the best we can with the insufficient time allowed us.

Although the dates of our Spring, 1964 trip were actually from April 22nd through May 6th, I would like to describe in some detail only our more interesting sightings actually made in the state of Texas. Undoubtedly all of our readers would take somewhat different routes to that area and therefore sightings made by us on the way would be of little interest to others whom we would hope would be encouraged or interested in studying the area described.

Another reason for slighting our records covering days of long distance driving is, of course, the difficulty of observing under these conditions. Generally only the wire-perching and common roadside birds and birds of prey are visible and the only point of interest all the way across Oklahoma was the sighting of 35 Scissor-tailed Flycatchers, by actual count, on the date of April 23rd. As the days passed this number seemed much less surprising, but these beautiful birds performing their incredible aerodynamic feats in the pursuit of insects brightened our hot and rather uninteresting trip across the highways of this countryside. The degree to which this species uses its long, flowing tail in maneuvering is something not to be forgotten and was totally surprising as I had imagined this appendage was largely ornamental and would be more in the way than useful.

On April 24th birding was even poorer between Dallas and Austin, as we traveled exclusively over four-lane highways that funneled us so quickly across the countryside it was difficult to know even what kind of area we were passing through. On this date, as we neared Austin, we began to see good numbers of what we took to be Boat-tailed Grackles, but found the following day, as we happened into the midst of a meeting of the Austin Audubon Society, that this bird, while currently classed as a sub-species of the Boat-tail, has an excellent chance of being raised to full specific status under the name of Great-tailed Grackle due to the differences it displays from its brethren in other coastal areas of this country. As it was explained to us, its call is noticeably different as is the eye color, and we can personally attest to its unusual vocal efforts from hearing them in a virgin thicket area later on our trip between Raymondville and Port Mansfield. Hesitating even to go into the trees due to the ferocious sounds being emitted, I can

recall not being too certain that these could come from a bird. We eventually found the commotion to be caused though, by a group of these Great-tailed Grackles disturbed in trees deep in the brush.

Our birding actually began in earnest on Saturday, April 25th, after we were fortunate enough to make contact with Frank Oatman, Jr., president of the Austin Audubon Society, and a fine host and most talented birder. We had lunch later with a number of other Austin birders including Dr. Edgar Kincaid, who was most helpful in suggesting routes and areas of interest for the remainder of our trip. Looking over our much-folded and annotated road map, I can remember clearly the spell he seemed to cast over those present and the feeling of excitement I had as he marked areas where we could find Botteri's Sparrow, White-tailed Hawks, etc., together with instructions on the best times and most likely turns of the road which when later followed, more often than not, resulted in the locating of the species in question. Everything seemed possible through the knowledge and personality of this exceptional man and as events later proved, this was exactly correct.

In the Austin area on this morning we found, among other more common species, the Inca Dove and Bronzed Cowbird, both of which are undergoing a population expansion into the Austin area from the South, as well as other Southern and Southwestern species into whose area we were just beginning to penetrate. Among these were the Rufous-crowned Sparrow, Lesser Gold Finch, House Finch, Ash-throated Flycatcher, Road Runner and Black-crested Titmouse. Of special interest were the Blackcapped Vireo and the Golden-cheeked Warbler which is normally considered as peculiar to the scenic Edwards Plateau country, the edge of which passes through Austin. This lovely bird is truly a threatened species, found only in the mixed cedar and oak forests which are being rapidly decimated by the building of homes. It would appear that only the setting aside of considerable acreages along the line of the Kirtland's Warbler area in Michigan could save this bird from eventual disappearance. It might be interesting for those who enjoy mysteries to mention in passing that on a boat trip this last May from Key West to the Dry Tortugas we were told by Dr. Glenn E. Wolfenden that he had just discovered in a series of Black-throated Green Warbler skins taken in Florida, a specimen of this same Golden-cheeked Warbler. How this one individual arrived in Florida is hard to imagine, since the species had never been known to exist outside the state of Texas, but the identification was definite.

On the afternoon of this date we were forced to leave Austin which by itself constitutes one of the richest birding areas in the state, to drive on to Rockport where we stayed at Rockport Cottages, Connie Hagar's well-known birders' roost. On the way south we spotted one of the most unusual sightings of our trip, a Western Grebe, swimming with about fifteen to twenty ducks of various species and Pied-billed and Eared Grebes in a two-acre pond beside the highway. There have only been one or two records of this species in this area in the preceding ten years.

(To be continued in the next issue)