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EDITOR OF THE LOON: Robert B. Janssen, 14321 Prince Place, Hopkins, Mn. 55343. (phone 938-7464). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details. Associate Editors, Kim R. Eckert and Paul Egeland.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor to "The Season," request the report forms from the **EDITOR OF "THE SEASON," Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804. (area 218, pages 525-5554).** phone 525-5654).

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A THANK YOU LETTER

The Waxwings came today, Lord
Out of the snowy sky, they came
Gregarious and graceful
Zeeing softly as they settled down
in the old gnarled crab apple tree

I watched them, Lord
All morning long
Was that so wrong?
To neglect the ironing and cleaning
And give myself the gift of such a morning
Watching and listening

They are so lovely, Lord
How did you dream them so?
Their gray velvet-soft bodies
splashed with yellow and cinnamon
and cherry red wax
Those incredibly beautiful faces
Masked with black
Edged in white
Framed with blush
and topped with an up and down crest

Gratefully,

Koni

(By Koni Sundquist, Duluth, Minnesota, March 21, 1972

A Message from the President about

Facial Markings As A Key To Bird Habitat And Behavior

Many students of nature find themselves forever busy trying to decode the purpose behind various peculiarities and characteristics of a species. Most of us will agree there are few accidents in nature. As a result, I'd like to suggest adding another area of bird wondering to bird watching. I find it absolutely fascinating to try to establish some kind of purpose or pattern to the eye and face markings of birds. Why do some have white heads and others black? Why do some have an eye ring or eye stripe? Why is there a black mask or white eye patch? Why are male facial markings so often different from female?

Again, with no extensive scientific support, except personal observation and hypothesis, I'd like to pass along a few generalizations. These I encourage you to dispute or verify. With each generalization I've listed a few typical

species that seem to support the statement.

White head — Tends to be most common among birds that live or nest in open, well-lighted areas such as beaches or snow — and generally take their food with their head above the surface of the water or in open, non-shaded areas. Examples are gulls, Bald Eagle, Common Egrets, Snow

Buntings.

Dark head — Also tends to live in open, well-lighted or snow-covered areas but has nest or takes food from shady areas of woodland, grassland or swamps, or puts head below the surface of the water for food. Examples are blackbirds, American Coot, many ducks, Baltimore Oriole, juncos, and hummingbirds. Also into this category goes many of those birds that catch insects on the wing such as Chimney Swifts, Purple Martins, Eastern King birds, Eastern Phoebes and Common Nighthawks.

White eye ring, cheek patch or eye stripe — Common to birds that nest or spend time in dark areas and occasionally flit out into bright areas. This seems to be common to birds that nest in bank or tree holes or live in deeply-shaded parts of the forest. Examples are Wood Duck, Belted Kingfisher, Least Flycatcher, Bufflehead, Black-capped Chickadee, Rubycrowned Kinglet, Wood Thrush, vireos, plus many warblers and female

birds of various species.

Black eye mask or eye stripe — Common to birds that spend their time in well-lighted areas but often pursue food in dark areas. Examples are falcons, shrikes, waxwings, terns, Osprey, American Woodcock, and many shore birds and woodpeckers. Also common to males of a species that have a mate in a shaded area. Additional examples are Yellow-headed Blackbirds, Bobolinks, American Goldfinch, Yellowthroat, Ring-necked Pheasant, American Redstart, and Rose-breasted Grosbeak.

To summarize, it appears that if a bird must look from a bright area to a darker one, it probably will have a dark head, eye mask or eye stripe. If the bird must look from a dark nesting area or habitat area to a brighter one, it probably will have a light eye ring, eye stripe or cheek patch. Many

birds have dual combinations.

Are there exceptions? Of course — or shall we call them challenges which require study and explanation. Often they depend on the emphasis you put on normal male or female habitat, nesting area, food location, etc. Some changes also come with spring, fall and juvenile and adult plumage. Give it a try. Then, you be the judge.

MARV BORELL

CONNECTICUT WARBLER NEST IN HUBBARD COUNTY, MINNESOTA

by David F. Parmelee and Richard J. Oehlenschlager

On June 18 1971, Clifford D. Dill, Richard J. Oehlenschlager and Dwain W. Warner heard a male Connecticut Warbler singing from a large white spruce within what appeared to be a very old and long-abandoned homestead in the Lake Alice Bog area, a few miles east of Itasca State Park. No male was noted there by Oehlenschlager and others during several subsequent trips the following week.

Oehlenschlager, was built entirely of grasses and sunk level with the ground which was hard and dry; it was concealed above by grasses and held five small, mostly naked young, probably two or three days old.

Not at all certain of the identity of the brooding bird, we returned to the site an hour later. In failing to flush the bird there a second time, Parmelee put his eye close to the ground for a



Fig. 1 The nest of the Connecticut Warbler found in Hubbard County was concealed by grasses near the center of the illustration. Photographer 30 June 1971 by David F. Parmelee.

On June 27, we visited the site and searched diligently for the species but did not detect even a song. Later, while we were leaving the area by way of the old homestead yard then upgrown to tall grasses, a yellowish warbler flushed from a ground nest between us, fluttered off above the grasses and quickly disappeared in spruces near by. Its nest, first seen by

better look at the nest and was amazed to find the female parent brooding only scant inches away. There was no mistaking her identity — clearly a Connecticut Warbler. She then left the nest in a flash and headed back to the spruces where Oehlenschlager also had a good look at her.

Seeing the brooding Connecticut Warbler close up made such a deep impression on Parmelee that he was inspired to make from memory the drawing used for the present **Loon** cover-illustration. The bird's white eye ring that so definitely distinguishes the species from its close relative, the Mourning Warbler, was especially prominent.

On June 30, we returned with others to the site and found the young considerably larger than they had been earlier, though all were still a long way from fledging. No sign was there of either adult. On July 2, the nest was empty and no adult was about. The young had succumbed to a predator

some time since the 30th.

Since so few Connecticut Warbler nests have been reported from anywhere within the species' rather restricted breeding range, we took care in collecting the empty nest by removing a considerable section of ground with the structure. The sod with nest and concealing grasses intact we took to the Forestry and Biological Station at Lake Itasca and placed in a special spot where the sun and rain kept the grasses fresh. Parmelee's plan from the start had been to make a detailed sketch of the nest before preserving it as a museum specimen. But he delayed too many days. In attempting to fetch his model finally, he was horrified to see an Eastern Chipmunk transfer the very last grasses of that valuable warbler's nest to its own doubtlessly the most elegant chipmunk's nest ever constructed!

The Connecticut Warbler's nesting is the first recorded for Hubbard County (T144N, R35W, S15, SE1/4). Al-

though the dry, grassy field would seem to be an unusual nesting habitat, the boreal habitat evidently preferred by the species in Minnesota certainly was close by. There is enough of the boreal element at Lake Alice Bog and Itasca Park (where at least a few pairs of these warblers also occur) to make this part of the state attractive to Connecticut Warblers, though the main concentration of these little-known birds must breed in the vast spruce bogs to the north in Minnesota and southern Canada.

The first Minnesota nest of the Connecticut Warbler was found by Ned L. Huff (Auk. vol. 46. 1929:455-65) at Big Sandv Lake in Aitkin County on June 13. 1929 when there were four fresh eggs. In the same general area on June 30. 1929. William Kilgore and Walter John Breckenridge (Auk, vol. 46. 1929: 551-52) found a second nest with five young "several days old." Both Aitkin County nests were sunk in sphagnum and concealed by labrador tea in a black spruce habitat.

Many years passed before another nest was found in Minnesota. According to Janet C. Green (personal correspondence), B. D. Cottrille found a nest with four large young at Farm Lake, Lake County, on July 4, 1962; young being fed away from the nest have been encountered by O. Lakela in St. Louis County on July 11, 1941 (three young), and by P. B. Hofslund in St. Louis County on July 12, 1952 (number uncertain). Field Biology Program, 302 Bell Museum of Natural History, University of Minnesota, Minneapolis, Minnesota 55455.

THE STATUS OF OSPREYS ON THE CHIPPEWA NATIONAL FOREST

by John Mathisen

Efforts to evaluate the breeding population and reproductive success of Ospreys on the Chippewa National Forest were initiated in 1963, although intensive surveys using aircraft were not begun until 1968. The results of nesting surveys for the period 1968-1971 are summarized in this paper.

The Chippewa National Forest is located in northcentral Minnesota and occupies an area of 1,650,000 acres. The physiography is characterized by exceedingly flat terrain with many lakes and marshes. There are approximately 354,000 acres of surface water and almost 180.000 acres of wetlands on the Forest. Commercial forest land accounts for most of the remaining area and includes typical associations of the boreal forest such as upland conifers, lowland conifers, aspen and northern hardwood types. Forestry is the dominant land use, although recreation is becoming increasingly important as an economic and sometimes ecologic consideration.

Osprey Nest Inventory

Little was known concerning the breeding population of the Osprey prior to 1963. When interest in the preservation and management of Bald Eagles became an official Forest Service matter in 1963, efforts to develop a nesting inventory for this species resulted in establishing locations of Osprev nests as well. It soon became apparent that the Chippewa was supporting a substantial breeding population of this unique raptor. In 1968 the Bureau of Sport Fisheries and Wildlife, Refuge Division provided aircraft for observations, and this rewarding and cooperative effort has continued to the present time.

The locations of Osprey nests are determined from field personnel who frequently observe nests during routine activities, and from aerial observation during the flights for checking Bald Eagle and Osprey nests. We have

not had the funds or opportunity to make an intensive, systematic search for Osprey nests to determine the total breeding population on the Forest. Although we have recorded up to 100 nest sites, there are many more to be found — perhaps twice this number. A nest inventory for this species is exceedingly difficult to maintain over a large area because of frequent nest destruction by windstorm and poor observability both from ground and air. Approximately 60 Osprey nests are known to have blown down since 1965. Only rarely have we found new construction in the general vicinity of destroyed nests. We must assume, therefore, that many of the Osprey pairs displaced by storm have established new nests in unrecorded locations.

In summary, we can account for approximately 100 breeding pairs of Osprey's on the Forest, but recognize that this is far less than a complete

inventory.

Nesting Surveys

We attempt to observe all recorded Osprey nests from the air soon after incubation commences in mid-May to determine which nests are occupied. A second check is made of occupied nests just prior to fledging in early August to determine breeding success.

The survey data are expressed as number and percent of active nests (an active nest having an adult in incubating posture), number and percent of successful nests (a successful nest having at least one young near fledging), average brood size and young per active nest (synonymous with young per breeding pair).

The statistics for percent of active nests are somewhat misleading because of the problem of supernumerary nests. The use of "territory" designations would be more descriptive, but we have found it almost impossible to group many of the nests into their respective territories. Ospreys on the

Chippewa usually nest as isolated pairs, but there are some areas where semi-colonial nesting occurs. In one case, for instance, there are nine nests

within a mile of one another.

The results of the Osprey survey from 1968 through 1971 are shown in the following table.

RESULTS OF OSPREY SURVEY, 1968 - 1971

Year	Known Nests	Observed Nests	Active No.	Nests %	Successful No.	Nest %	s No. of Young	Average Brood Size	Young Active Nest
1968	73	56	40	71	13	32	19	1.5	0.47
1969	89	69	49	71	23	47	50	1.7	1.02
1970	99	71	52	77	28	54	48	1.7	0.92
1971	90	74	49	66	22	45	39	1.8	0.80
Averag & tota		270	190	70	86	45	156	1.7	0.82

There was little variation in the relative number of occupied nests during the four-year period. Since supernumerary nests would account for many of the "unoccupied" nests, it appears that most of the Ospreys on the Chippewa initiate an attempt at

breeding.

The number of successful pairs, however has ranged from 32 percent to 54 percent (average 45 percent). Of 190 nesting attempts during this period, only 156 young were fledged (0.82 young per active nest). If Henny and Wight (1969) are correct in their calculations that an annual production of 1.22-1.30 young per breeding pair is necessary to maintain a stable population, we must conclude that the Chippewa population is declining (provided other mortality factors are comparable).

Dunstan (1968) reporting on 161 nesting attempts in Minnesota from 1966-1968 indicated 1.03 young per active nest, and a nesting success of 65 percent. We might conclude from these reasonably comparable data that Osprey productivity has declined appreciably in this area since 1968. Further comparisons can be made with other populations from data presented by Henry and Ogden (1970). The range of young per active nest was from 0.27 in Connecticut, to 1.22 in Florida. Successful nests ranged from 27 percent to 70 percent.

Reasons for nesting failure have not been scientifically evaluated on the

Chippewa, although assumptions can be made. Direct mortality of nestlings from windstorms can be of considerable importance in certain years. Disturbance by human activities may cause some nest abandonment although there are no data to support such a contention. Most Ospreys on the Chippewa are breeding in very isolated habitats, often in mosquito-infested wooded swamps where few people are likely to be found. Even logging is restricted to the winter months. Direct mortalities from shooting undoubtedly account for some losses of adults, but there are very few known instances of this occurence.

Pesticides have been identified in other Osprey populations as a factor in reproductive failure and population declines (Ames 1966). It is likely that Chippewa Ospreys are likewise contaminated, although testing has not been done. It is extremely difficult to obtain specimens for pesticide analysis here. Even addled eggs are largely out of reach because dead trees make climbing extremely hazardous if not an impossible undertaking.

Other Data

Upwards of 80 percent of Chippewa Ospreys have selected dead trees for nest sites. The most common tree species utilized are black spruce, and tamarack. Nests are also found in red pine, white pine, white cedar, and a few in hardwoods. Most of the nests are located in lowland conifer swamps, often some distance from open water.

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Nest site characteristics were described in detail and compared to Bald Eagle nest sites by Mathisen (1968). There are some interesting correlations between Osprey nest locations and other wildlife species on the Forest. Osprey's are frequently found nesting in beaver flowages where the trees have been killed providing acceptable nesting platforms. Likewise, we find Osprey's nesting along with Great Blue Herons, where the herons have killed or partially killed the trees. Of 12 known heron rockeries on the Forest, six have an Osprey nest within the rockery. Three cases are known where Ospreys have taken over Bald Eagle nests.

The Forest Service recognizes the Osprey as an important part of the wildlife community on National Forests. Official policy prohibits timber cutting and other disturbances within 330 feet of a nest at any time. Another buffer zone of 660 feet radius from the nest prohibits activity during the nesting season.

Future action should be directed toward refinement of the nest inventory and investigations into the reasons for reproduction failure.

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1001 Miles Street, Bemidji, Minnesota 56601.

THE FALL SEASON Aug. 1 to Nov. 30, 1971)

by Kim R. Eckert and Paul Egeland

The buck stops here. Don't blame Editor Bob Janssen, blame us for the lateness of this issue of the Loon. These seasonal reports are not the easiest things in the world to do, and often they are the only thing holding an issue up for printing. We're told that the June issue will be on time, however, so perhaps things will get back on schedule to stay. We're also told that there have been some volunteers to help on these reports, which is good news, because we certainly need the help.

It's traditional here to start with a weather summary, but we lost the data we compiled, and there isn't enough time to go look for it. But even though, as of now, there was no weather to speak of last fall, there were a lot of birds around worth mentioning, and enough observers around to mention them. A total of 280 specials were recorded, probably the highest ever

for a fall season. 54 observers contributed reports, which is much better than last fall's 42, but still not enough when you consider that only about one-fourth of these are from the north. But the western part of the state had better representation than usual, especially in the west-central and southwest.

Our style is similar to that of our previous reports, except for one major change. From now on, in both the spring and fall reports, the printing of observers' initials will not be as prevelant. Observers with the earliest and latest records of a species will not be acknowledged. Initials will only accompany unusual late or early dates, peak numbers, and for those rare and uncommon species in which all reports are listed. There are two reasons for this change. First, normal early and late dates for migrants is data that is not unusual or interesting enough in

itself to record the observer. Just the date and county is sufficient. The second reason is that these reports are very difficult to compile, type, and print. Elimination of initials will greatly ease the enormity of these tasks, and should help in getting and keeping the **Loon** on schedule.

Even though the spring migration is more interesting to most of us to observe and record, it is the fall season that perhaps has the most to offer in the way of an unpredictable and puzzeling migration. Why is it in the fall that observers in the northern half of the state often record southbound migrants as late or later than those in the south? With early migrants in the spring, the south almost always has a decided edge. And why is it that so many common (or at least regular) species are not seen as often in the fall as in the spring? Some are missed altogether, such as this fall no one saw Swainson's Hawk, Spruce Grouse, Hudsonian Godwit, Blue-gray Gnatcatcher, Prothonotary Warbler, Bluewinged Warbler, and Louisiana Waterthrush. There are, of course, partial answers to these questions too numerous to mention here, but at least it is interesting to read these seasonal reports in detail to observe and answer yourself the interesting questions raised. It is, after all, the curious and unpredictable that keeps the birder going.

With a record (?) 280 species recorded, there were of course many things of interest, but the following seemed the most significant. BH's Little Blue Heron, Snowy Egret, and Cattle Egret were still around in August after nesting at Lake Johanna. White-faced Ibis continued to show up into late September to top off a mild 1971 invasion for this species. Agassiz refuge again recorded some very high peaks for ducks as it did last spring. Scoters found their way to inland Minn. on 4 different occasions, and seem to be regular in small numbers away from Lake Superior in migration. Harlan's Hawks were reported, but since this bird is difficult to separate

from a dark phase Red-tail, only the most highly documented observation can be accepted. But other raptors made up for Harlan's being left out: 2 Gyrfalcons appeared, one even in the southwest; both eagles showed up in very encouraging numbers; and a Redshouldered Hawk turned up in northern Beltrami Co. Bobwhites continued to occur in southwest Minn., but one has to wonder about their origin. (Sorry about that TS and JB, I almost forgot your Ferruginous Hawk in Aitkin Co.; now don't you forget to send in details.) King Rails appeared as they so often do, in late summer with their young, after not being observed all spring and summer. 50,000 Coot is impressive for a peak, but many other waterfowl would have been preferable to the colorless mudhen. As they did last spring, shorebirds and Marshall made the news. Western Sandpipers and Buff-breasted Sandipers were almost abundant at Marshall, while Knots made a rare inland appearance at Agassiz, American Avocets somehow turned up in Duluth in late October, and Stift Sandpipers were very late in leaving the Fergus Falls area. Another unidentified jaeger was found on L. Superior, and a Hawk-Owl returned to its old Sax-Zim area. Snowy Owls appeared in good numbers and spread farther south. It was definitely an invasion year for Northern 3-toed Woodpeckers, and many listers were able to check off this elusive species. Perhaps the best bird was Minnesota's first Western Wood Pewee seen and heard well in Lyon Co. It will be a long time before this species turns up again. Tree and Cliff Swallows peaked well at Sherburne NWR, a new and interesting area with a lot of potential. Carolina Wrens showed up a few times, even in northern Itasca Co. A Varied Thrush showed up again as was expected, but the Loggerhead Shrike turned up only once and may be on the decline like some of the larger predators. Common Grackles showed up in huge numbers in the Twin Cities area, and all the winter finches invaded all over in good numbers, heralding one of our best winters for these birds. Every fall has those species that linger a month or two past their normal departure for some unknown reason, and this year the Great Crested Flycatcher, Swainson's Thrush, Baltimore Oriole, Scarlet Tanager, and Vesper Sparrow were extremely late. Finally, Smith's Longspurs again appeared to be regular in the prairie counties, but a couple also wandered to the shore of Lake Super-

Common Loon: late south 11-15 Hennepin; 11-19 Rice; 11-28 Wright; late north 11-18 Crow Wing; 11-10 Duluth.

Red-throated Loon: 10-23 Lake (1) KE, PE; only

Red-necked Grebe: late north 10-23 Crow Wing; 10-28 Duluth; only report south 9-5 Lincoln HK.

Horned Grebe: early south 9-20 Pope; 9-25 Lyon; late south 10-24 Wright; 11-19 Hennepin; late north 10-25 St. Louis; 10-30 Lake; 11-19 Duluth.

Eared Grebe: 5 reports: 8-19 Lyon PE; 9-11 Marshall DB; 9-16 Crow Wing TS and Marshall AR; 10-30 Ottertail (10) RHJ; only 1 report last fall.

Western Grebe: late south 10-6 Lyon; 10-31 Nic-ollet; 11-11 Hennepin; late north 10-14 Marshall; 10-31 Crow Wing; peak 8-29 Stevens (80), J. Hart.

Pied-billed Grebe: late south 11-16 Lac Qui Parle; 11-21 Hennepin 11-27 Wright; late north 11-13 Crow Wing; 11-14 Ottertail.

White Pelican: much more common than usual: late south 10-23 Traverse; 10-30 Lac Qui Parle: 11-5 Co'tonwood; late north 9-26 Ottertail; 10-7 Marshall; p-aks 9-20 Cottonwood (3000) LF; 9-12 Jackson (4000) HH; "Sept." Nobles (5000) HH.

Double-crested Cormorant: late south 10-20 Henneuln; 10-23 Traverse and Lac Qui Parle; 11-25 Winona TV: late north 10-16 Grant; 10-21 Marshall; peak 9-24 Ottertall (240) KE.

Great Blue Heron: late south 11-23 Wabasha; 11-28 Wright; 12-4 Carver; late north 11-14 Ottertall and Duluth; 11-26 Crow Wing.

Green Heron: late south 10-5 Winona and Carver; 10-13 Hennepin; 10-17 Houston; late north 9-5 Clay; 9-12 Mille Lacs.

LITTLE BLUE HERON: 1 adult and 2 imm. (Little Blue X Snowy hybrids?) still present on 8-14 at Lake Johanna, Pope Co., BH.

CATTLE EGRET: 30-40 adults and immatures still present on 8-14 at Lake Johanna, BH.

Common Foret: late south 10-5 Dakota; 10-17 Houston; 10-24 Wabasha; late north 9-16 Mar-shall; 10-4 Ottertall; peak 10-5 Dakota (120) RC. SNOWY EGRET: 8-14 Pope (1 ad.) BH, see account under Little Blue Heron.

Black-crowned Night Heron: late south 9-26 Cottonwood; 10-2 Pope; 10-29 Lyon; late north 9-25 Grant; 10-14 Marshall.

Yellow-crowned Night Heron: 9-18 Houston (6) TV, only report.

Least Bittern: more reports than usual: late south 9-21 Hennepin; 9-25 Lvon; 10-3 Pope; late north 8-28 Aitkin; 9-16 Marshall.

American Bittern: late south 10-22 Hennepin and Scott 10-23 Carver; late north 9-8 Mille Lacs; 10-20 Marshall.

WHITE-FACED IBIS: 8-29 Sulem Slough. Watonwan Co., 1 photographed by L. Rupp; 9-25 Traverse Co. (6 ml. e. of Browns Valley), KE (see Notes of Interest in December Loon).

Whistling Swan: early 9-22 Marshall; late south 11-6 Pone; 11-24 Cottonwood 11-30 Houston late north 11-7 Duluth; 11-15 Mille Lacs.

Canada Goose: late south 11-20 Nobles; 11-21 Wabasha 11-28 Murray; late north 11-4 Marshall; 11-26 Grant; peaks 10-21 Olmsted (10,000) JAB; 10-7 Marshall (13,240) AR.

White-fronted Goose: 3 reports: 9-9 Marshall AR; 10-22 Marshall KE; 10-15 to 11-10 Olmsted (3) CW.

Snow/Blue Goose: early 9-11 Marshall; 9-22 Murray; late south 11-7 Wabasha; 11-10 Olmsted; 11-14 Cottonwood; late north 11-7 Becker; 11-12 Crow Wing; peak 10-7 Marshall (1585) AR.

Mallard: peak 10-27 Marshall (31,620) AR,

Black Duck: early south 8-18 Sherburne; 9-15 Hennepin; late north 11-4 Marshall; 11-6 Cook; 11-26 Ottertail; peak 9-16 Marshall (534) AR.

Gadwall: late south 11-2 Winona and Carver; 11-24 Hennepin; 11-27 Waseca; late north 10-27 Marshall; 11-14 Ottertail; peak 10-7 Marshall (22,460)

Pintail: late south 10-25 Sherburne; 11-2 Winona; 11-16 Hennepin; late north 11-4 Marshall; 11-26 Ottertail; peak 10-14 Marshall (2450) AR.

Green-winged Teal: late south 11-2 Sherburne; 11-17 Hennepin and Blue Earth: late north 11-4 Marshall; 11-14 Ottertail; peak 9-30 Marshall (5530) AR.

Blue-winged Teal: late south 10-23 Sherburne; 10-24 Wright; 10-28 Hennepin; late north 10-16 Grant; 11-4 Marshall; peak 8-19 Marshall (14,230)

American Widgeon: late south 11-15 Winona; 11-21 Hennepin; 11-27 Waseca; late north 11-14 Ottertail; 11-25 Cass; peak 9-16 Marshall (12,760) AR. Shoveler: late south 10-21 Carver; 10-24 Wabasha; 11-20 Hennepin; late north 10-16 Grant; 10-27 Marshall; peak 9-30 Marshall (1070) AR.

Wood Duck: late south 11-20 Carver; 11-26 Sherburne; 11-28 Wabasha; late north 10-1 St. Louis; 11-28 Ottertail; peak 9-21 Carver (585) KH.

Redhead: late south 11-22 Waseca; 11-27 Hennepin; late north 11-4 Marshall; 11-6 Cook; 11-13 Ottertail; peak 10-14 Marshall (1080) AR.

Ring-necked Duck: late south 11-20 Hennevin; 11-28 Wright; 11-30 Wabasha; late north 11-4 Mar-shall; 11-7 Becker; peak 10-26 Sherburne (1000) BD.

Canvasback: late south 11-27 Waseca; 11-98 Wright; 11-30 Wabasha; late north 11-20 Crow V Ottertail; peak 10-27 Marshall (560) AR. Wing; 11-28

Greater Scaup: 4 reports: 9-26 Lyon PE; 10-8 Crow Wing TS; 10-29 Cass JB; 10-31 Hennepin VL, CH.

Lesser Scaup: early 8-31 Grant; 9-5 Duluth; late south 11-26 Lyon; 11-27 Waseca; 11-28 Wright; late north 11-4 Marshall; 11-26 Ottertail; peak 10-21 Marshall (7130) AR.

Common Goldeneye: early south 10-10 Wright; 11-1 Hennepin.

Bufflehead: early 8-31 Grant; 10-2 Hennepin; late south 11-19 Carver; 11-27 Hennepin; 11-28 Wright; late north 11-7 Becker; 11-8 Crow Wing; peak 10-21 Marshall (1300) AR.

Oldsquaw: only 2 reports: 11-6 Cook DB; 11-13 L. Minnewaska, Pope Co. (2), BH.

White-winged Scoter: 9-18 (3), 10-28 (2), 11-17 (19) Duluth, J. McIntosh, JG. JAB; 10-10 (2) and 11-7 (1) Cook, MMC, DB; 10-22 Crow Wing (5) TS, JB; 10-29 Lyon (1) PE.

Surf Scoter: 10-23 Lake and Cook (5) KE, PE, JG; 10-29 Cass (2) JB, TS; 10-31 Hennepin (1) VL, CH.

Common Scoter: 10-10 (7), 10-23 (4), 11-6(2) Cook, MMC, KE, PE, JG, DB.
Ruddy Duck: late south 11-11 Hennebin; 11-13 Pope; 11-28 Wright; late north 11-6 Grant; 11-7 Becker; peak 8-26 Marshall (1380) AR.

Hooded Merganser: late south 11-6 Hennepin; 11-19 Carver; 11-28 Waseca; late north 11-6 Cook; 11-19 St. Louis; 11-28 Ottertail; peak 11-4 Marshall (240) A.R.

Common Merganser: early south 10-5 Carver; late north 11-21 Grant and Marshall; 11-28 Crow

Red-breasted Merganser: early south 10-9 Hennepin; late south 11-25 Winona; late north 11-17 Duluth; only other reports were from NE Minn. in August.

Turkey Vulture: late south 10-10 Carver; 10-13 Winona; 10-31 Hennepin; late north 10-13 Duluth; 11-6 Grant; peak 10-4 Duluth (60) JG.

Goshawk: 10 reports from Aitkin, Lake, Duluth and Marshall; no south reports.

Sharp-shinned Hawk: late south 11-21 Dakota; 11-22 Wabasha: 11-29 Washington; late north 11-7 Beck-

Snarp-sninned Hawk: late south 11-21 Dakota; 11-22 Washington; late north 11-7 Becker; 11-9 Duluth; peak 9-14 Duluth (259) MMC. Cooper's Hawk: late south 9-11 Hennepin; 9-29 Sherburne; 10-13 Olmsted; late north 10-10 Crow Wing; 11-9 Duluth.

Red-tailed Hawk: late north 11-7 Clay; 11-9 Duluth; 11-13 Crow Wing.

Harlan's Hawk: there were 3 reports of this species, none of which had completely convincing details; see JG's article on this hard-to-identify species in the March 1967 Loon.

Red-shouldered Hawk: late south 10-27 Hennepin; north and west reports: 9-4 Lower Red Lake, Beltrami Co. DB; 10-10 and 11-6 Deerwood, Crow Wing Co., TS; 9-15 Pope, J. Hart.

Broad-winged Hawk: late south 10-6 Sherburne; 10-22 Hennepin; late north 10-9 Duluth; 10-19 Mille Lacs; 10-27 Marshall.

Rough-legged Hawk: early 9-18 Mille Lacs; 9-24 Douglas; late north 11-28 Mille Lacs and Crow Wing; 11-29 Marshall.

FERRUGINOUS HAWK: 10-23 Rice Lake NWR, Aitkin Co., TS, JB; details?

Golden Eagle: 12 reports of 15 individuals (only 4 reports last fall): 9-25 Duluth CH; 10-4 Sherburne BD; 10-5 Duluth JG; 10-9 Hennepin EM; 10-11 Cook WHL; 10-19 Pope RBJ; 10-20 Marshall AR; 10-22 Hennepin OJ; 10-31 Aitkin JB, TS; 11-9 Winona TV; 11-17 Marshall AR; 11-28 Polk, J. and S. Maertens.

Bald Eagle: adults reported from Crow Wing (1), Mille Lacs (1), Duluth (5) and Aitkin (3); immatures reported from Stearns (1) Hennepin (1); Wadena (1), Aitkin (9), Duluth (9), Becker (3) and Cottonwood (1); also 94 of unknown age were reported from Winona, Sherburne, Wabasha, Grant, Koochiching, Clearwater, St. Louis, Aitkin, Cass, Crow Wing, Marshall and Hennepin. Marsh Hawk: late south 11-19 Lac Qui Parle; 11-21 Cottonwood; 11-27 Waseca; late north 11-21 Marshall; 11-24 Morrison.

Osprey: late south 10-4 Carver; 10-10 Stearns; late north 10-4 Duluth; 10-31 Lake; 11-3 St. Louis; also reported from Sherburne. Anoka, Marshall, Crow Wing, Mille Lacs, Ottertail and Cook.

GYRFALCON: 2 reports: 9-16 Duluth MMC; 9-22 Nobles (1 dark phase), J. Brandenberg.

Peregrine Fairon: 4 reports: 8-11 Sherburne BD; 9-21 Duluth MMC, JG; 9-23 Marshall AR; 10-2 Crow Wing TS.

Pigeon Hawk: 9-5 Douglas KE; 9-26 Sherburne BD; 9-18, 9-19, 10-2, 10-4 Duluth (4) MMC, JG, KE; only reports.

Sparrow Hawk: late north 10-16 Grant and Aitkin; 10-19 Mille Lacs; 10-31 Ottertail.

Ruffed Grouse: reported from Crow Wing, Duluth, Mille Lacs, Carlton, Cook, Lake, Ottertail, Morrison, Lake of the Woods, Pine, Dakota, Stearns, Sherburne, Chisago, Wabasha, Anoka and Clay. Greater Prairie Chicken: 10-9 Rothsay, Wilkin Co., KE; only report.

Sharp-railed Grouse: 8-17, 9-18, 11-21 Aitkin (11) TS; 10-16 Aitkin (2) JB, MMC, JG; 11-10 Clear-water (25) RD; 11-13 Koochiching (5) NH. BOBWHITE: 8-20 Mountain Lake, Cottonwood Co.

(12), E. Duerksen. Ring-necked Pheasant: reported from Swift, Doug-

Ring-recked Pheasant: reported from Swift, Dobelas. Benton, Dodge, Hennebin. Sibley. Scott, Dakota, Lvon, Pope, Redwood. Olmsted, Winona, Nobles. Blue Earth. Murray, Watonwan, Lac Qui Parle. Sherburne, Waseca, Carver, Rice, Wabasha, Ramsey, Stearns, Duluth, Ottertall.

Chukar: 10-22 Ely (9) RBJ.

Gray Partridge: 8-8 Pope BH; 8-28 Dodge BH; 9-24 Dakota BH; reported with no dates from Nobles HH, Blue Earth EK, Murray ND, Lyon PE.

Sandhill Crane: 10 reports, more than usual: 10-22 Cottonwood (45). A. Setten; 10-8 Clav (400) EA; 10-27 Norman (400) EA; 9-5 Marshall DB, KG; 8-2 Sherburne (2) BD; 9-6 (34), 9-16 (104), 10-14 (1) Marshall AR; 10-17 Aitkin TS; 11-6 Duluth DB.

KING RAIL: 2 reports: 8-27 Lacrescent, Houston Co. (2) FL; 8-16 to 9-11 Regier Slough, Cottonwood Co., up to 4, photographed by L. Rupp.

Virginia Rail: late south 9-3 Cottonwood; 10-2 Pope; 10-12 Hennepin; late north 9-6 Crow Wing

Sora: late south 10-10 Scott; 10-16 Pope; 11-21 Hennepin CH; late north 9-16 Marshall; 9-22 Duluth.

Common Gallinule: 4 reports: 8-17 and 9-12 Henne-pin KG; 10-2 Cyrus, Pope Co., RBJ; 10-12 Hennepin

American Coot: late south 11-7 Wright and Cottonwood; 11-29 Wabasha; 11-30 Hennepin; late north 11-4 Marshall; 11-28 Ottertail; peaks 9-16 Marshall (26,780) AR; 10-16 Douglas (50,000) KE, PE. Semipalmated Plover: early 7-16 Clay; 8-9 Lyon; late south 9-6 Stearns; 9-16 Carver; 9-26 Lyon; late north 9-14 Mille Lacs.

Piping Plover: 8-10 and 11 Mille Lacs MI, only

Killdeer: late south 11-17 Wabasha; 11-20 Houston; 11-25 Lac Qui Parle; late north 10-9 Ottertail and Douglas; 10-24 Duluth.

American Golden Plover: early 8-22 Clay (1000) EA; 9-1 Duluth; late south 9-25 Hennepin; 10-30 Ren-ville; late north 9-27 Duluth; 10-16 Grant; 10-26 Ottertail:

Black-bellied Plover: early 8-9 Lyon; 8-31 Grant; late south 10-1 Pope; 10-30 Lyon; late north 10-22 Clay; 10-31 Duluth and Lake.

Ruddy Turnstone: 4 reports: 9-1 and 2 Duluth; 9-1, 9-8, 9-10 Mille Lacs MI; 9-6 Lyon LP; 9-25 Lyon PE. American Woodcock: late south 10-10 Washington; 10-28 Hennepin; 10-31 Blue Earth; late north 10-4 Kanabec; 10-10 Cook.

Common Snipe: late south 11-8 Blue Earth; 11-20 Nobles and Houston; late north 10-17 Ottertail; 11-6 Crow Wing; 9-26 Grant and Ottertail (80) KE.

Upland Plover: 3 reports: 7-1 Henneoin, F. Nubel; 8-3 and 10 Aitkin TS, JB; 8-10 Lyon PE.

Spotted Sandoiper: late south 9-7 Sherburne; 10-4 Dakota; late north 9-12 Douglas and Mille Lacs; 9-22 Crow Wing; 10-16 Grant.

Solitary Sandpiper: early 7-10 Hennepin; 7-16 Clay; late south 9-27 Hennepin; 10-1 Pope; 10-10 Scott; late north 9-4 Morrison; 9-8 Mille Lacs.

Willet: 3 reports: 8-19 Lyon PE; 9-7 Lyon LP; 9-19 and 20 Murray (6) ND.

Greater Yellowlegs: early 7-10 Aitkin and Sherburne; late south 10-30 Lvon; 10-31 Hennepin; 11-2 Winona; late north 10-17 Ottertail; 11-4 Mar-

Lesser Yellowlegs: early 7-8 Altkin; 7-9 Duluth; late south 10-23 Cottonwood; 10-24 Freeborn; 10-31 Wright; late north 10-17 Ottertall; 10-27 Marshall.

Knot: "rare in July," Agassiz NWR, Marshall Co., AR; very few inland reports.

Pectoral Sandpiper: early 7-9 Duluth; 7-10 Hennepin; late south 10-3 Lyon; 10-24 Freeborn; late north 10-17 Ottertail; 10-31 Grant and Duluth.

White-rumped Sandpiper: early 8-10 Crow Wing; 8-12 Cottonwood; late 8-22 Lyon; 8-26 Hennepln; 9-3 Cottonwood.

Baird's Sandpiper: early 7-16 Clay; 7-26 Mille Lacs; late south 9-20 Wright; 9-25 Lyon; 9-28 Car-ver; late north 10-23 Cook; 11-6 Grant.

Least Sandpiper: early 7-10 Lyon; 7-12 Sherburne; late south 9-5 Wright; 9-6 Stearns; 10-3 Lyon; late north 9-10 Mille Lacs; 10-10 Grant.

Dunlin: early 7-3 Duluth; late south 9-29 Wright; 10-30 Lyon; late north 10-16 Grant; 10-22 Clay; 10-31 Duluth.

Short-billed Dowitcher: 7-10 Lyon (2) PE; only

Long-billed Dowltcher: early 7-10 Hennenin; 9-6 Grant; late south 10-2 Lyon; 10-16 Pope; late north 10-16 Grant.

dowitcher, sp.: reported from 7-3 to 10-20 in Lyon, Scott, Pope, Waseca, Grant, Marshall, Mille Lacs, Scott, Pope, Wase Clay and Duluth.

Stilt Sandpiper: early 7-9 Duluth; 7-10 Hennevin, Lyon and Yellow Medicine; late south 9-13 Hen-nepin; 9-26 Lyon; late north 10-10 Grant KE; 10-17

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Ottertail KE, PE (may be latest date on record); peak 8-22 Lyon (1000) LP.

Semipalmated Sandpiper: early 7-5 Mille Lacs; 7-10 Lyon; late south 8-31 Hennepin; 9-6 Stearns; 9:26 Lyon; late north 9-2 Duluth; 10-10 Grant.

WESTERN SANDPIPER: 7-17 Wabasha KE, PE; 8-10 Aitkin RHJ; 8-9 and 19 Lyon PE; HK reported this species on 9 different dates in Lyon Co. (Marshall) from 7-14 to 9-25, with a peak of 8 on 9-5; there is little doubt that this bird deserves to be on Minnesota's regular list.

Buff-breasted Sandpiper: reported from Duluth (9-2 and 9-11, JG, C. and L. Hewitt) and Marshall, Lyon Co. (8-9 to 8-19, 8-29, 9-6, 9-12, 9-23, PE, HK, LP); most reports ever from inland Minn.

Marbled Godwit: 7-16 Clay, E. Welter; 8-9 and 19 Lyon (5) PE; 8-29 Lyon LP; only reports.

Sanderling: early 7-10 Lyon; 7-11 Duluth; late south 9-26 Lyon; late north 10-16 Grant; 10-24 Duluth

American Avocet: 7-16 Clay. E. Welter:10-31 Duluth (2) BL; this bird is seldom reported in fall. Wilson's Phalarope: early 7-10 Lyon; 7-16 Clay; late south 9-4 Wright; 9-6 Lyon; 9-28 Carver; late north 7-30 Aitkin; 7-31 Crow Wing.

Northern Phalarope: 4 reports: 8-9 and 12 Lyon PE; 9-6 Stearns JG; 9-6 Lyon (100) LP; 10-1 Scott PE; S

jaeger, s Parasitic. sp.: 9-7 Duluth, K. Carr; most likely a

Glaucous Gull: 11-12 Duluth (3) JG, MMC.

Herring Gull: late south 11-14 Cottonwood; 11-27 Hennipen; 11-28 Dakota; late north 11-27 Crow Wing; 11-29 Douglas; peak 11-12 Duluth (3000) JG. Ring-billed Gull: late south 11-28 Dakota and Wright; 11-30 Hennepin; late north 11-12 Duluth; 11-21 Grant; peak 9-6 Grant and Ottertail (2000)

Franklin's Gull: late south 11-15 Hennepin; 11-17 Pope; 11-27 Carver, J. Gilbert; late north 10-31 Ottertail; peak 10-18 and 11-23 Carver (5000) KH. Bonaparte's Gull: early 8-16 Mille Lacs; 9-1 Duluth; late south 11-16 Hennepin; 11-21 Dakota; 11-27 Wright; late north 10-31 Grant; 11-7 Crow Wing.

Forster's Tern: late south 9-20 Kandiyohi; 10-3 Wright; late north 9-6 Ottertail; 9-24 Grant: 9-30 Marshall.

Common Tern: late south 9-21 Carver; late north 9-12 Duluth and Crow Wing: 9-14 Mille Lacs. Caspian Tern: early 8-23 Mille Lacs; 9-11 Wright; late south 10-3 Wabasha and Wright; 10-5 Carver; late north 9-13 Marshall; 9-14 Mille Lacs.

Sherburne; 9-20 Crow Wing; Black Tern: late south 9-11 Sherburne Pope; 9-27 Ramsey; late north 9-17 Crow 9-24 Grant.

Mourning Dove: late north 11:17 Clearwater; 11-27 Grant; 11-28 Aitkin.

Yellow-billed Cuckoo: only 1 report: 8-10 Aitkin RHJ.

Black-billed Cuckoo: late north 9-18 Becker and St. Louis; 10-2 Kanabec; late south 9-14 Dakota; 9-19 Sherburne.

Screech Owl: reported from Olmsted, Nobles. Washington, Hennepin, Big Stone and Cottonwood. Great Horned Owl: reported from Aitkin, Grant, Duluth, Crow Wing, Cass, Mille Lacs, Morrison, Wasseca, Olmsted, Lac Qui Parle, Wright, Dodge, Stearns, Carver, Hennepin, Sherburne and Pope; only 4 reports last fall.

Snowy Owl: 9 reports: 10-10, 11-3, 11-12 Cook OP; 10-25 Rice OR; 11-10 Clay EA; 11-11 Duluth, E. Putnam; 11-17 Sherburne BD; 11-19 Winona TV; 11-24 Lac Qui Parle, fide PE; 12-3 Clearwater RD; Duluth, E. 11-24 Marshall AR.

Barred Owl: reported from Crow Wing, Cook, Ait-kin, Stearns, Morrison, Wabasha, Washington, HAWK-OWL: 10-29 St. Louis (1) JAB Hennepin, Winona, Carver and Goodhue. - Z Long-eared Owl: 10-31 Cottonwood LF; 11-9 Duluth MMC; 11-28 Dakota RC.

Short-eared Owl: 11-3 Pope BH; only report.

Saw-whet Owl: 8-14 St. Louis BDC; 10-20 and 11-4 Duluth, K. Sundquist.

Whip-poor-will: 2 reports: 9-25 Kanabec DB; 10-1 Marshall HK.

Common Nighthawk: late south 9-28 Ramsey; 10-1 Scott; 10-6 Hennepin; late north 9-8 Crow Wing; 9-21 Grant; peak 8-18 Duluth (750), D. Olsen.

Chimney Swift: late south 9-23 Wabasha; 9-24 Lyon; 9-28 Ramsey; late north 9-5 Crow Wing; 9-7 Duluth.

Stearns; 10-2 Cottonwood; 10-5 Rice; late north 9-21 Mille Lacs; 10-5 Cook.

Belted Kingfisher: late south 11-12 Carver; 11-21 Wabasha; 11-30 Hennepin; late north 11-15 Crow Wing; 11-28 Ottertail.

Yellow-shafted Flicker: late north 10-9 Cook; 10-16 St. Louis; 10-24 Cass.

Wing, Cook, Cass, Duluth, Mille Lacs, Aitkin, Morrison, Clearwater, Blue Earth, Dakota, Washington, Hennepin, Winona, Wabasha, Wright, Lac Qui Parle, Carver, Anoka, Sherburne, Pine, Pope and Becker; only 10 reports last year.

Red-bellied Woodpecker: reported from Carver, Blue Earth, Dakota, Washington, Hennepin, Win-ona, Wabasha, Dodge, Wright, Sherburne, Morri-son (10-31 DB) and Aitkin (all year at feeder, LP). Red-headed Woodpecker: late south 10-19 Wabasha; 10-24 Hennepin; 11-1 Sherburne; late north 10-4 Cook; 10-9 Ottertail.

Yellow-bellied Sapsucker: late south 10-2 Cotton-wood; 10-13 Olmsted; 10-18 Hennepin; late north 10-5 Cook; 10-6 Koochiching.

Black-backed 3-toed Woodpecker: 9-20 and 11-28 St. Louis, fide JG; 9-24 and 10-10 Cook MMC; 10-23 Cook KE, PE, JG; 11-2 and 6 Crow Wing JB; 11-27 and 30 Crow Wing TS; an invasion year for this and the following species.

MORTHERN 3-TOED WOODPECKER: perhaps the greatest influx ever of this species: 9-20 Ogish-kemuncie, St. Louis Co., J. Wilson; 10-23 and 24 Basswood Lake, Lake Co., A. Olson; 11-10 Duluth JG, MMC; 11-11 Duluth, K. Sundquist; 11-20 Nimrod. Wadena Co. DB; 11-27 and 30 Deerwood, Crow Wing Co. (3) TS.

Eastern Kingbird: late south 9-16 Sherburne; 9-20 Wabasha; 10-3 Hennepin; late north 9-16 Ottertail; 10-10 Mille Lacs; peak 9-6 Grant and Ottertail; 10-10 Mil tail (200) KE.

Western Kingbird: 6 reports: 8-8 Kandivohi BH; 8-10 Hennepin OJ; 8-18 Murrav ND; 8-19 Pope WH; 8-20 Sherburne BD; 9-6 Wright ES.

Great Crested Flycatcher: late south 9-6 Pope; 9-7 Hennepin; 9-15 Washington; late north 10-24 Cass

Eastern Phoebe: late south 10-17 Wright; 10-24 Hennepin; 11-4 Carver KH; late north 10-5 Morrison; 10-7 Crow Wing.

Yellow-bellied Flycatcher: early south 8-26 Waba-sha; 8-28 Anoka; late 9-3 Wright; 9-8 Duluth.

Traill's Fivcatcher: 9-11 Morrison LR; 9-18 and 21 Hennepin ES; 8-14 Wright ES; only reports.

Least Flycatcher: late south 9-10 Cottonwood 9-14 Murray; 10-9 Hennepin; late north 9-22 Duluth; 9-30 Morrison.

Eastern Wood Pewee: late south 9-21 Wabasha; 9-23 Lyon; 9-26 Hennepin; late north 9-8 Duluth; 9-25 Crow Wing.

WESTERN WOOD PEWEE: first state record: 9-25 Cottonwood, Lyon Co. PE; seen and heard well; details will be published here in full.

Olive-sided Flycatcher: early south 8-15 Wright; 8-22 Hennepin; late south 9-14 Hennepin; 9-30 Dakota; 10-4 Hennepin; late north 8-23 Crow Wing; 8-29 Duluth.

Horned Lark: late north 11-7 Lake; 11-13 Cook: 11-26 Ottertail.

Tree Swallow: late south 10-12 Hennepin; 10-17 Wright; 10-20 Carver; late north 10-3 Crow Wing; 10-16 Grant; peak 9-7 Sherburne (20,000) BD.

Bank Swallow: late south 9-3 Murray; 9-25 Henne-pin and Lyon; late north 9-24 Douglas; 10-3 Crow Wing.

Rough-winged Swallow: only 3 reports: 8-6 Blue Earth LF; 8-29 Rice BDC; 9-25 Hennepin EM.

Barn Swallow: late south 10-11 Lyon; 10-15 Carver; 10-24 Cottonwood; late north 9-24 Douglas; 10-2 Mille Lacs.

Cliff Swallow: late south 9-23 Sherburne; 9-25 Lyon; 10-2 Hennepin; late north 9-11 Mille Lacs; 9-22 Crow Wing; peak 9-7 Sherburne (3000) BD. Purple Martin: late south 9-14 Olmsted; 9-25 Wright; 10-12 Hennepin; late north 9-14 Ottertail; 9-30 Crow Wing.

Gray Jay: reported from Clearwater, Crow Wing, St. Louis, Cook, Koochiching, Cass, Aitkin, Carlton, Lake and Itasca.

Blue Jay: peak 9-16 Duluth (5000) MMC.

Black-billed Magpie: 5 reports: 10-7 Duluth, D. Sheer; 10-10 Clearwater RD; 10-22 Marshall and Beltrami (7) KE; 10-23 Norman EA; 11-25 Aitkin I.P.

Common Raven: reported from Carlton, Lake, St. Louis, Marshall, Clearwater, Cook, Crow Wing and Beltrami.

Boreal Chickadee: 6 reports: 9-24 Cook (9) MMC; 10-6 Koochiching DB; 10-16 St. Louis NH; 10-21 Lake RBJ; 10-22 St. Louis RBJ; 11-1 Duluth, T. Peck.

Tuffed Titmouse: 9-6 Hennepin RBJ; 11-29 Carlos, Douglas Co., 1 at feeder, H. Lewis.

Red-breasted Nuthatch: early south 8-27 Hennepin; 8-29 Washington; 9-11 Sherburne and Ramsey. Brown Creeper: early south 9-11 Hennepin; 9-13 Chisago; 9-17 Nobles; late north 11-19 Crow Wing; 11-28 Grant; 12-1 Clearwater.

House Wren: late south 10-5 Hennepin; 10-6 Dakota; 10-11 Olmsted; late north 9-12 Crow Wing; 9-25 Duluth.

Winter Wren: late south 10-18 Washington; 10-19 Hennepin; late north 10-5 Koochiching; 10-6 Duluth.

Long-billed Marsh Wren: late south 9-28 Carver; 10-11 Washington; 10-21 Hennepin; late north 8-31 Crow Wing; 10-7 Morrison.

Short-billed Marsh Wren: late south 9-8 Sherburne; 9-25 Lvon; 10-3 Hennebin; 2 north reports: "August" Ottertail RHJ; 8-12 Aitkin RHJ.

CAROLINA WREN: 4 reports: 9-30 Minneapolis CH; 10-4 through Nov. Washington WWL; 10-23 to Dec. Washington. J. and S. Lundgren same bird?); 11-20 Pengilly, Itasca Co., E. Bloomgren.

Mockingbird: 1 report: 8-8 Onamia, Mille Lacs Co. MI.

Cathird: late south 10-7 Hennepin; 10-11 Olmsted; 11-4 Ramsey; late north 9-24 Duluth; 10-1 St. Louis. Brown Thrasher: late south 10-9 Chisago; 10-16 Hennepin; 12-3 Dakota, M. Goldberg; late north 10-22 Clay; 11-30 Ottertail.

Robin: late north 11-24 Mille Lacs; 11-27 Grant; 11-28 Crow Wing; peak 9-5 Carver (1000) KH.

VARIED THRUSH: 12-3 Mendota Heights, Dakota Co., M. Goldberg.

Wood Thrush: late south 9-23 Dakota; 10-3 Hennepin: 10-5 Winona; 1 report north: 8-10 Malmo. Aitkin Co. RHJ.

Hermit Thrush: early south 9-29 Stearns; 9-30 Chisago; late south 10-14 Winona; 10-23 Hennepin; 10-24 Cottonwood; late north 11-6 St. Louis; 11-7 Duluth.

Swainson's Thrush: early south 8-22 Washington; 8-23 Henneoin; lafe south 10-22 Dakota; 11-11 Cottonwood LF; 11-28 Ramsey, M. Olson; late north 9-24 Cook; 9-27 Duluth.

Gray-cheeked Thrush: early 8-27 Chisago; 8-30 Hennepin; late south 9-12 Hennepin; late north 9-27 Duluth; 10-3 Cook.

Veery: late south 9-27 Hennepin; late north 9-15 Mille Lacs; 9-18 Lake.

Winona; 11-13 Dakota; late north 10-22 Aitkin; 11-11 Cook.

Golden-crowned Kinglet: early south 9-27 Stearns; 9-28 Carver and Hennepin; late north 10-28 Duluth; 11-4 Morrison; 11-14 Grant.

Ruby-crowned Kinglet: early south 8-25 Dakota; 9-8 Hennepin; late south 10-26 Olmsted and Cottonwood; 10-29 Hennepin; late north 10-21 Crow Wing; 10-24 Duluth.

Water Pipit: more common than usual: early 9-23 Lyon; 9-26 Ottertail and Lake; late south 10-2 Pope and Hennepin; late north 10-31 Altkin; 11-6 Lake and Grant; peak 10-16 Aitkin (150) JB, TS.

Bohemian Waxwing: 4 reports: 11-7 Duluth (3) JG; 11-7 Lake (11) DB; 11-8, 11-23, 11-30, 12-1 Crow Wing (450) JB; 11-26 Grant (1) KE.

Cedar Waxwing: late north 10-31 Clearwater; 11-7 Ottertail; 11-20 Crow Wing.

Northern Shrike: early south 10-14 Hennepin; 11-12 Sherburne; early north 10-17 Crow Wing; 10-28 Duluth; 11-3 Cook.

Loggerhead Shrike: only 1 report (none last year): 8-24 Duluth MMC.

Yellow-throated Vireo: late south 9-18 Hennepin; 9-23 Wabasha; 10-7 Stearns; late north 9-17 Pine; 9-21 Crow Wing.

Solitary Vireo: early south 8-28 Wright: 9-8 Hennepin; late south 9-27 Sherburne; 10-3 Wright; 11-3 Hennepin RBJ; late north 10-4 Crow Wing; 10-6 Duluth.

Red-eyed Vireo: late south 9-22 Sherburne; 9-27 Hennepin; 10-3 Wnight; late north 9-8 Duluth; 9-11 Morrison.

Philadelphia Vireo: early 8-27 Wabasha; 8-31 Hennepin; late south 9-12 Wright; 9-13 Dakota; 9-18 Hennepin; late north 9-8 Duluth; 9-28 Morrison.

Warbling Vireo: late south 9-10 Wright; 9-11 Hennepin; 9-23 Wabasha; late north 9-8 Duluth; 9-13 Grant.

Black and White Warbler: early south 8-19 Wright and Hennepin; late south 9-11 Carver; 9-14 Ramsey; 9-29 Hennepin; late north 9-21 Crow Wing; 9-23 Duluth.

Golden-winged Warbler: late south 9-10 Wright; 9-24 Ramsey; 9-25 Hennepin; late north 9-6 Mille Lacs; 9-8 Duluth; peak 8-21 Crow Wing (25) TS.

Tennessee Warbler: early south 8-20 Ramsey; 8-24 Dakota; late south 10-3 Carver; 10-10 Hennepin; late north 10-7 Morrison; 10-8 Duluth; 9-20 Crow Wing.

Orange-crowned Warbler: early 8-26 Aitkin; 8-29 Carver; late south 10-11 Washington; 10-16 Wright; 10-24 Hennepin; late north 9-28 Duluth; 10-11 Morrison.

Nashville Warbler: early south 8-25 Ramsey and Washington; late south 10-4 Sherburne; 10-7 Watonwan; 10-12 Hennepin; late north 10-4 Crow Wing; 10-5 Duluth.

Parula Warbler: early south 8-26 Sherburne; 9-8 Hennepin; late south 9-27 Hennepin; 9-28 Dakota; late north 9-8 Crow Wing.

Yellow Warbler: late south 9-5 Hennepin; 9-6 Watonwan and Sherburne; late north 9-11 Crow Wing; 9-13 Duluth.

Magnolia Warbler: early south 8-23 Ramsey; 8-25 Hennepin; late south 10-9 Hennepin; late north 9-16 Crow Wing; 9-18 Lake; 9-28 Duluth.

Cape May Warbler: 4 reports: 8-30 Crow Wing TS; 9-2 Duluth JG; 9-19 Hennepin VL; 9-23 Lyon HK. Black-throated Blue Warbler: 2 reports: 9-11 Hennepin, Mrs. A. Fuller; 9-11 Wright ES.

Myrtle Warbler: early south 8-18 Wabasha; 9-12 Wright; late south 10-24 Hennepin; 10-29 Wabasha; 10-30 Nobles; late north 10-31 Ottertail; 11-11 Duluth.

Black-throated Green Warbler: early south 9-10 Carver; 9-15 Hennepin; late south 9-23 Ramsey; 9-26 Watonwan; 9-27 Hennepin; late north 9-21 Crow Wing 9-25 Duluth.

Cerulean Warbler: 8-22 Wright (2) KG, only report. Blackburnian Warbler: early south 8-19 Wright and Watonwan; late south 8-29 Wright; 9-23 Watonwan; 9-28 Hennepin; late north 8-29 Duluth; 9-11 Crow Wing.

Chestnut-sided Warbler: early south 8-5 Washington; 8-25 Ramsey; late south 9-10 Washington and Wright; 9-27 Hennepin; 10-7 Stearns; late north 9-18 Lake and Duluth.

Bay-breasted Warbler: early south 9-4 Hennepin; late south 9-11 Wright; late north 9-12 Crow Wing; 10-2 Duluth. Blackpoll Warbler: only 4 reports: 9-2 Duluth JG; 9-15 Hennepin EM; 9-18, 9-27, 10-8 Hennepin VL; 9-20 Hennepin FN.

Pine Warbler: early south 8-19 Wright; late south 9-28 Hennepin; 10-7 Stearns; late north 9-8 Duluth; 9-27 Crow Wing.

Paim Warbler: early south 9-11 Ramsey; late south 9-30 Watonwan; 10-9 Dakota; late north 10-2 Crow Wing; 10-5 Morrison; 10-12 Duluth.

Ovenbird: late south 9-11 Wright; 9-17 Ramsey; 10-7 Hennepin; late north 9-16 Morrison; 9-22 Crow Wing.

Northern Waterthrush: early south 8-14 Wright; 8-19 Washington; late south 9-24 Hennepin; 9-27 Washington; 9-28 Pope; late north 9-11 Morrison; 9-23 Duluth.

Connecticut Warbler: 5 reports: 9-3 Wright ES; 9-6 Hennepin OJ; 9-18 Lake RBJ; 9-19 Lake JAB; 9-30 Olmsted CW.

Mourning Warbler: early south 8-29 Pope; late south 9-5 Wright; late north 9-11 Morrison.

Yellowthroat: late south 9-25 Lyon; 9-26 Wright; 9-27 Hennepin; late north 10-7 Crow Wing; 10-11 Cook.

Wilson's Warbler: early 8-14 Wright; 8-16 Hennepin; late south 9-11 Wabasha; 9-25 Lyon; 9-27 Hennepin; late north 9-8 Mille Lacs and Duluth; 9-16 Morrison.

Canada Warbler: early south 8-22 Wright; 8-23 Ramsev and Watonwan; late south 9-16 Carver; 9-26 Hennepin; late north 8-15 St. Louis; 8-20

American Redstart: late south 9-12 Wabasha; 9-27 Hennepin; late north 9-16 Morrison; 9-19 Crow Wing; 9-23 Duluth.

Bobolink: late south 8-25 Ramsey: 9-4 Hennepin; 9-5 Lyon; late north 9-11 Grant; 9-13 Mille Lacs. Eastern Meadowlark: late south 10-19 Sherburne; 10-24 Wright; late north 11-4 Duluth; 11-9 Cook; 11-24 Mille Lacs.

Western Meadowlark: late south 11-21 Pope; 11-30 Nobles and Murray; late north 11-18 Clearwater; 11-27 Douglas.

Yellow-heeded Blackbird: late south 10-1 Scott; 10-10 Wabasha; 10-22 Hennepin; late north 10-11 Cook; 11-6 Grant KE; peak 9-12 Wright (2000)

Red-winged Blackbird: late south 11-22 Waseca; 11-27 Sherburne: 11-29 Winona; late north 11-26 Ottertail; 12-1 Mille Lacs.

Orchard Oriole: 3 reports: 8-1 Murray ND; 8-19 Lyon PE; 9-12 Duluth, B. and D. Hojnacki.

Baltimore Oriole: late south 9-30 Dakota; 11-28 Ramsey, fide BH; 12-1 Washington, Mrs. Kuby; late north 8-29 Ottertall; 9-2 Duluth.

Rusty Blackbird: early 9-29 Wright; 10-11 Stearns; late south 11-7 Hennepin; 11-11 Wabasha; 11-13 Pope; late north 11-7 Cook; 11-9 Duluth.

Brewer's Blackbird: late south 11-3 Nobles; 11-16 Hennepin; 11-22 Waseca; late north 10-8 Duluth; 11-6 Grant.

Common Grackle: late south 11-27 Waseca; 11-29 Winona; 11-30 Watonwan; late north 11-9 Grant; 11-11 Duluth; beak 10-12 to 10-27 Hennevin (500,000-750,000) BH; an unprecedented concentration.

Brown-headed Cowbird: late south 10-20 Dakota; 10-31 Hennepin; late north 10-9 Wilkin and Clay; 11-30 into Dec. Clearwater RD.

Scarlet Tanager: late south 9-20 Washington; 9-27 Sherburne; 10-1 Hennepin; late north 9-30 Duluth; 11-26 Grant KE (latest date on record).

Cardinal: 2 north reports: 10-26 Lutsen, Cook Co.; 11-1 Little Marais, Lake Co.

Rose-breasted Grosbeak: late south 9-27 Hennepin and Stearns; 9-28 Dakota; 10-7 Ramsey; late north 9-21 Duluth; 9-28 Morrison.

Indigo Bunting: late south 9-5 Dakota; 9-11 Wright; 9-26 Pope; late north 9-21 Duluth.

Dickcissel: 8-3 and 4 Watonwan LF; 8-29 Rice BDC; 9-6 Grant KE; only reports.

Evening Grosbeak: early south 10-31 Sherburne; 11-5 Hennepin; 11-8 Ramsey.

Purple Finch: reported from 17 counties north to Cook and Aitkin, south to Wabasha and Watonwan

Pine Grosbeak: 2 south reports: 11-21 Hennepin VL; 11-29 Winona TV; also reported from 1f northern counties (only 1 report last fall).

Hoary Redpoil: 4 reports: 11-3 Duluth MMC; 11-7 Cook DB; 11-21 and 26 Grant (4) KE.

Common Redpoll: early south 11-3 Ramsey; 11-7 Hennepin; early north 10-11 Cook; 10-22 St. Louis; 10-28 Duluth; peak 11-11 Duluth (5000) MMC.

Pine Siskin: early south 10-1 Ramsey; 10-12 Stearns; 11-1 Hennepin; peak 10-28 Duluth (2000) MMC, JG.

American Goldfinch: late north 10-28 Duluth; 11-3 Cook; 11-14 Grant.

Red Crossbill: reported from Carver, St. Louis, Beltrami, Duluth, Lake, Grant, Clearwater, Crow Wing; only 1 report last year.

White-winged Crossbill: reported from Hennepin, Stearns, Pine, St. Louis, Clay, Grant, Cook, Crow Wing; none last fall.

Rufous-sided Towhee: late south 10-5 Wright; 10-7 Hennepin; late north 9-23 Crow Wing; 10-2 Kanabec; 11-28 and 12-5 Mille Lacs MI.

Lark Bunting: 8-12 Watonwan LF; 10-8, 9, 10 Tofte, Cook Co. JP.

Savannah Sparrow: late south 10-10 Winona; 10-19 Dakota; 10-30 Hennepin; late north 10-8 Duluth; 10-10 Crow Wing.

Grasshopper Sparrow: 8-11 Mille Lacs MI, only report.

Le Conte's Sparrow: late south 10-23 Watonwan; 10-24 Olmsted; 10-31 Hennepin; late north 9-5 Marshall.

Sharp-tailed Sparrow: 2 reports: 8-17 Waubun marsh (3) FL; 9-28 Hennepin CH.

Vesper Sparrow: late south 10-17 Hennepin and Watonwan; 10-21 Dakota; late north 11-6 Grant; 11-21 Cook OP.

Lark Sparrow: 2 reports: 9-18 Hennepin, Mrs. L. Lackore; 9-24 Grant KE.

Slate-colored Junco: early south 8-25 Dakota; 9-20 Hennepin; 9-21 Stearns; late north 11-28 Cook; 11-30 Crow Wing; 12-8 Clearwater.

Oregon Junco: reported from Hennepin, Wabasha, Carver, Winona, Washington, Crow Wing and Duluth.

Tree Sparrow: early 9-30 Mille Lacs; 10-2 Cook; 10-6 Duluth; late north 11-21 Grant; 11-22 Duluth; 11-27 Crow Wing; peak 10-29 Crow Wing (1000) TS. Chipping Sparrow: late south 10-11 Dakota; 10-18

Chipping Sparrow: late south 10-11 Dakota; 10-18 Hennepin; 10-22 Watonwan; late north 10-17 Ottertail; 11-4 Duluth JG.

Clay-colored Sparrow: late south 9-11 Carver; 9-20 Olmsted; 10-1 Hennepin; late north 9-26 Crow Wing; 10-6 Grant.

Field Sparrow: late south 10-17 Wright; 10-23 Traverse; 10-31 Nobles; only report north 9-18 Duluth BH.

Harris' Sparrow: early 9-20 Duluth; 9-25 Crow Wing and Cook; late south 11-14 Watonwan; 11-21 Murray; 12-1 Olmsted; late north 11-9 Duluth; 11-13 Clearwater.

White-crowned Sparrow: early 9-15 Cook; 9-16 Duluth; late south 10-15 Hennepin; 10-31 Nobles; 11-12 Olmsted; late north 10-10 Cook; 10-18 Duluth.

White-throated Sparrow: late south 11-12 Hennepin; 11-13 Ramsey; late north 10-31 Duluth; 11-10 Crow Wing; 12-11 Clearwater.

Fox Sparrow: early 9-22 Duluth; 9-23 Cook and Crow Wing; late south 11-12 Carver; 11-23 Blue Earth; 11-24 Hennepin; late north 11-6 Duluth; 11-30 Crow Wing.

Lincoln's Sparrow: early south 8-19 Washington; 8-22 Hennepin; late south 10-13 Olmsted; 10-16 Hennepin; 10-17 Wright; late north 10-17 Ottertail; 10-31 Lake.

Swamp Sparrow: late south 10-17 Watonwan and Wright; 10-20 Dakota; late north 10-17 Ottertail and Crow Wing; 11-7 Duluth.

Song Sparrow: late south 11-9 Hennepin; 11-29 Lac Qui Parle; 12-2 Dakota; late north 10-23 Cook; 11-12 Duluth.

1

Lapland Longspur: early 9-11 Duluth; 10-4 Cook; 10-9 Wilkin; late north 11-6 Grant; 11-7 Duluth; 11-8 Cook; peak 10-31 Crow Wing (2000) TS.

SMITH'S LONGSPUR: no less than 3 reporth with good details: 10-13 Duluth JAB (see Notes of Interest, Summer 1971 Loon); 10-9 Wilkin (at least 4) and 11-6 Grant KE (see Notes of Interest, Dec. 1971 Loon); also on 9-25 in Lake Co. 2 were reported with incomplete details by J. Pratt.

Snow Bunting: early 9-18 Lake; 9-26 Cook; 10-9

Duluth.

AIR, Agassiz NWR
EA, Elizabeth G. Anderson
JAB, James A. Baumhoffer
JB, Jo Blanich
DB, Don Bolduc
BDC, Betty & Doug Campbell
MMC, Marjorie M. Carr
RC, R. Christman
MC, Mable Coyne
RD, Richard C. Davids
ND, Nelvina DeKam
BD, Bob Drieslein
WKE, Whitney & Karen Eastman
KE, Kim R. Eckert
PE, Paul Egeland
WF, Wayne Feder
LF, Mrs. L. A. Feil
PF, Pepper Fuller
JG, Janet C. Green
KG, Karol Gresser
HH, Helen Hatlelid

WH, Mr. & Mrs. Wayne Hawkinson
KH, Kathy Heidel
NH, Nels J. Hervi
BH, Bruce A. Hitman
CH, Charles L. Horn, Jr.
MI, M. Ivanovs
RHJ, Rev. & Mrs. Richard H. Jackson
RBJ, Robert B. Janssen
EJ, Mrs. E. W. Joul
OJ, Oscar L. Johnson
EK, Earl D. Kopischke
HK, Henry Kyllingstad
ML, Margaret B. Lackore
VL, Violet Lender
FL, F. Z. Lesher
BL, Bill Litkey
WHL, William H. Longley
WWL, Mrs. W. W. Lundgren
WDM, Wynn & Don Mahle
EM, Evelyn W. Moyle
MM, Mrs. Mary Muehlhausen
FN, Fran Nubel
LP, Lloyd Paynter
OP, Mrs. Oliver Peterson
OR, Orwin A. Rustad
LR, L. S. Ryan
TS, Terry Savaloja
JS, John L. Schladweiler
ES, Evelyn T. Stanley
FKS, Forest & Kirsten Strand
PT, Pat Telfer
TV, Brother Theodore Voelker
CW, Carol Welch

FIRST CONFERENCE ON STATUS OF NORTH AMERICAN OSPREY

Proceedings of the recent North American Osprey Research Conference are now in preparation for expected distribution in late summer to interested subscribers as well as the 80 participants. The group met in mid-February at the College of William & Mary, Williamsburg, Va., where Dr. Mitchell A. Byrd, head of the Biology Department, presided as host and resident chairman.

Serving with Dr. Byrd on the committee for organization of the conference were John C. Ogden, Research Biologist currently engaged in studies of Ospreys and Bald Eagles at Everglades National Park, Florida; and Robert S. Kennedy, a candidate for a doctorate at Louisiana State, who last year earned his M.A. under Dr. Byrd's tutelage in work involving Osprey reproduction in nearby Chesapeake Bay.

At the conclusion of the sessions the participants elected an American Osprey Committee from five general regions of the United States to publish the Proceedings; to implement the aims and activities of the group; to seek Federal cooperation in promotion of direct and indirect protective measures for the species; and to stand to serve in an advisory capacity to the

Bureau of Sport Fisheries and Wildlife with respect to future work on this species.

Dennis Puleston, Chairman of the Board of Trustees of the Environmental Defense Fund, recounted the shocking record of Osprey decimation in the Long Island area, especially on Gardiner's Island where, from a high of over 300 pairs in 1948, the population has dwindled to 34 pairs, with a concurrent drop of the reproduction rate from 2.2 average per nest to a .5 rate in 1971. Describing the lack of predation or human disturbance there, he ascribed the disaster to the effects of DDT and derivatives and to PCBs, now found at high levels in fish of the area.

Individuals or institutions wishing to receive a copy of the paperbound, published PROCEEDINGS OF THE FIRST NORTH AMERICAN OSPREY RESEARCH CONFERENCE may do so by writing to Mitchell A. Byrd, Dept. of Biology, College of William & Mary, Williamsburg, Va. 23185. Sale price is expected to be no more than \$2.00. Requests for copies need not be accompanied by prepayment; a bill will be sent at the time the order is filled.

G. F. Fernandez, P. O. Box 53, Dartmouth, Mass. 02714.

THE 1970 CHRISTMAS COUNT

by Manley Olson

The 1970 Count was a record-breaker in several respects. The 26 counts betters the record of 24 counts in 1967. Twenty-four of the counts were reported in American Birds. A very encouraging note is that only one area covered in 1969 was not covered in 1970, that being Collegeville. New counts included Sherburne Refuge. last censused in 1967, Warren, and Mountain Lake-Windom.

The 104 species observed tops the record 103 species seen in 1969. No new species were added to the all-time list, however.

Afton's 60 species was also a record. The previous high was 50 species on the 1959 Afton count. Winona and Red Wing tied for second with 48 species. Of counts taken totally in Minnesota the leaders were Bloomington, Duluth, and St. Paul with 46 while St. Paul-N. E. Suburban recorded 45 species. The total of seven counts with 45 or more species is also a record.

Species seen for only the second time on Christmas Counts were the Black-crowned Night Heron at Bloomington (previously seen at Minneapolis in 1941), Harlequin Ducks at Duluth (Duluth 1961) and a Turkey at Willmar (Fergus Falls 1967).

In addition to the 104 species seen on the counts, five additional species were seen during the count period: Marsh Hawks at International Falls and Warren, Black-backed Three-toed Woodpecker at International Falls, Saw-whet owl at St. Paul-N.E., Osprey at Afton, and Clark's Nutcracker at Bloomington. The later two species have never been recorded on a Minnesota Christmas Count.

Several limitations concerning the data should be pointed out. First I did not agree to undertake this assignment

until December 1971, thus there was virtually no possibility of contacting compliers to verify observations since nearly a year had elapsed since the counts. Secondly, most of the report was compiled from the data in American Birds. Only in a few cases did I have access to the original reports of observers. Thus on questionable reports I have no certainty that substantiating details were submitted. Finally as in past years several counts include territory outside Minnesota. Only the Fargo-Moorhead count included separate lists for each state; the figures for Afton, Red Wing and Winona included birds seen in Wisconsin (as they have for at least the past ten years). Thus to some degree the data presented here do not exclusively cover birds seen in Minnesota.

With one exception reports appearing in American Birds have not been altered. The Loggerhead Shrike and the Chipping Sparrows were deleted from the Red Wing count since I was aware that no such substantiating data existed to support these reports. Several other reports questioned in American Birds have been left in since I had no basis on which to exclude them. Also included were several reports not questioned by American Birds about which I have some doubts.

Among the more significant features of the 1970 count was the growing number of participants. Twelve counts had at least 15 observers, four exceeded 25. Bloomington had a record 50 observers.

Special recognition should go to Boyd and Helen Lien for serving on four counts. Maury and Isabel Godberg, Don and Shirley Bolduc and Wally Jiracek each helped on three counts and seven others served on two.

Int'l Fall Warren	Hibbing	Walker	Moorhead	Duluth	Corsby	Fergus Falls	Little Falls	Sherburne	Cedar Creek	Anoka	Willman	to the post of	St. Paul (N. E.)	Minneapolis	St. Paul	Afton	Excelsior	Bloomington	Red Wing	Cottonwood	Faribault	Marshall	Wabasha	Winona	Mt. Lake-Windom	No. of Counts
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No. of Individuals

Pied-billed Grebe																									1		1	
Great Blue Heron																	1		-						1		2	
Black-Cr. Night Heron																		*****	1				-				1	_
Canada Goose			-	-				205	4					17	2	3	20	200	1		-			40			9	49
Mallard						6		992			101	400		57	426	733	161	5183	1764	120	1	38	1	1250	71		16	1130
Black Duck												1			2	1	2	19	10	5				12	6		9	5
Pintail	-				-		-	-				-				1			1	1							3	
Green-winged Teal								1										-									1	
American Widgeon					-		-												1								1	
Wood Duck								1			1	1				2	1			2					1		7	
Redhead		-														1											1	
Canvasback			-			1																					1	
Greater Scaup	1		-																								1	
Lesser Scaup								2								1									1		3	
Common Goldeneye	21	-				40		73	6			5			7	176	28	1	210	13				1			12	58
Bufflehead				-				2									2		2								3	
Oldsquaw						9																					1	
Harlequin Duck						2																					1	
Common Merganser						4		2											33	1							4	4
Red-breasted Merganser	-		-			5																					1	
Goshawk						3											ж										1	
Sharp-shinned Hawk														2				ж									1	
Cooper's Hawk														1			1								1		3	
Red-tailed Hawk						1					2			5	4	9	6	4	7	1		x			5	4	11	4
Red-shouldered Hawk																		x						1			1	
Rough-legged Hawk										2				1	1		X	1	6			4		1	1		8	1
Golden Eagle											1									х				1			2	
Bald Eagle							1							2			3			16				18	11		6	5
Pigeon Hawk														1													1	
Sparrow Hawk											1			1	2	3	4	4	7	2		x	1	4	х		10	2
Ruffed Grouse	x		3	2		18	9	4	1	31	18	1	3	61			18			9					1		14	17
Sharp-tailed Grouse	21																										1	2
Bobwhite																	3					х			16		2	1
Ring-necked Pheasant					5	46	ж	17	4	1	28	1	х	111	26	147	76	90	76	2	19	25	1	2	10		20	81
Gray Partridge		19																								21	2	4

Warren	Hibbing	Walker	Moorhead	Duluth	Corsby	Little Falls	Fergus Falls	Sherburne	Cedar Creek	Anoka		Willmar	St. Paul (N. E.)	Minneapolis	St. Paul	Afton	Excelsior	Bloomington	Red Wing	Cottonwood	Faribault	Marshall	Wabasha	WInona	Mt. Lake-Windom	No. of Counts	No. of Individuals	
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Turkey													1														1	1
American Coot								14									1								x		2	15
Killdeer				_										2													1	2
Common Snipe														1		1	1	5	×						4		5	12
Glaucous Gull		-		-		1								_													1	1
Herring Gull						193					-								1					-			2	194
Ring-billed Gull													*						1								1	1
Mourning Dove						8	-				2			23		5	21		8	3	3			21	2	1	11	97
Screech Owl														1			2	2	2						1	1	6	9
Great Horned Owl		1			1	1		4		1			2	ж	1	2	2	1	2		2	2	4		1	10	16	37
Snowy Owl					3	4													1								3	8
Barred Owl			х			x								2		2	1	1	1	1				1	4		8	13
Long-eared Owl						1																					1	1
Short-eared Owl										13																	1	13
Belted Kingfisher																	3	1	1	1			4		2		6	12
Yellow-shafted Flicker													3	х		1	1	2			1	1	х	1	x	7	8	17
Plleated Woodpecker	1		4	x		1	2			1	1	-	х	10	2	2	8	5	2	6		х		1			14	46
Red-bellied Woodpecker				1					1				1	23		5	22	9	14	23		2	1	4	22	1	14	129
Red-headed Woodpecker									1	5	1			5			1	1	1	4		x		1	9		10	29
Yellow-bellied Sapsucker	1																								1		2	2
Hairy Woodpecker	1	1	27	11	10	14	2	8	1	8	6	3	9	77	5	30	48	48	29	29	12	2	7	1	29	5	26	423
Downy Woodpecker	1		22	15	6	102	11	10	10	13	34	8	17	117	11	42	92	72	60		13	4	18	10	43	14	25	797
Horned Lark		2								4					10		х			12	27	1.	41	4	10	105	10	216
Gray Jay	11		15	1		6																					4	33
Blue Jay	4	15	100	70		26	28	22	61	395	257	16	7	441	96	210	343	235	172	220	4	10	2	78	287	13	25	3112
Black-billed Magpie	3																										1	3
Common Raven	131		27	х		332																					3	490
Common Crow		1			4	47	3		8	163	131	7	3	156	42	152	845.	134	52	95	1	64	123	32	64	73	22	2200
Black-capped Chickadee	53		254	82	40	366	189	95	20	126	242	35	47	628	54	240	428	304	156	198	30	7	57	21	193	95	25	3960
Boreal Chickadee			14	4		2																					3	20
Tufted Titmouse											2			13		1	7	1	4	2					3		8	33
White-breasted Nuthatch	ж	2	12	28	14	17	14	28	10	34	42	12	32	269	20	55	155	105	60	75	8	8	22	25	58	20	25	1125
Red-breasted Nuthatch	1		12	8	-	1	5		1	4	2				1	6	5	1	1	12		-			1		15	61
Brown Creeper			1	1			ж	1	x	-			6	7	4	1	7	9	11	5	3		2		5	1	15	64
Brown Thrasher																1		1	2								3	4

	Int'l Fall	Warren	Hibbing	Walker	Moorbead	Duluth	Corsby	Little Falls	Fergus Falls	Sherburne	Cedar Creek	Anoka		St. Paul (N. E.)	neapolis	St. Paul	Afton	Excelsion	Bloomington	Red Wing	Cottonwood	Faribault	Marshall	Wabasha	Winona	Mt. Lake-Windom	No. of Counts	of
Robin	x				1	1		2						3	1	5	5	1	5	6		x			4		11	34
Golden-crowned Kinglet													5				2			2		2			1		5	12
Ruby-crowned Kinglet					_		-				-					1						~					1	1
Bohemian Waxwing	2					22																					2	24
Cedar Waxwing						52		8						1		1	14		1								6	77
Northern Shrike	1		1			6	2	1		6	2		х			2	3		4	2			х	1			13	32
Starling	64	25	81		324	504	-	112	48	25	93	32	11	349	615	892	821	400	976	1382	110	108	97	47	277	502	24	7895
House Sparrow	70	476	75	55	371	682	15	1131		276	427	34		4005	568	2678	2219	2336					325		3291		26	
Meadowlark (Species-?)		210	10	90	311	002	10	1101	1100	210	741	0.4	50	4005	1	2010	2210	2000	2010	2020	100	1.2	020	300	3231	X	1	1
Red-winged Blackbird								3			-			1	1	3	3		6	2				53	43		8	114
Rusty Blackbird								- 0	_					1		1	0		0					99	43		2	2
Common Grackle						1				1			1		7	7	2	11	6	7	1	_		10	8	13	14	76
Brown-headed Cowbird			_			1				1			1	1		-	1	- 11		- 1	1			10	3	10	2	4
Cardinal				_	1	1			-	1	1	1	2	112	17	44	132	157	66	225	-	- 4	1	103	158	4	19	1032
Evening Grosbeak	7		00	291	1	290	84	4	24	45	17	1	3	22	6	40	24	137	00			4	1	103	30	4	15	975
Purple Finch	- 1		90	291		7	04	6	15	2	17	13	7		12	35	4	90	2	6		X	1		12		15	268
Pine Grosbeak						25		0	13			13	- 1	90	12	33	4	30		0		X	1		12		1	25
Common Redpoll						25					18			100			2			76							4	196
Pine Siskin			6			0.77					18		5				1		_	5	-						-7-	58
American Goldfinch			0	2		37 22		400	-	101	054		9	669	42	74	173	338	0.077	132			0	31	178	13	18	2971
								45	5	121	851	6		669	42	74		338	267	132	1	X	3	31	178	13	18	2971
Red Crossbill				6		1											2								-	-	3	3
Rufous-sided Towhee															1	1	0.000	0.00					410	0.5	001	1		
Slate-colored Junco				7	6	8	Х			146	43	16		394	94	161	275	251	85	407	11	5	47	95	294	26	19	2371
Oregon Junco										1			-	101	2		7	1	2	1	2	-	1	=0	6	-		
Tree Sparrow						1				155	56	2	21	401	52	191	251	161	113	163	17	ж	3	52	293	3	17	1935
Field Sparrow								5									1			1					х		3	7
Harris' Sparrow										_										1							1	1
White-crowned Sparrow						1		1																			2	2
White-throated Sparrow		-														2	1	1		1							4	5
Fox Sparrow																									1		1	1
Swamp Sparrow																	1	1								_	2	2
Song Sparrow														1		4	1			1					2	7	6	16
Lapland Longspur					1												2										2	3
Snow Bunting	20	539	46		102	1	1	11		2	85			305	-		9			65	60		70	-	46	25	16	1393
Number of Species	19 414	10	18	_ 17	15	46	14	30	19	27	29	21	20	45 8458	32 2134	46 5975	60 6276	39 10187	46 6545	48 5939	21 426	17 360	24 833	31 2271	48 5466	26	104	73166
Number of Individuals			790	636	889			2810	1327		2466																	

AN EAGLE VISITS A FEEDER

by Robert B. Janssen

On December 31, 1971, I received a phone call from Betty Feltl who lives at 936 12th Avenue in Hopkins, Hennepin County. She stated that she had a Bald Eagle in her yard and that the bird was visiting her suet feeder. I receive many phone calls about unusual bird observations but this had to be one of the strangest I had ever received. Being somewhat skeptical I passed the observation off as a probable hawk. Seeing as it was New Years Eve day it was possible someone was celebrating the New Year a little early! My curiosity was aroused so I drove over to Miss Feltl's house which is located in south Hopkins on top of a hill and surrounded by woods and open fields. A large apartment complex is located nearby. When I drove into the yard Betty greeted me and after introductions I asked her if the bird was around. She said yes it was and if I turned around I could see the bird on the ground on the other side of a low rise. I peered over the rise, still somewhat skeptical, but there was an immature Bald Eagle standing in the snow eating a piece of suet. (See photo). Betty told me that the bird had

arrived in her yard on Tuesday, December 28 and had been feeding in the area since that time. The bird was very tame and perched in many places in the yard including a bird feeder and a suet feeder attached to the side of a large tree in the front yard. I noticed immediately that the bird was banded and that the right wing was color marked with an orange and blue dye.





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The bird flew to several perches in the yard and then to the suet feeder where I approached to within six feet and proceeded to take a number of photographs. One color photo showed the bird perched on top of a bird feeder with a tattered American flag in the

background!

As I was observing the bird I guessed that it had come from the Chippewa National Forest because of the color marking and band. I, of course, knew of John Mathisen's work on Bald Eagles on the Chippewa. On my way home I remembered receiving a notice from Dan Frenzel of the University of Minnesota concerning color-marked Bald Eagles. (This information was published in **The Loon** 43:99). I rushed to find the notice and to my elation discovered that the bird was one of the birds color-marked and banded by Frenzel on the Chippewa and to top it all off the bird was carrying a radio. I immediately called Mr. Frenzel and by Monday morning (Jan. 3) several graduate students were at Betty Feltl's making an attempt to trap the eagle. To make a long story short the eagle was finally trapped in Betty's front yard on Wednesday, January 5. The radio was retrieved, the bird held in captivity for a few days and then released along the Mississippi River near Prescott, Wisconsin.

Reflecting on this rather strange observation and sequence of events, this young eagle hatched on the Chippewa Forest during the summer of 1971 must have been somewhat late in moving southward. As it was coming south, snow covered the ground and the lakes froze making it difficult for the bird to find food. It would seem that starvation caused the bird to lose its fear of humans and the large pieces of suet readily available at Betty Feltl's were an attraction and an easy source of food.

Why this eagle would show up in a yard in Hopkins will never be known but even if these circumstances could be known they would not be as strange as the sight of this same eagle clinging to a suet feeder on the side of a tree.

The photos were taken by D. S. Kihlman, a University of Minnesota student and friend of Miss Feltl's. 14321 Prince Place, Minnetonka, Minnesota 55343

notes of interest

A WINTER CAROLINA WREN — The first part of November, 1971 my 8 year old boy came home and excitedly told me about the tame brown wren he and another friend had seen. It was so tame he could almost catch it, he told me. I assured him it was not a wren for all wrens had left for the South long before this. On November 25, Thanksgiving day, while I was waiting for my dinner I went to the kitchen to get a drink and see which birds were having their meal with us. And there on our feeder, eating suet, was a stranger. He was a beautiful rufous brown with a buffy, almost yellow, underside and carried his tail in a jaunty, wren like, angle. I knew it couldn't be a wren, for hadn't I told my son there weren't any wrens left around here at this time of the year?

I took my problem of identification to work and asked my friend, Dick Peterson, knowing he was quite knowledgeable on such matters. He was stumped by my description but made several suggestions as to what it could be. So home I went to follow those suggestions up, but the more I looked the more convinced I became that we had a Carolina Wren with us.

At this point he was coming once or twice a day to eat suet and then going to the neighbors house to look for bugs all around the house. He continued this all the while he was here, going where the snow melted away from the foundation. Dick felt this was hardly an adequate diet so he took beef, suet and sometimes liver and froze them together and then ran them over a saw reducing the mixture to a fine "sawdust." When this was offered to the bird he seemed to feel that he had a real bonanza and hung around most of the day for the next several days.

Then disaster struck, the men who had been promising to come for over a month to connect our sewer, came and dug a trench second only to the Grand Canyon between the feeder and the house. This was too much for the wren and we didn't see him from that Monday morning, November 29, until the next Sunday afternoon. I had just about given up on him when I

went outside and there he was busily eating at the feeder again.

He was quick in his actions and gave the appearance of being nervous but just the opposite was true. He would allow you to come within five feet of him before he would reluctantly fly away and then he would soon return. On the day Dick took this picture he came up to the feeder while the camera was being set up and there were two of us moving around just a few feet from it. He even stopped to rest for awhile on the tripod holding the 1,000 watt flood light Dick used to brighten his picture.

He never developed any regular schedule for eating. Sometimes he would come in the afternoons for several days, then he would switch to another time of the day and for one week he met me just at daybreak when I came to put his food out. One day I took quite a scolding for being a little later than he thought necessary. At such times he was in the feeder as soon as my back was turned. Some days he would spend the whole day in our

yard and a couple of days we never saw him at all.

As the winter progressed we fixed up a little auxiliary feeder under the regular one so that we could keep his special food safe from the Starlings who soon decided they really went for it too. Then we began to put out meal worms for him which he greatly relished. He survived several weeks of below zero weather and even one night of 36 below. Then on Saturday,

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January 29, 1972, he came for breakfast and never returned.

It seemed that week there was quite a movement of birds, for some reason, and he may have moved on. The Monday after he left we were honored with a Pine Grosbeak. Then the Purple Finches and Common Redpolls came in abundance, and they hadn't been to our feeder before that this winter.



We were pleased to have him for a guest while he was in the vicinity and hope he is well and safe, making someone else glad with his presence. My only regret is that I never got to hear him sing the song I am told he was capable of.

The picture was taken by Dick Peterson on December 4, 1971 with a speed graphic camera, a 240 lens at a distance of 4½ feet, Tm X film. 801 Chathamfield Road, Minnetonka, Minnesota 55343.

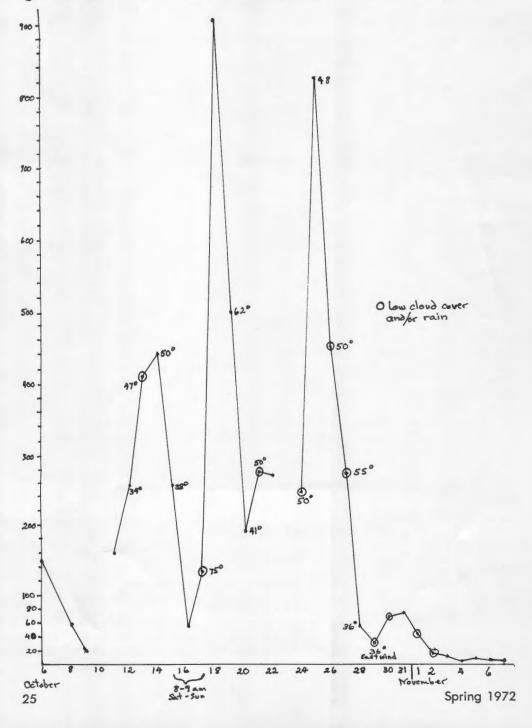
CERULEAN WARBLER NEST — The nest site was in a patch of flood plain forest of very tall elms, basswood and soft maple trees with a dense understory, near a stream flowing into Lake Pepin northeast of Villa Maria Center, south of Old Frontenac, Goodhue County, Minnesota. On July 11, 1971, I watched a pair chasing one another high in the tall trees. The next day the female led me to the nest — a very small, inconspicuous structure placed in a fork near the end of a top limb of a 50 foot elm. On July 18 both adults made repeated trips to the nest. Three young were perched beside the nest on July 24; and on July 26 at the bottom of this fragile nest had a large hole and the young were not again observed. During this period I saw and heard a number of other Ceruleans in the same area. Anne C. Buechele, Minneapolis, Minnesota.

FALL ROBIN MIGRATION — On October 6, 1971 at about 7:15 a.m., by our house, I saw a flock of Robins coming over from the north. Having about a half hour free, I climbed the bank which faces north, and stood, with the mature oak-elm-cherry woods at my back and the expanse of yard, drive-way turnaround, and long hill below me, and watched. 150 more

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Robins came over before 7:50 when I had to stop.

My curiosity aroused, for the next month I spent most every day up there from 7:15 a.m. to 7:45, until November 7. I could see for about ¼ mile to the west, north, and east. It became more fascinating as October progressed. On October 18 I counted 907 Robins in that half hour!



The Robins were just visible at 7:15, some flying high (2000-3000 ft), and when the sun had risen at 7:45 most had alighted for the day. Near the end of the period I watched from about 7:30 to 7:55. They were easy to count as they flew in very loose flocks of about 10-15, usually about 10-30 feet apart. Sometimes it was impossible to tell where one flock left off and the next began. There were many singles and/or stragglers. I could not tell how many birds went beyond the woods behind me, but many landed, some swerving to land upon hearing the chirping of those already down. Huge flocks (500-1000) of blackbirds (Common Grackles, Red-wings, Brown-headed Cowbirds) flew in close flocks east and west during the period. The Robins flew through, being forced off course a bit, but coming out the other side headed south again. The diagram indicates the number of Robins seen each day from October 6 to November 7.

On clear days the birds flew wide apart. On days when they appeared suddenly out of low clouds, they were closer together, 5-10 feet apart and in bigger flocks. I never saw more than 30 Robins in a flock, however. On November 3 through 7 I saw no early Robins, but a few on the ground during the day. Pepper Fuller, 14505 McGinty Road, Wayzata, Minnesota,

55391.

GREAT GRAYS 4, GOSHAWK 0 - On January 30, 1972, (Sunday, Grand Marais M.O.U. meeting), we saw two Great Gray Owls hunting mice in a field at the base of the Arrowhead Trail, near Hovland, Cook County, Minnesota. They were hunting from fence posts, and flew out into the field some six feet off the ground, then dropped rapidly. Each time they left their perches, a male Goshawk came out of a small thicket to harass them, never flying closer than three feet. The owls did not appear to be concerned about the hawk, and merely raised one wing as he passed over them. It seemed that the hawk was respectful of the owls, as long as they stayed on the fenceposts, watching nervously from a tree about 25 yards away. It was their hunting, whether successful or not, that incited him. We watched for 45 minutes, and each owl caught two mice, out of 12 attempts, despite the worrying Goshawk. They carried their prey back to the posts in their beaks. Although we have seen Great Gray Owls before, we were fortunate indeed to observe them hunting successfully, and the Goshawk was an added bonus. It is interesting to contemplate whether the owls were just passing through, or whether they were establishing a nesting territory. Later, Steve and Jo Blanich, Terry and Mark saw the owls, and approached within 8 feet for photographs. Mr. and Mrs. William H. Carr, 1834 Vermillion Road, Duluth, Minnesota

RESULTS FROM THE ANALYSIS OF THE LAKE PULASKI GREEN HERON FOR PESTICIDE POISONING — In a note which appeared in the Fall 1971 issue of The Loon, I described a sick Green Heron found at Lake Pulaski, Wright County. The results of the tests taken at the Warf Institute in Madison, Wisconsin, were sent to me by Dr. Elder of the Bureau of Sport Fisheries and Wildlife. From the results of the tests taken it appeared that insecticide intoxication could have been involved. The symptoms of organochlorine or other pesticide poisoning sometimes resemble those of other toxic substances and some diseases. The heron wasn't autopsied by a pathologist before being analyzed for chemical poisoning, since the day I brought the bird in other heron specimens they had were being shipped out. The tissue samples were sent with instructions to analyze the brain for organochlorines and PCB'S and the liver for total mercury.

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The results are:

Liver: Mercury 2.0 ppm (parts per million)
Brain: DDE
DDD 2.70 ""
DDT 3.08 "
Estimated PCB 28.40 "
Dieldrin 1.75 "
Heptachlor epoxide 0.90 "
Benzene hexachloride 0.32 "
Endrin none detected

Pesticide researchers at the Patuxent Wildlife Research Center in Maryland were asked what the array of residue values mean. The levels of benzene hexachloride and heptachlor epoxide were far too low to be significant as were the PCB'S. The lethal range for the PCB'S is believed to be in the hundreds. The level of dieldrin, is below the range known to be lethal in birds, although it is disturbingly high. The DDT and it metabolites (DDD and DDE) are at the lower limit for brain levels of lethal equivelants. This has been established from experimental work done on birds killed by DDT and its metabolites. It can not be proved that the heron died from DDT intoxications, however, because of the symptoms that the heron displayed before death, the probability of DDT involvement woulld be high. As for the mercury, the level would have been sufficient for alarm a year ago. It appears now that this might be a normal background level, although it is not definite as yet. Even though the heron may not have died from acute pesticide poisoning, we should be alarmed and concerned over the variety of organochlorines it contained. It can only be speculated as to where the heron picked up the toxic substances. Like other species high on the aquatic food chain, this Green Heron reflects the condition of its environment. Bruce A. Hitman, 7483 Brooklyn Blvd. #4, Minneapolis, Minnesota

CAROLINA WREN VISITS FEEDER — A Carolina Wren, somewhat north of its normal habitat, was sighted Saturday, November 20, 1971 at Swan Lake, Pengilly, Itasca County. The bird, more common in the southeast United States but whose range extends to the southern part of Minnesota, was first sighted in a feeding station filled with sunflower seeds and a lesser quantity of smaller wild bird seeds. After several minutes eating in the feeder, which is within five feet of the observation window, the bird flew away but over a period of three hours made several return visits to the area feeding on seed spilled on the ground. The bird was easily identifiable by the broad white stripe over the eye which extended back to the neck; the bright, buffy under-body; rufous back; and the barred wings as well as the characteristic holding of the tail in an erect position. In addition to my wife and son and daughter we had additional witnesses to the wren visits because we had invited two neighbors over to watch the numerous Red-breasted Nuthatches who are back at our feeder after a year's absence and the wren made several of its return visits at the time of their visit. The wren reappeared at the feeder December 12th and 13th but was not seen again, Everett C. Blomgren, Spring Park Road, Parkville, Minnesota 55773

1965-1971 FALL HAWK MIGRATION, DULUTH — The last report of the Fall Hawk Migration in Duluth was reported in The Loon in 1964. In the seven years following this report observers have spent 628+ hours out of 188 days in the months of August, September, October, and November making counts of the hawks in Fall migrational flight. During these last seven

years 222,147 hawks of 14 species have used the Duluth flyway.

The largest proportions of these flights have been dominated by Broad-winged Hawks during all of the past seven years. The largest number of Broadwings ever recorded was in 1970 when 61,739 used the flyway during the 16 days of September on which the observations were made. The largest flights were recorded for individual days on September 22 with 24,316 Broadwings and September 26 with 15,268 Broadwings. In 1971 the number of recorded Broadwings was again high. A total of 54,410 were recorded during 17 days of observation in September and one day in October. On the 18th of September 20,203 were recorded and the next highest day was September 21st with 10,206 individuals.

Since 1968 a significant number of Turkey Vultures have also been recorded: 798 in 1968, 209 in 1969, 368 in 1970, and 497 in 1971. This can most probably be accounted for by the fact that in these years more observation days were in October. It was during October that the largest consistent flights were recorded except for 1968 when 657 individuals were

counted on September 26th.

The last two years (1970 and 1971) have shown an increase in the number of Ospreys and Bald Eagles using the flyway. In 1971 the majority of Bald Eagles were recorded late in November, and the Ospreys passed through in September. In 1970 all observations were made in September.

1970 stands out as a record year. Though only 86.7 hours out of 16 days in the month of September were spent in observation the total count of 69,214 hawks and an estimate of well over 70,000 is the largest yearly total ever recorded in twenty years of the Duluth Hawk Count. Why this year was so good is not clear. Weather data showed a relatively high average wind speed, primarily with a West to Northwest component. An insignificant amount of precipitation was also recorded for this period. It is also possible that observers happened to be in the right place at the right time.

In noting the data below it should be called to the attention of the reader that there is sometimes great variation in total numbers for a species from year to year. This could be due to the fact that the number of days and the hours per day of observation are not consistent throughout the migration period. General trends should not be concluded hastily. The significant rise in Broadwings may represent an increase for this species brought about by less competition.

SPECIAL	1965	1966	1967	1968	1969	1970	1971	TOTAL
Sharp-shinned Hawk	3136	806	2361	1877	2765	5328	4106	20,379
Cooper's Hawk	75	13	26	30	32	36	31	243
Goshawk	0	6	7	18	20	4	8	63
Broad-winged Hawk	16257	10304	7689	24768	12983	61739	54410	188,150
Red-tailed Hawk	1327	279	82	1072	434	533	1448	5,175
Rough-legged Hawk	78	1	2	52	4	0	322	459
Sparrow Hawk	258	409	106	227	342	513	542	2,397
Pigeon Hawk	18	3	2	5	19	11	5	63
Peregrine Falcon	11	5	1	4	29	7	3	60
Osprey	31	25	13	37	68	63	90	327
Marsh Hawk	102	46	82	222	248	445	515	1,660
Turkey Vulture	140	19	53	798	209	368	497	2,084
Bald Eagle	11	3	2	5	8	25	30	84
Golden Eagle	3	1	0	1	3	6	2	16
Others	0	0	2	0	6	10	1	19
Unidentified	467	67	45	63	196	30	100	968

TOTAL for year 21914 11987 10473 29179 17366 69118 62110 222,147

LONG-EARED OWL NEST ON SHERBURNE REFUGE — The nest was discovered by Mr. William Hanson of Princeton, Minnesota on June 27, 1971. It was located about 25 feet up in a medium-sized red oak tree about 75 feet from a woodland trail. The precise location is the SE1/4, Sect. 17, T35N, R27W, Sherburne County. The nest was surrounded by a rather dense layer of grapevines and other foliage, and was well concealed. On June 30, I visited the area to watch the nest and to obtain photographs of the adults. I climbed a tree about 30 feet away and got several photos of the adult owls. On my approach, one adult left the nest area and the other remained assuming the drawn-out, "hiding" pose. After I remained hidden, the bird assumed a more relaxed pose. At this time there were three young owls in the nest. As long as I did not attempt to climb the nest tree, the adult perched near the nest showed little or not alarm. Pellets found at the base of the nest tree contained remains of mice and shrews. On July 1, I climbed to the nest and both adult owls became aggressive and vocal. One bird swooped at my head several times uttering a variety of cat-like screeches and hisses. When I reached the nest both adults perched nearby assuming the "defensive posture" described in the literature. I took photos of the owlets in the nest which appeared quite crowded. From the length of the primary feather shafts I would estimates their age at between 3 and 4 weeks at that time. I did not attempt to handle the young or tamper with the nest in anyway.



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I re-visited the nest again on several occasions and the young owls were fledged sometime between the 10th and 12th of July. Assuming the young were about three weeks old on July 1, and an incubation period of 21 days (Bent), the clutch was probably completed during the second or third week in May.

Any further comments on Long-eared Owls in this area would be mostly theory on my part. This was the first nest encountered on the refuge and observations of the birds have been very infrequent. I have searched for winter roosts of Long-eared Owls the past two winters with no success. Robert L. Drieslein, Ass't. Refuge Manager, Sherburne National Wildlife Refuge, Box 158, Princeton, Minnesota.

WINTER PEREGRINE SIGHTING — On February 8, 1972, all morning the usual number of Common Redpolls, American Goldfinches, Purple Finches, White-breasted Nuthatches and Black-capped Chickadees were at our feeders on the deck. At noon I noticed all was quiet, not a bird was in sight. As I stepped outside to check the feeders, a Peregrine Falcon suddenly swooped down and past me a bit above eye level and about ten feet in fronth of me and flew to an elm tree just north on the boulevard bordering the west side of Cedar Lake. Hoping the bird would remain in view, I grabbed my binoculars, jacket and boots for the snow was deep - and ran to the boulevard. I scanned the area carefully but to my great disappointment, no bird was in sight. The large size, the pointed wings, the dark slate-blue back, the bold pattern of the dark head and the light underparts left no doubt in my mind that this was the strong, swift flight of the Peregrine Falcon. Regarding its Minnesota range Roberts states (Vol. 1, pg. 354, The Birds of Minnesota), "A summer resident, breeding in the Lake Superior region and along the bluffs of the Mississippi and St. Croix rivers. Probably mainly a spring and fall migrant elsewhere." Although I recorded this rare species three times in 1971, twice in Texas, once in Minnesota, this is the first winter observation I have recorded in this urban area. Fran Nubel, 2000 Cedar Lake Blvd., Minneapolis, Minnesota 55416.

Editors Note: There are no previous February records and only one January record for the Peregrine in Minnesota. Because of the extremely short observation time of the above individual and the swooping flight, the possibility of this bird being a Goshawk does exist.

LATE GREAT BLUE HERON AT LAKE PULASKI — During the last couple weeks of November 1971, a Great Blue Heron lingered on at Lake Pulaski, Wright County, feeding on frogs. The heron was first noticed feeding along the north shore of the lake on November 18. There were hundreds of frogs everywhere along the shore both dead and alive. Those that were alive moved very slowly due to the low temperature of the water. It seemed rather late in the year for frogs to be swimming around when they should have been hibernating. I believe this phenomenon was attributed to the warm weather that we had previous to that time causing the frogs to become active and then subsequently were slowed down with the onset of colder weather preventing them from digging down into the lake bottom. The heron was last seen on Nov. 28. The following week, the edge of the lake froze up several hundred feet out, therefore cutting off the heron from its ready food supply. Bruce A. Hitman, 7483 Brooklyn Blvd. #4, Minneapolis, Minnesota 55443.

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REQUEST FOR INFORMATION

Shorebirds Recapture Operation:

Several species of shorebirds will be marked with yellow feather dye on the undrparts, and yellow streamers attached to the leg, in the 1972 fall migration. Sanderlings will be marked only with leg streamers. Birds will be caught on the Magdalen Islands (Gulf of St. Lawrence).

Reports of sight records should include the locality, date, species, name and address of observer (s). Please weigh the bird and read the band number if taken alive.

Information should be sent to:

Raymond McNeil
Centre de Recherches Ecologiques de Montreal
4101 est, rue Sherbrooke
Montreal 406, Que
Canada

REQUEST FOR COWBIRD DATA

I would like to obtain some assistance from MOU members. I'm interested in collecting some data on bird species which hatch and feed young Brown-headed Cowbirds.

The information I need is as follows:

Date of observation Location of Observation (At least county) Species feeding the cowbird Number of cowbirds being fed Were any of the young of the feeding species present?

Please send this information to:

Robert E. Hotlz Assistant Professor, Biology Concordia College 275 N. Syndicate Street St. Paul, Minnesota 55104

PURPOSE OF THE MOU

The Minnesota Ornithologists Union in an organization of both professionals and amateurs interested in birds. We foster the study of birds, we aim to create and increase public interest in birds and promote the preservation of birdlife and its natural habitat.

We carry out these aims through the publishing of a magazine, **The Loon**; sponsoring and encouraging the preservation of natural areas; conducting field trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.



SUGGESTIONS TO AUTHORS

The editors of **The Loon** need articles, shorter "Notes of Interest" and black/white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewriten, double-spaced and on one side of the sheet with generous margins. Notes of interest should be generally less than two typewritten pages double-spaced. If reprints are desired the outhor should so specify indicating number

required. A price quotation on reprints will be sent upon receipt of information.

Club information and announcements of general interest should be sent to the Newsletter editor. See inside front cover. Bird-sighting reports for "The Season should be sent promptly at the end of February, May, August ana November to Mrs. Janet Green. See inside front cover.

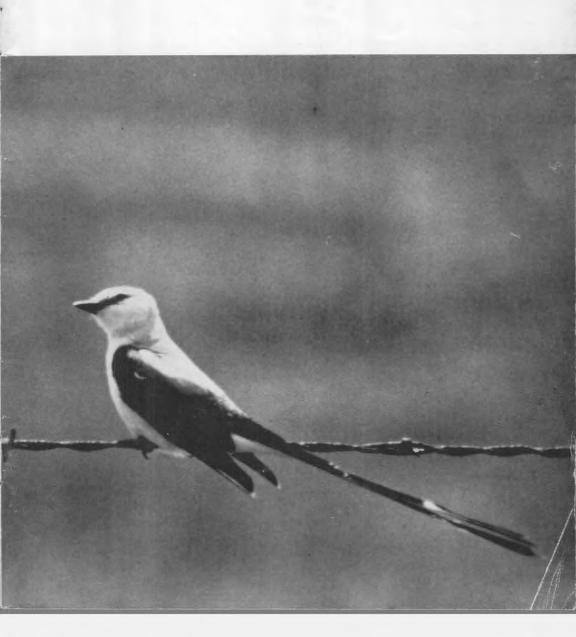
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The

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MEMBERSHIPS AND SUBSCRIPTIONS: Mrs. Elizabeth Campbell, 5267 W. Bald Eagle Blvd., Saint Paul, Mn. 55110. To join the MOU and receive both MOU publications, send Mrs. Campbell \$4 for a regular yearly subscription. Or other classes of membership that you may choose are: Family \$5 yearly; Sustaining \$25 yearly. Lite \$100. Also available from Mrs. Campbell: back issues of The Loon (\$1 each ppd.) and MOU checklists of Minnesota birds (20 for \$1 ppd.). Gifts, bequests, and contributions to the MOU Endowment Fund should also be sent to Mrs. Campbell.

EDITOR OF THE LOON: Robert B. Janssen, 14321 Prince Place, Hopkins, Mn. 55343. (phone 938-7464). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details. Associate Editors, Kim R. Eckert and Paul Egeland.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor to "The Season," request the report forms from the **EDITOR OF "THE SEASON," Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804.** (area 218, phone 525-5654).

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PLEASE DON'T AGREE

On a hike at Northwoods Audubon Center this winter, the thought that we say "yes" too often struck home. There was a fairly large woodpecker hammering on a tree about thirty yards from our snowshoe group and everyone spotted it.

Our group stopped and binoculars of all shapes and sizes were brought out. Someone said "Pileated" and I didn't think so. Soon, another person was in agreement with Pileated and a third saw a patch of red, and soon there was growing agreement that it was indeed a Pileated Woodpecker. I felt somewhat blind as I saw no crest on the bird's head and no red. Then the sun filtered through the branches and the woodpecker turned his head to the perfect angle and a patch of yellow on the forehead became a beacon. I pointed it out and the others began to see it too. It was a Black-backed Three-toed Woodpecker.

Afterwards, one man in the group came up to me and thanked me for not saying "yes" when everyone else saw red. I hadn't really thought of it then, but this was a good example of the tendency which we all have — the ability to see what we want to see. Everyone in the group had wanted to see the Pileated. They hadn't given any thought to a rarer species such as the one we did see. They knew the Pileated was in that area because there were signs of him all over.

The bird was large and they knew that Pileateds are large. They knew what signs to look for and, unfortunately, they began to see them even though they weren't there.

I hope that you too will give this some thought. If you are out birding with someone, even an expert, don't agree unless you are sure. Don't claim to have seen something unless you have seen him clear enough to be able to identify him again. Wait until you have seen all of the field marks, even if it means your life list will have to wait a little longer before adding that species.

The best ornithologist is not the one with the longest list, but, rather, the one with the best understanding of the species on that list.

Mike Link Director-Naturalist Northwoods Audubon Center Sandstone, Minnesota

CATTLE EGRET, LITTLE BLUE HERON, AND POSSIBLE SNOWY EGRET NESTINGS AT THE LAKE JOHANNA ROOKERY, POPE COUNTY, MINNESOTA

by Bruce A. Hitman Photos By The Author

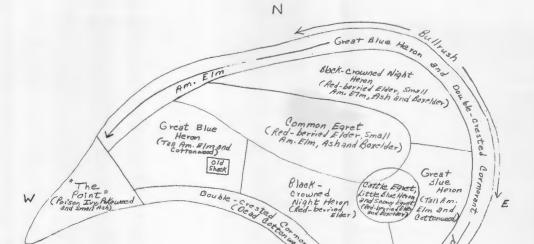
The Lake Johanna Rookery has maintained fairly static breeding populations of the Great Blue Heron, Common Egret, Black-crowned Night Heron, and Double-crested Coromorant, since I first examined the island in 1965. The summer of 1971 brought three new species to the rookery. The Cattle Egret, which is rapidly expanding in this country and elsewhere, nested here for the first state breeding record. Also nesting was the Little Blue Heron and possibly the Snowy Egret or more interestingly, a possible hybridization between the two. These are also first occurrences for the state as far as known.

The rookery is located on an island in Lake Johanna, Lake Johanna Township, Pope County (Sec 17, T. 123 N., R. 36 W., 5th PM) (Fig. 1). It is classified as a game lake and consists of two parts, the upper and the lower lake. The island is located in the lower lake, which has a maximum depth of 7 feet. It is approximately 5 acres and 10-12 feet in height. As vacant unsurveyed public domain lands, the island is under the jurisdiction of the Bureau of Land Management. From observations made by the bureau and Minnesota Department of Natural Resources Biologists, the highest and best use of the island now exists as a rookery.

My first exploration of the rookery



Fig. 1



Areas of the Island Where Each Species Tends to Concentrate and the Principle Vegetation Found Within These Areas

S

took place on June 26, 1965. Before that time not many people knew of the existence of the rookery other than the few farmers living around this rather secluded lake. At that time, Great Blue Herons, Common Egrets, Black-crowned Night Herons, Double-crested Cormorants were nesting on the island. The cormorants were then considered as becoming scarce in Minnesota. This was primarily due to pressure from fishermen who believed they consumed large quantities of game fish. Nesting sites as well as birds themselves were destroyed in order to alleviate this condition (e.g., Monson Lake Memorial State Park Rookery, Hayes Township, Swift County, during the early 1960's). At that time there were approximately 50 nests in the Lake Johanna Rookery; this was a significant number for that time in Minnesota (Breckenridge). I estimated that the Great Blue Herons and Common Egrets each had at least 100 active nests. The Black-crowned Night Herons numbered between 75 and 100.

The following summer Genevieve Tvrdik visited the rookery after I told her of its population of cormorants. She noted the same species nesting there at the time (The Loon 38: 106-107).

Cottonwood

On May 16, 1970, I revisited the rookery finding most all of the species incubating. I found small nestlings on the ground, indicating that some of the Great Blue Herons had hatched. At that time I estimated that there were over 100 active nests each of Great Blue Herons and Common Egrets. Double-crested Cormorants and Blackcrowned Night Herons numbered between 75 and 100, but this figure was probably higher for the Night Herons. These figures aren't much different from those taken in 1965. It is difficult to get a good count of these birds for two reasons: first, the island is very dense and contains much low vegetation; secondly, the birds do not stay on their nests making it difficult to determine which nests are active. At that time I also discovered other occupants of the island. They consisted of Mallards which had nests scattered throughout the island, but were mainly concentrated on the hill at the east end. A deer was also flushed from the island and it swam to the mainland upon being discovered.

The following two events were primarily the reasons that prompted my

visit to the rookery in 1971:

On June 19, 1971, I was driving west on County Road 8 in Gilchrist Township, Pope Co., around 1:00 p.m. At the north end of prairie pothole, I saw a fairly large, white bird walking among the hummocks and livestock which were grazing in an adjoining pasture. This pothole is also adjacent to a waterfowl production area. The bird was white all over with a yellow bill and yellow legs. From what I could tell it was about half the height of a Common Egret and fit the description of an immature Cattle Egret.

Around 5:30 p.m. of that same day, I was on the south side of Lake Johanna observing the rookery. The earlier sighting of the Cattle Egret aroused my curiosity and caused me to think that there possibly might be more around the rookery area. As I was walking along the south side next

to a small bay, I came across not more Cattle Egrets, but an adult Little Blue Heron. It alighted on a dead tree limb across the bay about 150 feet away from me. It stayed for 15 minutes while I had a good look at it. Its height was comparable to that of a Black-crowned Night Heron. Its body was a slate-blue, with maroon head and neck. The legs were dark and its bill was a light blue with the distal 1/3 being black.

Finding these two herons in the area of the rookery and at that time of the year prompted me to think that these birds might be nesting there. It certainly was a possibility that should be investigated, and I hadn't

been on the island that year.

I decided to make a survey of the rookery on June 27. All species that had nested previous years were present and their nests contained mostly large young. There were Black-crowned Night Heron nests which contained eggs, although there were probably eggs in the other species' nests as well. The Black-crowned Night Heron nests were more accessible since they are generally closer to the ground (4-10 feet above ground).



Fig. 2

There were also Night Herons out of the nests scrambling among the branches and hanging in a reptilian way using their wings and bill to grab the branches. Several young cormorants were trying out their wings; some evidently got over confident and fell out. I came across two such birds scrambling through the vegetation and eventually into the lake. They were able to swim and dived readily. I also found many dead cormorants as well as herons on the ground and in the water; they were of various ages and in different stages of decomposition.

I continued along the southeast side of the island near the top of the hill. Here is where I saw an adult Cattle Egret perched in a boxelder with a Common Egret and several nests and young of the latter. The Cattle Egret had a reddish-brown crown, lower foreneck, and mantle (Fig. 2). Its legs were a yellowish pink and an orangishyellow bill. After observing this area for several hours, I counted a total of four Cattle Egrets in breeding plumage. All were perched in the same dead tree that was located in an area that had a thick undergrowth of red-berried elder. Some of the birds lacked the brightness and length of the plumes which were present in the birds that appeared to be larger. One of the birds would fly into the lower vegetation, but upon seeing me would swerve from its flight pattern. They would then sit in some of the bushes nearby waiting for me to leave, I would assume, so that I could not detect where they were nesting. I never did observe these birds at their nests, although I did find their nests later on.

That day, in the same area occupied by the Cattle Egrets, I saw an adult Little Blue Heron (Fig. 3). Only one bird was seen and no nest was found at that time. The only evidence that it might be nesting was that the bird would repeatedly fly back to the same area and appeared upset over my presence.

I returned to the rookery on July 11 hoping to locate nests of these two



Fig. 3

species, but failed due to a lack of time. Four Cattle Egrets and one adult Little Blue Heron were in the same area as before. Many of the nests of other species were either empty or had large young in them. The Black-crown-Night Herons were especially noticeable with immature birds flying about everywhere and also standing in the water along the shore. At this time I came across several half-eaten young herons on the ground. Apparently some predator such as raccoon, fox, or skunk was at work feeding on the young which had fallen from their nests. Also, various animals were found that had been disgorged on the ground. These included larval salamanders, frogs, and fish of various sizes.

Several weeks later I returned to the rookery in another attempt to locate the nests. As I rowed across the south side to the island on July 24, about 50 Common Egrets were on the southwest shore of the lake. Also in the area was a Great Blue Heron deepwater feeding about 200 feet from shore. With the exception of the Blackcrowned Night Heron, this is the first time that I've seen this or any species of heron in water over its belly. A Double-crested Cormorant flew in the direction of the rookery with a white feather in its beak. Possibly it was going to use it for nesting material? As I approached the rookery, numerous Black-crowned Night Herons were flying around. I went directly to the spot where I had previously seen the Cattle Egrets. This time there were 7 adult Cattle Egrets and an adult Little Blue Heron. After several hours of concealing myself in the 8 foot high stinging nettle, an adult Snowy Egret in adult plumage alighted on a dead branch not more than 20 feet away (Fig. 4). It sat on the branch for several minutes. The bird was all white, with some breeding plumes on the back, and it had the typical black legs with yellow feet. Its bill was all black with yellow lores, and the iris was an orangish red. In size, it was slightly smaller than a Cattle Egret.

My attention turned next to two



Fig. 4

Cattle Egrets . They were apparently greeting one another or going through some courtship ritual. It consisted of billing [which is a crossing of bills (Palmer, 1962)], and also one of the birds would raise its crown and both would emit loud calls. Two other Cattle Egrets perched nearby atop some elderberries were emitting the same "Kowwh Kowwh" calls (Palmer, 1962). This was in the area where I found several nests of that species. These birds were possibly giving alarm calls or were calling to announce their presence to the young? After watching the activities of these Cattle Egrets, I found the location of two nests. The first nest was approximately 6 feet up in a red-berried elder. It was made of medium sized sticks and was about 11/2 feet in diameter by 6-8 inches deep. There were two nestlings with pin feathers. The down and feathers were a yellowish beige being darker near the base. The skin was a light green and the bill darkish with an orangish colored tip. The iris was yellowish-white. The second nest was approximatelly 8 feet up in a boxelder and contained three nestlings. They were smaller than the previous nestlings. Because of the height and foliage cover, I was unable to get a better look at them.

In a basswood tree not far from the above nests, I discovered a young bird standing on a nest that was nearly dismantled. The nest was 4 feet above the ground but may not have been this bird's place of hatching. This juvenile (unable to fly) was a whitish to creamy buff in color, with greenish legs, flesh-colored bill and darkish eyes. At this time I was unable to identify what species it was since it didn't resemble any other young seen in the rookery to date. Within a few feet in the same tree, there was another young bird not seen before and yet another of the same species at the top of the tree. These juveniles had grayish legs and feet in front and lighter colored on the back. They had black bills and lores, the eye being light, almost white, their feathers and down being all white. One adult Snowy Egret was seen perched next to the one at the top of the tree, but no feeding was observed. This adult Snowy appeared larger than the first one seen although they may have been the same individual.

As I left the rookery that evening, I circled around the island and counted several hundred cormorants sitting on dead trees or swimming in large rafts. Many of these were immature birds.

It was a clear warm day on August 8 when I approached the rookery again. A flock of 7 Cattle Egrets flew between me and the island as I got closer. The Cattle Egrets were the only birds on the island that flew in a close flock and with a noticeable rapid wing beat unlike other herons (Palmer. 1962). After several hours of observing the activity in the rookery, I discovered another heron that apparently had hatched there. It was a young Green Heron that still had down attached to its head and neck, but was able to fly short distances from tree to tree. In other occasions I noticed adult Green Herons on the south shore of the lake. There were other species of birds inhabiting the island as well as herons. One of these was the Common Grackle which nested everywhere and even made use of the active nest of a Great Blue Heron by nesting in the bottom of it. Song Sparrows and Tree Swallows were also observed with the latter nesting in the many dead trees.

I checked the basswood tree, where on July 24 I had seen the young bird of whose species I had been unsure. There were now two of these birds. They were perched at the top of the tree and had grown considerably since I had seen them 15 days before. Their plumage had changed enough so that now I was almost sure they were Little Blue Herons. They still had flesh-colored bills, yellow loral area, eye lighter than before, greenish legs and dullish white plumage. The characteristic which convinced me that they were Little Blue Herons was the dark tips of their primaries. Unfortunately, I was unable to get a good picture of this.

The all white young with the black bills were gone.

There were 3 or 4 young Cattle Egrets flying around the area plus some younger ones perched on the elderberries. On the northwest side of the island, 9 were perched in a dead tree.

One cormorant was apparently sitting on its nest. This seemed rather late for eggs or even small young. I found one nest with two juvenile Great Blue Herons in it, also several Common Egrets with large young. The Black-crowned Night Herons were all out of the nest except for a few.

There was little activity on the island on August 14. It was 6:00 p.m. when I saw 10 Cattle Egrets come in from the south. They didn't appear to any reddish-brown plumage on them. I was unable to get a good look at them since they came in quite fast and unexpectedly. Apparently they were coming in to roost for the night after feeding in some muddy area since their feet were covered with a dark substance. I found two more juvenile Cattle Egrets near the center of the rookery perched on a huge elm tree which had recently toppled over from the roots. This was the first instance in which an adult Cattle Egret came near the young birds due to my presence (Fig. 5). They made loud "Kowwh" calls in apparent defiance of me. I also observed one immature Cattle Egret that had a yellow bill with all white plumage as opposed to the juvenile birds with dark bills with an orange tip. The adult bills were an orange-yellow for the most part. Again the differences in plumages of the adults became noticeable in that those with longer reddish-brown areas were slightly larger. At that time there were between 30 and 40 Cattle Egrets in the rookery, including adults, immatures, and juveniles.

Around 7:30 p.m. an adult Little Blue Heron arrived at the same spot as seen previously and where the young were. The two young Little Blues were perched atop the basswood



Fig. 5

and adjacent elm. They could fly readily and did so to some trees about 100 feet away. The dark-tipped primaries were very evident giving the birds a more "immature appearance." The bills were still a flesh color, lores yellow, and the legs had more of a flesh color to them.

An adult Snowy Egret appeared at 8:00 p.m. in the same area as seen previously. This was the first one seen since July 24. The cormorants began to arrive around this time. I left the rookery at 8:00 p.m. and went around the north shore where I surprised a large Canada Goose. Some of the cormorants were floating in large rafts and perched on partially submerged tree limbs. This was the last time that I visited the rookery in 1971.

On September 5, 1971, Ray Glassel went out to the rookery around 6:00 p.m. He saw only Common Egrets, Black-crowned Night Herons, and Double-crested Cormorants, the latter with some young in the nests. He didn't see any Cattle or Snowy Egrets, nor did he see any Little Blue Herons.

Neither did he see any Great Blue Herons.

Janet Green told me an interesting side note concerning the Cattle Egrets. While she was at Lake Johanna Labor Day weekend, a farmer on the west side of Lake Johanna by the name of Joseph Skarpness informed her that he had seen the Cattle Egrets with his cattle during the summer. They would come in with them in the evenings. He didn't know what they were but the description fit. They weren't present at the time Mrs. Green was there - they had probably moved out of the area by then.

Another interesting side note came from a conversation with Dr. Al Grewe of the St. Cloud State College Biology Department. After telling him of the occurrence of Cattle Egrets, Little Blue Herons, and Snowy Egrets at Lake Johanna Rookery for the summer of 1971, he informed me that the Cattle Egret had nested at the Pelican Lake Rookery near Ashby, Grant Co., during the summer of 1970 and 1971. This coincides nicely with the sighting made by Louis M. Moos on August 21, 1971, near Ashby. In fact, it must have been adjacent to Pelican Lake.

In summary, there is no doubt that the Cattle Egret did nest at the Lake Johanna Rookery during the summer of 1971. They probably didn't nest there in 1970 from observations made by myself and by Mr. Skarpness at his farm. There is always the possibility that they might have fed elsewhere that year. It was thought that these nestings at Lake Johanna in 1971 were the first for the state until those at Pelican Lake became known.

There is no doubt in my mind that the Little Blue Heron nested there also and fledged two young. In all outward appearances they fit the description of Little Blue Herons except for a few details which are probably due to individual variation.

There is some uncertainty in my mind as to whether a pair of Snowy Egrets nested at Lake Johanna in 1971. I've checked Bent (1926) and Palmer,

as well as other publications for descriptions of Snowy Egret young and they generally fit the description of the two all-white birds. I didn't see any of the adult birds feed their young nor did I see two adults of the Little Blue Heron and Snowy Egret at any one time. This caused me to think about the possibility of hybridization between the Little Blue Heron and Snowy Egret after reading of its occurrence in Palmer. The two

Little Blue Herons fit the description of this species but as noted in Palmer, the feeding behavior was like that of a Snowy Egret, which I was unable to observe in these birds. The two birds which I thought might be Snowies could have been Cattle Egrets since they are quite similar. At any rate, hybridization is a possibility. Further observations next year could prove interesting as far as all three species are concerned.

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DULUTH AUDUBON BUYS HAWK RIDGE

By the time you read this announcement, the Duluth Audubon Society will have completed purchase of the 100 acre tract of land along Skyline Blvd. formerly known to all hawk watchers as "Hawk Hill." Now it will carry a somewhat more imposing name, Hawk Ridge Nature Reserve. (I trust you are all duly impressed. . .)

The Duluth Audubon chapter will turn over ownership of the property to the city but retain management and operate it as a nature interpretive center for the conservation of raptors.

Fund raising begins with a kick-off dinner, 6 p.m. Saturday, Sept. 16th (timed to coincide with the annual Fall Hawk Count) at the University Methodist Church. Fran Hamerstrom, Wisconsin wildlife biologist and author of "An Eagle to the Sky," will be the guest speaker. Fran is considering bringing along, Chrys, one of her Golden Eagle friends. (He'll love the smorgasbord.) Cost

of dinner will be \$3.00 plus 50 cents for registration. Reservations and checks to be sent in advance to:

Marge Carr 1834 Vermilion Road Duluth, Mn. 55803 Phone number — 1-218-724-2129

We hope you put a circle around the Sept. 16-17 weekend and come to Duluth. Believe me, you will never forget the thrill of seeing a moving river of hawks in the sky.

Do come and please urge your clubs to contribute to the fund raising. Not only must the property be paid for, brochures printed, trails cut, parking lot installed, signs made, also monies set aside for research of raptors and someday, the additional purchase of a 200 acre buffer zone to preserve the area for all future hawk watchers.

We need you and your help!!!

Koni Sundquist, Publicity Chairman

1971 - 72 WINTER SEASON (Dec. 1 to Feb. 29)

by Janet C. Green

The winter season of 1971 - 72 started out with unseasonably mild temperatures throughout much December which caused some migrant waterfowl and sparrows to linger through Christmas time. However, when the new year came the temperature took some nose dives sometimes reaching 40° or more below zero. Lake Superior froze up about the usual time in early February but the intense and steady cold created an ice pack so thick and extensive that it didn't go out of the tip of the lake at Duluth until May 31st.

In spite of the cold and heavy snow in the northern part of the state birdwatching was rewarding because all the winter finches were present with the Common Redpoll, Pine Grosbeak and White-winged Crossbill occurring in invasion numbers. The latter two species penetrated far into the southern part of the state when the abundant cone crop in the north was depleted half way through the winter. Like they were two years ago Common Redpolls were the most numerous

Common Loon: 12-5 Wright BAH; 12-7 Wabasha

Red-necked Grebe: 1-29 St. Louis PF, B&DC; 1-31 Lake FN; — both Lake Superior.

Horned Grebe: 12-12 Hennepin FN, VL; 12-26 Duluth JCG.

Pied-billed Grebe: 12-30 Wabasha DGM; 1-1 Anoka DB; 12-18 (2) — 2-27 Fergus Falls KRE; 12-12 — 1-1 — 2-19 (2) Black Dog, Dakota Co.

Great Blue Heron: 124 Carver KH; 12-5 Dakota KRE; 12-18 Fergus Falls KRE; 2-20 Winona RG.

Whistling Swan: 12-12 (50) Winona FZL; all winter, cripple, Rochester.

Trumpeter Swan: (11) captive flock, Carver KH. Swan sp.: 1-8 (free-flying) Rochester RBJ, RG.

Canada Goose: Migrants: 12-17 (70) Winona FZL; 12-18 (2) Brainerd JB, TS. All winter: (6-10) in Scott, Sherburne, Anoka, Dakota; (150) Carver, (500) Fergus Falls, (2,000) Lac qui Parle Refuge, (16 (00)) Rochester (16,000) Rochester.

White-fronted Goose: 1-2 (1,CW), 1-7 (2,FVS), 3-14 (3,D. Raveling) Rochester.

Blue Goose: 12-18 Brainerd TS, JB; 1-9 Virginia DB; 1-11 — 2-21 Scott.

Snow Goose: 12-18 Brainerd TS, JB; 12-29 — 2-8 Rochester.

Mailard: North 12-29 (2) Orr, St. Louis Co. NJH; 1-2 Duluth KRE; all winter (200) Grand Marais, (1500) Fergus Falls.

SE Quarter all winter where open water, average flock (20-50); largest number: (100) Red Wing,

winter bird in both the southern and northern parts of the state.

It also was an invasion year for Snowy Owls; they were more numerous in the southern half of the state than they have been for several years. Raptors were particularly concentrated in the Duluth harbor where they fed on rodents, pigeons and pheasants that in turn feed on the spilled grain. During the winter 5+ Red-tailed Hawks, 3+ Rough-legged Hawks, 6+ Snowy Owls, 2+ Gyrfalcons, and 1 Bald Eagle were seen there.

The rarity of the winter was the Gray-crowned Rosy Finch that spent three weeks at a feeder in Little Marais, Cook Co. It was also the most observed bird of the season since almost everyone who went on the M.O.U. winter trip to Grand Marais saw it. A runner-up for attracting the most people were the Northern Three-toed Woodpeckers near Deerwood. Carolina Wrens appeared in the state for the first time in many years but none of the three that were reported were known to have successfully overwintered.

(150) Whitewater Refuge, (250) Carver, (500) Anoka. SW Quarter all winter (3000) Lac qui Parle Refuge; 1-1 Cottonwood Mrs. LAF; 1-8 Pope BAH.

Black Duck: North 12-18 (2) Brainerd TS, JB; 12-18 (3) Fergus Falls; all winter (20) Grand Marals. SE Quarter all winter where open water, average flock (1-6); largest number: (50) Elba, Winona Co. HLB.

Gadwell: Migrants: 12-5 (8) Dakota KG; 12-12 Hennepin OLJ; 12-18 (2) Fergus Falls KRE, All winter: 12-26 (3) — 1-23 (16) — 2-21 (10) Shakopee, Scott Co.

Pinfail: 12-30 (5) Whitewater Refuge DGM; 1-18 Black Dog, Dakota Co. VL; 2-23 Beaver, Winona Co. RBJ.

Green-winged Teal: 12-18 Minn. River VL; 12-19 Grass Lake RBJ; — both Hennepin.

American Widgeon: last migrant, 12-5 Hennepin VL; winter, 1-2 (RG) — 1-30 (VL) Shakopee, Scott

Shoveler: 1-10 Ramsey RG.

Wood Duck: North 12-18 (6) — 2-27 Fergus Falls KRE; 1-9 Virginia DB. South from 12-1 to 1-15 (1 or 2) in Sherburne, Hennepin, Ramsey, Winona, Carver, Anoka; later records: 2-1 Anoka VL; 2-12 Scott KRE; 2-26 Hennepin CLH.

Ring-necked Duck: 12-5 (6) Wright BAH; 12-12 (3) Hennepin VL; 12-18 Miss. River, Aitkin Co. TS, JB; 1-9 Virginia DB.

Lesser Scaup: 12-5 Wright BAH; 12-9 Hennepin CLH; 12-18 Fergus Falls KRE; 1-2 Ramsey JAB; 1-19 Scott RBJ.

Common Goldeneye: North 12-18 (28) — 2-27 Fergus Falls KRE; Lake Superior all winter, largest number: 12-23 (19) Duluth, 1-29, 30 (25) Cook Co.; 2-13 (48, after Superior freeze-up), 2-27, 29 (10) Scanlon, St. Louis River. SE Quarter all winter, average flock (10-20); largest number: (282) Miss. River. Ramsey Co. (Xmas, 360) Black Dog, Dakota Co. (Xmas); increased numbers: late Feb., Wabasha DGM.

Bufflehead: 12-5 Duluth JCG; 12-5 Wright BAH; 12-7 Hennepin CLH; 12-25 (1) — 1-2 (3) Miss. River, St. Paul JAB; 1-2 Dakota RG; 2-5 Duluth JCG.

Oldsquaw: a few, Lake Superior; largest number: 1-29 (40) Encampment River, 1-29 (30) Good Harbor Bay.

Common Scoter: 1-1 Grand Marais KRE.

Ruddy Duck: 12-12 Wright BAH.

Hooded Merganser: 12-7 Hennepin CLH; 12-18 Fergus Falls KRE; 1-10 (RG), 1-12 (RBJ) Ramsey; 1-23 (DB), 2-13 (RG) Pine River, Crow Wing Co. Common Merganser: North all winter, Lake Superior; largest number: 2-5 (6) Duluth JCG. SE Quarter migrants: 12-5 to 12 (75) Wright BAH; 12-6 (200), 12-10 (1000), 1-2 (200) Wabasha DGM; 2-26 (20) Hennepin B&DC; all winter, a few on rivers in Dakota, Goodhue.

Red-breasted Merganser: 12-26 (6) last, Duluth JCG; 1-1 (2) Dakota VL; 2-5 Cook RG; 2-21 Dakota KRE. Goshawk: reported by 6 people in Cook, Beltrami, Duluth, Ramsey, Hennepin, Dakota.

Sharp-shinned Hawk: 12-5 Carver KH; 12-19 Sherburne BD; 12-23 Cotton, St. Louis Co. NJH; 12-29 Scott JAB; 2-18 Carver MHM; 2-26 Swift BAH; 2-27 Morrison LSR.

Cooper's Hawk: 1-10 Sherburne, BD; 1-29 Hennepin OLJ.

Red-tailed Hawk: North reported by 5 people; Dec. in Clearwater, Crow Wing, Ottertail; Jan. thru Feb., 5 birds minimum in Duluth.

SE Quarter reported by 16 people in 11 counties. SW Quarter none.

Red-shouldered Hawk: 1-3 Winona RG; 2-23 Winona RBJ; 2-26 Winona HLB.

Rough-legged Hawk: North reported by 3 people; Marshall (thru 1-6, then 2-27), N. Shore in St. Louis Co. (last, 12-13), 3 birds minimum in Duluth harbor all winter. SE Quarter reported by 12 people in 9 counties. SW Quarter reported by 2 people in 2 counties.

Golden Eagle: all winter (2) Lac qui Parle Refuge; 2-12 Morrison DAF.

2-12 Morrison DAF.

Bald Eagle: North fall migrants: 11-23 thru 12-5 (7 birds) W. Mesabi Range fide HM; 12-9 (2 A) Ottertai KRE; winter: 12-26 (3) Clearwater; 12-11 (1, fide MI) — 2-28 (2, TS) Brainerd; 1-20 Duluth MMC; 1-29 Crow Creek, Lake Co. B&DC; spring migrants: 2-26 Ely RG; 3-7 (2) Central Lakes, St. Louis Co. fide HM. South last migrants: 12-12 Sherburne BD, 12-18 Carver KH; wintered Miss. River Hennepin (Osseo, 1-13) to Houston, maximum count (15) in Jan., scarce mid-Jan. to mid-Feb.; all winter (1) Lac qui Parle Refuge.

Marsh Hawk: 12-24 Wadena NJ; 12-29 Scott JAB; 1-2 Ramsey JAB; 1-7 Marshall AzNWR.

Sparrow Hawk: SE Quarter reported by 23 people in 12 counties. SW Quarter reported by 2 people in 2 counties.

GYRFALCON: dark phase birds in Duluth harbor; descriptions of plumage indicate perhaps 2 or 3 different birds: 1-18 MMC, 2-9 MMC; 2-26 JCG, RBJ, RG, FN; 3-10 MMC.

Ruffed Grouse: North reported by 18 people in 12 counties; South reported by 6 people in Washington, Chisago, Sherburne, Hennepin, Carver, Benton.

Greater Prairie Chicken: 12-18 (1) Ottertail KRE.

Sharp-tailed Grouse: reported from Marshall, Beltrami (10), Aitkin (8), Lake of the Woods (42). Bobwhite: 2-13 (7) Elko, Scott Co. JAB.

Ring-necked Pheasant: North reported by 5 people in Mille Lacs, Wilkin, Ottertail, St. Louis (Duluth). South reported by 33 people in 24 counties.

Chukar: 1-11 (6) Ely FN.

Gray Partridge: reported from Ottertall (10), Clay (13), Stearns (4), Rice (13), Nobles, Rock, Murray (12), Blue Earth, Watonwan, Dakota (20), Scott (17).

VIRGINIA RAIL: 1-8 Winona RBJ, RG — third winter record.

American Coot: stragglers: 12-29 (8) Winona ETS; 1-1 last, Hennepin; 1-2 thru 8 Rochester; winter: 12-18 (9) — 2-27 Fergus Falls KRE; 12-18 — 2-15 (2) Shakopee, Scott Co.

Common Snipe: 12-26, 2-7 Hennepin VL; 1-2 (3) Hennepin RG; 1-8 (4) Winona RBJ; 1-15 Winona FZL.

Glaucous Gull: largest number, Duluth: 12-26 (1 A, 1 Imm.), 2-8,9 (3); largest number, SW Lake Co.: 2-27 (5) Two Harbors FN; other: 1-29 near Palisades Head B&DC.

iceland Guil: 2-8,9 Duluth MMC, JCG; 2-27 (2) Two Harbors FN.

Herring Gull: migrants: 12-12 Hennepin, Winona; 1-1 Ramsey JAB; 1-1, 2-13 Dakota VL; 1-2 (2) Dakota RG. Lake Superior: 12-6 (400) Duluth; mid-Dec. to mid-Jan. (100-150), mid-Jan. to mid-Feb. (50) Duluth-Two Harbors area; 2-27 (200) Two Harbors; 1-30 (130) Grand Marais.

Ring-billed Gull: 12-5 Dakota KRE; 12-6 Duluth JCG: 12-5 (200), 12-11 Wabasha DGM; 12-12 Hennepin VL.

Mourning Dove: North last, 12-30 Cook Co. K. Carr; all winter, 12-1 — 2-18 Duluth MMC. South all winter, reported by 23 people in 17 countles; usually 1 or 2; largest number: 15 three places in Twin Cities and 46 on one farm (12-19 Sherburne).

Screech Owl: reported by 7 people in Rice, Nobles, Hennepin, Washington, Sherburne.

Great Horned Owl: North reported by 7 people in 7 countles; South reported by 16 people in 14 countles.

Snowv Owl: North a minimum of 8 owls in Duluth 12-6 to end Feb. plus 12 owls in Cook, Lake, Otterfall Clav. St Louis (Mesabi Range). Mille Lacs from 11-21, 28 (fide HM) and 12-9 (JP) to 2-29 (MI). South 14 owls in Wright, Nobles, Hennepin, Dakota, Cottonwood, Murray, Goodhue, Ramsey from 12-11 (ETS) to 3-4 (FN).

Hawk-Owl; 12-27 Waskish, Beltrami Co. RCD; 12-31 Fourtown, Beltrami Co. KRE; 1-5 Duluth B. Bergstedt fide JCG; about 2-23 Grand Marais C. Christensen.

Barred Owl: North reported by 2 people in 2 counties; South reported by 7 people in 6 counties (all SE quarter).

Great Grav Owl: 1-30 (2,MMC), 2-1 (2,DB), 2-5 (1, RG), 2-13 (1, C. Wechsler) Hovland, Cook Co.

Short-eared Owi: 12-2 Lac qui Parle Mrs. OLE; 1-8 Clay L&CF; 2-21 Morrison LSR.

Boreal Owl: 1-16 photographed SHERBURNE NWR, R. Watlov; 2-28 found dead, Duluth MMC.

Belted Kingfisher: North 12-18 Fergus Falls KRE. South Dec thru mid-Jan. in Dakota, Olmsted, Winona. Hennepin. Wabasha; later: 2-12 Sibley RG; 2-21 Olmsted HLB.

Yellow-shaffed Flicker: Dec. thru mid-Jan. in Ottertail. Nobles, Wright, McLeod, Cottonwood, Wabasha, Sherburne, Chisago; late Jan. thru late Feb. in Lac qui Parle, Wabasha, Sherburne, Anoka, Cottonwood, Pope, Watonwan, Clay.

Pileated Woodpecker: reported from 16 counties including Wadena, Douglas, Blue Earth on western margin.

Red-bellied Woodbecker: North reported from Crow Wing (2, JB), Altkin (JB), Cass (Walker). South reported from 13 counties: Stearns and Sherburne southeastward to Carver, Rice, and Olmsted on Western margin.

Red-headed Woodpecker: North reported from Mille Lacs (3 birds), Crow Wing (4+birds); South reported from Sherburne, Anoka, Hennepin, Winona, Wabasha.

Hairy Woodpecker: North reported from 11 counties; South reported from 19 counties.

Downy Woodpecker:North reported from 14 countles; South reported from 21 countles.

Black-backed Three-toed Woodpecker: 12-3 — 1-22 (female), 2-13 (male) Deerwood TS; 1-8 (3 females, 1 male) Deerwood EMB; 2-24 rural Duluth H. Roberts.

NORTHERN THREE-TOED WOODPECKER: 11-27 — 3-5 (minimum, 3 males, 1 female) Deerwood TS.

Horned Lark: Dec. thru mid-Jan. in Marshall, Ottertail, Clay, Wabasha, Murray, Cottonwood, Lac qui Parle, Nobles, Rock, Swift, Kandlyohi, Dakota, Wright, Winona, Carver; South migration: 2-2 (250) Wabasha, Cottonwood; 2-8 thru 13, first arrivals, nine people; 2-20 thru 28, flocks (20-50) widespread; North migration: 2-21 Clearwater; 2-29 Morrison, Crow Wing.

Gray Jay: reported from Cook, Lake, St. Louis, Pine (Kerrick), Aitkin (McGregor), Itasca, Crow Wing (Deerwood), Cass (Wilkinson), Beltrami (Red Lake), Clearwater (Bagley), Lake of the Woods.

Blue Jay: North reported from 14 counties; South reported from 20 counties.

Biack-billed Magpie: COOK CO. (1-29, 30 Kimball Creek MMC), Aitkin (Palisade 12-12 — 1-8), Marshall, Beltrami, Clearwater (25), Wadena (Nimrod), Cass (Walker).

Common Raven: reported from Lake and Cook (20-25), St. Louis, Pine (Askov), Aitkin, Crow Wing, Itasca, Beltrami (Red Lake), Lake of the Woods, Marshall (AzNWR).

Common Crow: North all winter in Ottertail, Clay, Morrison, Mille Lacs, Crow Wing, Aitkin, Duluth; migration: 2-22 in Duluth Bagley, Onamia. South reported in 21 counties; greatest number: (110) Cottonwood, (2-300) Rice.

Black-capped Chickadee: North reported from 14 countles; South reported from 19 counties.

Boreal Chickadee: reported by 4 people in Lake, Cook, St. Louis (Hibbing).

Tufted Titmouse: reported by 10 people in Hennepin, Winona, Washington, Olmsted, Ramsey, DOUGLAS (1-3 — 2-28, Lake Carlos, NJ).

White-breasted Nuthatch: North reported by 19 observers in 10 counties; South reported by 34 observers in 18 counties.

Red-breasted Nuthatch: North reported by 16 observers in Cook. Lake, St. Louis, Carlton, Crow Wing, Itasca, Mille Lacs. South reported by 16 observers in Isanti, Stearns, Hennepin, Olmsted, Cottonwood, Carver.

Brown Creeper: North reported by 8 people in Clay, Mille Lacs, Duluth, Hibbing, Morrison, Crow Wing, Clearwater, Wadena. South reported by 28 people in 17 counties, both SE and SW.

CAROLINA WREN: 11-20, 12-12, 13 Pengilly, Itasca Co., E. C. Blomgren; Nov. to Jan., Lake Jane, Washington Co. JCG, KRE, SL; early Dec., 12-19 (RBJ) — 1-29 (KG, last) Minnetonka, Hennepin Co. Catbird: 12-17 — 3-1 Bloomington, Hennepin Co. RBJ, RG.

Brown Thrasher: early Dec. to mid-Jan. Hennepin fide RBJ; 1-5 Ramsey REH; 12-1 — 2-13 Wright BAH.

Robin: a few (1 to 6) wintered from St. Louis and Marshall south to Cottonwood and Winona Counties — total of 16 counties.

Varied Thrush: minimum of 5 birds in Duluth area: early Dec. — 1-24 Clifton; 1-18 (3) — 2-20 Lakeside; 2-23 — 4-15 Duluth Heights. Also Nov. to mid-Jan. Gooseberry, Lake Co. fide JCG; 12-26 Cross Lake, Cass Co. Mrs. W. H. Gliderhus. Eastern Bluebird: 1-3 (8) Wabasha RG.

Golden-crowned Kinglet: North 12-12 Crow Wing RG; South 9 people in Dec. only; last: 12-29 Washington WHL.

Bohemian Waxwing: large flocks (up to 500) in Duluth (12-10 — 2-12), Crosby (12-1 — 1-9); medium flocks (up to 50) in Sherburne, Swift, Ramsey, Hennepin, Hibbing from early Jan. thru late Feb.; small flocks (1 to 12) in Grant, Clay, Clearwater, Hennepin.

Cedar Waxwing: usually small flocks (10 to 30) reported erratically by 21 people in Duluth, Marshall, Cottonwood, Pope, Swift, Wabasha (100 in Dec.), Hennepin, Carver, Sherburne, Ramsey (75 in Feb.), Rice.

Northern Shrike: North reported by 13 people in 9 counties; South reported by 20 observers in 11 counties.

LOGGERHEAD SHRIKE: 12-19 Sherburne NWR H. McCollum.

Meadowlark sp.: North migrants: 12-12 Rice Lake NWR, JB, TS; 2-19 Ottertail KRE. South Dec. thru early Jan. (1 to 3) reported by 8 people in Rice, Dodge, Lac qui Parle, Cottonwood, Nobles, Rock, Murray, Blue Earth; later: 1-23 Olmsted CW, 1-31 Jackson HSH, 2-7 — 28 Wabasha DGM.

Red-winged Blackbird: a few (1 to 4) reported from Scott, Hennepin, Rice, Winona, Dakota, Wabasha, Grant, Pope, Cottonwood, Mille Lacs; flocks: 12-30 (200) Wabasha, 1-2 (60) Ramsey, 2-5 — 13 (50) Anoka, 2-11 (30) Dakota.

Baltimore Oriole: male 1-2 (RG) — 1-29 (died. fide I Goldberg) Edina, Hennepin Co.

Rustv Blackbird: 12-4 Rice OAR; 1-2 Carver RG; 1-3 Wabasha DGM; 12-18, 2-27 Fergus Falls KRE. Common Grackle: in Dec. and Jan. reported by 14 people in Cook, Douglas, Mille Lacs, Cottonwood, Lac qui Parle, Wabasha, Olmsted, Hennepin, Carver, Rice, Anoka (12-26, 40, CKS); Feb.: 2-6 Cottonwood LR, 2-5 Chisago FVS, 2-14 Hennepin PF.

Brown-headed Cowbird: to end Dec. Watonwan

Cardinal: North 12-3 Clay L&CF; 1-3 female 2-15 male Mille Lacs MI; all winter, Lutsen, Cook Co. SW Quarter 12-7 Rock HSH. SE Quarter Stearns and Sherburne Counties southeastward.

Evening Grosbeak: widespread but not abundant from Lake of the Woods and Cook Countles southward to Nobles-Cottonwood and Olmsted-Wabasha; biggest flocks (30-100) in north central area (Stearns, Cass, Clearwater, Ottertail, Crow Wing, Itasca).

Purple Finch: North from late Dec. and especially from late Jan. thru late Feb. a few (1 to 4, occasionally 12 to 20) with other winter finches in Ottertail, Lake, Carlton, Duluth, Virginia, Mille Lacs, Clay. South not common in normal winter range (1 to 4 usually, 8 to 12 occasionally) from Stearns (up to 50) and Morrison (up to 20) south to Olmsted and Winona.

Pine Grosbeak: an invasion year throughout state: North first in any numbers 12-18 Cook, 12-19 Duluth; greatest numbers (flocks of 25-75) from midJan. thru late Feb. throughout coniferous areas from Marshall to Cook and southward to Mille Lacs Lake; only a few in Clay, Morrison, none in Ottertail. South first 1-9 Hennepin OLJ, 1-19 Chisago FVS, 1-22 Pope, Ramsey, Hennepin; small flocks (2 to 10) widespread from late Jan. thru late Feb. from Chisago and Pope southward to Cottonwood and Olmsted; two reports of bigger flocks (25-30) in Hennepin; last: 2-28 Carver, Washington, 3-1 Swift HSH.

GRAY-CROWNED ROSY FINCH: 1-25 -- 2-16 Little

GRAY-CROWNED ROSY FINCH: 1-25 -- 2-16 Little Marais. Lake Co. feeder of Ted and Viola Fensted; seen by almost everyone on MOU winter trip - third state record.

Hoary Redpoll: North 1 to 4 in redpoll flocks from 12-26 (MMC). 12-31 (TS) to end Feb.; most reports late Jan. thru late Feb. South 1 to 3 in redpoll flocks from 2-18 (CLH) 12-19 (B & DC), 1-4 (BD) to 2-29 (EHD; KRE); present from Chisago and Stearns south to Scott.

Common Redpoll: most abundant winter finch with invasion throughout state: North widespread and abundant (flocks 20-100+Common) all winter but came more frequently to feeders from mid-Jan. on; reported from 14 counties by all observers. South abundant (flocks up to 2-300 not unusual) all winter but especially from late Jan. on; present throughout from Chisago and Pope southward to Nobles and Olmsted; reported by all observers.

Pine Siskin: scattered reports, usually of 1 to 4, occasionally 8 to 12, by 9 observers in the North and 16 observers in the South; widespread from

Cook and Clay south to Lac qui Parle, Scott and Olmsted; greatest numbers in Hennepin, Wabasha, Olmsted and Duluth.

American Goldfinch: North very few in Morrison. Mille Lacs, Clay; South reported from Chisago and Pope south to Lac qui Parle (once in Dec.), Carver and Olmsted. Largest numbers (20-50) in Stearns, Olmsted, Wabasha.

Red Crossbill: North a few (1 to 6) reported by 9 people from late Dec. thru late Feb. in Ottertail, Beltrami, Clearwater, Wadena, Crow Wing and Duluth; South 1-9 (6) Hennepin ETS, 1-27 Washington WHL, 2-12 Isanti fide OLJ.

white-winged Crossbill: invasion year North reported by 12 people with major concentration (flocks 12 to 30 common) from Crow Wing northeastward to Cook in Dec., numbers dropped off after early Jan. when cone crop depleted but a few present thru end Feb.; a few also in Beltrami, Lake of the Woods, Clay, Grant, Clearwater, South reported by 20 people in Isanti, southern Mille Lacs, Anoka, Hennepin, Sherburne, Carver, Washington, Ramsey. Wabasha, Olmsted, Cottonwood, with almost all observations in Jan. and Feb.; first 12-18 Hennepin; flocks up to 15 to 20 seen. Rufous-sided Towhee: 12-8 Washington KG

Slate-colored Junco: North overwintered (1 to 3 usually; up to 16 in Duluth) in 9 counties from Cook and Beltrami southward; South migrants: 12-18 (100) Stearns MC; all winter throughout, less numerous than usual in Twin Cities (2 to 6), more numerous further south (10 to 15).

Oregon Junco: North singles reported by 4 people in junco flocks; South up to 3 reported by 12

people.

Tree Sparrow: North 12-15 Clearwater RCD; 12-18 Ottertail KRE; Jan. Duluth fide JCG; all winter (5 to 6) Cook JP. South fewer than usual in normal range, 2 to 8 usually reported with flocks (20-40) only occasionally.

Harris' Sparrow: 12-5 Olmsted CW; 12-15 Clearwater RCD; 12-26 Duluth JCG; to 1-26, crippled, Olmsted DRM; mid-Jan. Watonwan EDK; 12-23—1-13 (1 to 2) Cottonwood Mrs. LAF; 12-16—2-14 Wabasha DGM.

White-crowned Sparrow: until 2-26 Lac qui Parle Mrs. OLE.

White-throated Sparrow: 12-9 Washington KG; 12-15 Clearwater RCD; 12-19 Duluth, K. Sundquist; 12-28 Ramsey JAB; 12-29 Scott JAB; Dec. — Feb. Fox Sparrow: 12-26 — 28 Carlton ME. Wabasha DGM.

Song Sparrow: 12-18 Ottertail KRE; 12-25 Sherburne BD; 1-6 Dakota RG; 1-13, 14 Duluth fide JCG; 1-23 Ramsey JAB; 1-30 — 2-15 Scott VL; daily Wabasha DGM.

Snow Bunting: North reported in 10 counties, largest flock: 75; South reported in 14 counties, migrants: 12-10 (1000) Rice OAR, largest flocks (1-200) in Cottonwood, Nobles. Rock, Lyon, Chip-

CONTRIBUTORS:

Agassiz National Wildlife Refuge staff James A. Baumhofer Jo Blanich Don Bolduc Marvin Borell E. M. Brackney Harry L. Buck Betty & Doug Campbell Earl D. Kopischke Marjorie M. Carr Mable Coyne Ella H. Dahlberg Richard C. Davids Mrs. Arnold DeKam Bob Drieslein Kim R. Eckert Mrs. O. L. Eckhardt Mardene Eide L. & C. Falk Mrs. L. A. Feil David A. Fiedler Pepper Fuller Raymond Glassel Janet C. Green Karol Gresser Bonnie Hanson Helen S. Hatlelid Wayne Hawkinson Kathy Heidel Nels J. Hervi Bruce A. Hitman Robert E. Holtz

Charles L. Horn Jr. M. Ivanovs Nancy Jackson Robert B. Janssen Oscar L. Johnson Mrs. E. W. Joul Maria Krogseng Violet Lender Fred Z. Lesher William H. Longley Seth Lundgren Lester Magnus Donald G. Mahle John & Ann Mathisen Don R. Mathison Harriet Micensky Mary H. Muelhausen Fran Nubel Jean Peterson Lester Rupp Orwin A. Rustad L. S. Ryan Terry Savaloja Ellen Schmid C. K. Sherck Evelyn T. Stanley Forest V. Strnad Pat Telfer Carol Welch 9773 North Shore Drive, Duluth, Minnesota 55804

WITH THE "GOONIES" ON MIDWAY

by P. B. Hofslund

On August 29, I was seasick-miserably, miserably seasick. My wife was seasick, my daughter was seasick, but no one was as seasick as I. But out of adversity comes good fortune and herein lies the tale.

We had combined a vacation trip with the meeting of the American Ornithologists' Union arriving Seattle in time to take the pelagic field trip, a trip combining a bus ride with a boat trip. The first day out (on land) was fine and the first couple of hours out on a salmon-fishing boat the second day was fine, but a look at my wife's face (an unusual shade of green)

set me to thinking, and when the boat stopped to look at four New Zealand Shearwaters and the water continued to go in four different directions I gave up the ghost (or I suppose I should be honest about it and say my breakfast) and for the rest of the trip I really didn't care if they did see a jaeger catch a cowbird and I wasn't much interested in 60,000 Sooty Shearwaters sitting around the boat. But sometime during a lucid period I saw my first albatross, the Black-footed

Later in the week I stopped at the lunch table (I had regained interest in food almost as soon as we had docked at Westport, Washington), of Dr. S. Charles Kendeigh of the University of Illinois and Dr. Harvey Fisher of Southern Illinois University. They asked me if I had taken the pelagic trip and when I related my experiences I remembered that Harvey had worked nearly fifteen years on the various aspects of albatross life history. I ended my remarks with, "But Harvey I did see at least one albatross," and Harvey said, "Would you like to see thousands of them?" This set into motion a series of events that culminated in my boarding the first of several aircraft which eventually landed me on Sand Island of the Midway Atoll.

At St. Louis, Missouri, I joined the other two members of our expedition, Dr. Fisher and John Richardson, a research photographer at Southern Illinois University. Our first stop was in Honolulu and here my first look at is-

land life.

A seemingly unrelated event has taken on deeper significance as I review my thoughts on the life on these islands. Harvey had lived on Oahu as an instructor at the University besides time during World War II and subsequent visits as a stopover to his research areas. John had been a diplomatic courier during the Korean conflict and had been based at Hickam Field. I had never visited this area, so they were determined to show me the best of the island. We really did not see the beach at Waikiki; it was surrounded by high-rise apartments and motels. The fine dining room they had promised had disappeared. The Royal Hawaiian was hidden by a high rise motel, and when we finally did decide to return to a hotel where one could have food and drink under a banyon tree, we found only one way streets and no parking signs until at last a parking lot loomed up where for \$1.00 we could park for the evening. When we got to the hotel with the banyon tree we found a luau in progress (at which we considered exorbitent prices) so to the buffet dinner we went instead. No entree except some halfbaked fish, most of the side dishes

were unpalatable, generally poor service, and so a thoroughly unappetizing place to eat. My remarks about the fine food they had gotten for me were not genuinely appreciated. The next day a lunch at another fine place was a failure too, mainly because after an hour wait we still couldn't get to a table to have lunch. A trip to the beautiful gardens of Honolulu was disappointing because a new freeway was going through the middle of it and the gardens were being carted away tree by tree to some other area.

The moral of the story is that commercialism is destroying the very succeed in Oahu. It is like the parasite things that enabled commercialism to which destroys its own host. In desperation for existence the tenacles of commercialism push out in all directions with no rhyme nor reason, without planning, and there is the fear that everything typical of the islands may fall before them, particularly the native wildlife, plants and animals.

My first and only sight of native Hawaiian birds came on our return trip from Midway when I saw the Creeper and other of the Hawaiian Honey Creepers in the aviary at the University of Hawaii. Dr. Andrew Berger and his students are studying them with hopes of finding some way to save these native birds so one need not look for them only in the aviaries and museums. The Indian Hill Myna, Japanese White-eyes, Barred and Spotted Doves, House Finches (a marvelous orange rather than the rosy-red of most of the mainland birds) and the lone Brazilian Cardinal that I saw, all are introduced birds succeeding in an artificial environment.

We arrived on Sand Island about 9:30 at night and on the ride to B.O.Q., where we were to be quartered for our stay on Midway, I saw my first Laysan Albatrosses. My impression was only a fleeting one, far more impressive were the Bonin Petrels flitting in and out of the light, and a wire sitting group of Hawaiian Terns (also called White-capped Noddy, Hawaiian Noddy, and Noio). Albatross impres-

sions came later; some that night when their moaning, bill clapping conversa-

tion kept up all night long.

Our first day was a memorable one. A fine, beautiful day, the kind one associates with the south Pacific (actually Midway is north of the Tropic of Cancer, but it's more romantic to think of it as south Pacific) and after a morning of amenities with various station personnel we had our first good look at Sand Island. Again my impressions were not of the albatrosses but of a woody shrub called scavies and the Casuarina or Ironwood trees and a pair of Fairy Terns that hovered just a few feet in front of our face. These ethereal birds never seemed quite real. The name, White Tern, which appears in many books as its preferred name just is not as descriptive as the "Fairy." The bird made me think of butterflies, white rose petals and, of course, fairies.

We got our first real taste of allbatross catching that night. Armed with headlamps and a spray can of paint we sallied forth to the antennae field. The idea was to catch all banded birds and read the band numbers. You catch albatrosses by walking up to them and grabbing them by the neck. Then you tuck them under your arm, read the band, spray the top of their head with paint so they needn't be caught again, release them and on to the next. Simple? Let me explain a little further. The Laysan Albatross only weighs about six pounds (average) but in size it easily makes two of a Herring Gull and with a 6½ to 7 foot wing spread it becomes a good armful. Add to that the beak of about 4 inches, sharply hooked at the tip, and sharplyclawed feet and there are complications. My first letter home after two days of catching albatrosses described my battle wounds thusly, "On my right arm I have six spots where the beak has clamped on me through my shirt. It leaves only a slight scratch but a livid bruise. On the same arm I have five long scratches from the flailing toe nails. On my left thumb I have two long scratches on one side and one long scratch on the other side plus punctures from the bill tips. This last wound happened when I got careless and let one really clamp down. Had to pry the jaws apart. There are only a few other scratches, but I have bruises on both knees, also on the legs where the birds have given me a friendly nip, and a couple of bruises across my side from flailing wings." As I write this some 3½ months after leaving Midway my right hand still bears a two inch scar across the back and on the calf of my left leg there still is a mark where one irate (?) bird I had just released came up behind me and gave me a good nip.

In order to take off, the albatross needs a run into the wind; this gave us a chance to catch them even if they didn't oblige us by standing still as we approached them. They were fairly fast too, sometimes escaping even the young sailors that occasionally helped us. We were further handicapped by the petrel burrows that mined whole areas of the field and by wires supporting antennae towers. It was disconcerting to be reaching for a "goonie" and have the ground collapse from under you or to take a headlong dive tripped by the wires, especially if you should end up in a patch of sand burrs.

The antennae field became our "bete noire", because it was a night time job after working full days in another area. Our routine was to rise at 6:30, dress for breakfast, eat, come back to the room, put on our field clothes, bicycle to the boat dock, catch the 8 o'clock boat to Eastern Island, ride to the nesting plot, work that, move to the "south of pier" plot, catch as many birds as we could before the 3 o'clock boat came, back via bicycles to B.O.Q. to report on our day's work, shower, nap, or take a quick trip to the PX, eat supper, change to our field clothes, and work the antennae field till 9:30-10:00 when we would head back to our room to collapse in bed.

It was on Eastern Island that we began to know the Laysan. Here we worked in the daylight and with respect to pairs rather than unassociated birds. With the nesting area we were interested in birds in relationship to their pairing. As each egg was laid (Albatrosses only lay one egg a season) we attempted to catch the pair so that from reading the band numbers we could learn the constancy of the pair bond, besides such obvious things as the return to the nesting area and longevity. The female after laying the egg incubates it on the average of two days before leaving it to the care of her mate. Sometimes it is less than 24 hours before the changeover takes place. The male will remain at the nest for three weeks before he is replaced by the returning female. As we were to be on the atoll only four weeks we had hoped to get each nest shortly after the eggs were laid so that we could catch both members of the pair. Our procedure was to visit the area once each day, find the new nests, mark them with a numbered plaque, and read the bands (or band if unbanded) of the bird occupying the nest. Before we left the area we had found just a few short of 900 nests on the approximately one acre nest plot, a record number for the dozen years that this area had been studied.

To remove a bird from the nest was no great thing. One morning I personally caught and lifted 170 of these nesting birds, almost a half ton of them. You stand facing the bird (which probably is snapping its bill furiously) and with little hesitation it is grabbed by the neck with either the right or left hand depending on where the bird seems to be paying the least at-tention. We originally tried to come up from behind the head, but this was moderately successful. learned the right way from a young sailor, Maxwell Fromm, who had caught chickens and geese at his home in Springfield, Minnesota. Max was a savior to John and me on several occasions.

The reaction of individual birds after being handled varies greatly. Some immediately go back to the egg tucking it up in the brood pouch, occasionally bending their head down to the egg and talking to it. "Eh! Eh!" they say and some observers believe this talking to the egg may imprint on the developing chick the sound of its parent's voice. Others immediately take off and we would at times have to herd them back toward their nest. Consistent leavers are usually not successful nesters according to Dr. Fisher's evidence. Only a couple responded by attacking their tormenters. One, on its release, came at least five feet from its nest and bit me on the leg.

Perhaps I have left you with the impression of albatross aggressiveness, but this really is not my feeling at all. Actually, my impression is more one of gentleness even though it was not unusual to see individuals covered with blood after fighting a territorial fight. I remember best: getting down on my knees, making a bill movement with my fingers and having the bird nibble gently at my fingers; Dr. Fisher sitting on a bench handing leaves to a sitting bird who tucked the material into its nest; toddlers wandering in and around the nest without a single snap by the bird. These observations are of interest, because as Dr. Fisher pointed out to us, anything towering over the birds represents a threat, those on the same level, apparently very little.

I do not think that any motion picture or any written words can describe oceanic island wildlife. I have worked on inland islands with thousands of gulls and terns, but never had I had the feeling of numbers as there were with the albatrosses. Perhaps it was their size or perhaps it was their almost complete disregard for human habitations (I counted 70 birds in the front yard of one resident), but I was impressed by their numbers. There were perhaps 200,000 Laysans on these two small islands, a remarkable thing when you consider the pressure applied by the military at the early inception of the island base.

Still another impression I had of island life is the lack of small birds. In the habited part of Sand Island there

had been a population explosion of canaries and these birds, results of import and release, were the only song birds. A wintering population of American Golden Plover frequently accompanied by small groups of Ruddy Turnstones were interesting to me, because they frequented the habited part of the island and not the shoreline.

We saw few insects and other small arthropods; cockroaches and wood lice were there as well as several spiders. It interested me to note that the chief "bone cleaner" of the islands seemed to be the wood lice (Isopoda). I saw no carrion beetles. What the canaries, plovers and turnstones fed on I did not determine. There must have been enough small invertebrates to keep them going as they seemed relatively numerous. We occasionally saw a small gekkonid lizard too that found something to feed on.

I had never seen Frigate Birds before. The one common to the atoll was the Great Frigatebird whose soaring flight was truly magnificent. In flight they reminded me of skinny fork-tailed Turkey Vultures. Another impression was that if you could combine their appearance, their flight, and the walk of the Black-footed Albatross you would

have evil personified.

Still another exciting bird was the Red-tailed Tropicbird. A few young birds were still on Eastern Island and so a few adults would make their appearance each day. One of the most beautiful sights I saw were six of these birds performing against the bluest of blue skies.

A migrant of especial interest was the Bristle-thighed Curlew. It had intrigued me since the late 40's when I had read an article by Arthur Allen describing the search for its nest. I had met Henry Kyllingstad, who, was the first to locate a nest, earlier in the year, so wtihin a year's time, but a quarter of a century after the article, I met the man and the bird so intimately tied up with an interesting piece of writing. Curlews were seen on several occasions, but no more than three at a time.

Our last week at Midway was marred by such strong winds that we could not get from Sand to Eastern Island. However, we did get to an island about 60 miles away. Through the courtesy of the Padre (the Catholic Chaplain) John and I became his assistants and so were able to take the flight in a coast guard plane to Kure, the end of the Hawaiian chain. Our prize bird finds on this island were the Masked and Brown Boobies. The Redfooted Booby is quite common on Eastern, but I saw only a single Brown and no Masked forms on Eastern. I laborously skinned a Red-foot with a razor blade as my only tool one night after we had finished our work at the antennae field, only to discover that I had brought two banding permits with me, but not my collecting permit.

We sighted other birds, a quick view of a Short-eared Owl, several Pintails, teal and other ducks, a meadowlark, and several Wedge-tailed Shearwaters, Noddy Terns, but the last bird I want to cover in any detail is the Blackfooted Albatross. This was the same species I had seen while seasick off of the Washington coast, the only species of albatross represented in the collection at Duluth, and therefore an acquaintence if not an old friend. They look incredibly vicious, they walk with an evil hunch, they "talk" in a sinister tone, they have what looks like an incredibly thick neck to grab, and so I never did catch one, even to say that I had held a live, Black-footed Albatross in my hands. I gave them the respect that they probably didn't deserve, but none-the-less they left me with impressions I'll never forget of a magnificent, but somehow rascally bird.

Strong winds and sudden showers marked our last week at Midway. Coast Guard rescue planes abounded as they attempted to locate survivors of a sunken Danish freighter. I suspect that John and I worried about whether we could get out on the next log flight so we could get home by Christmas, and I suppose we both heaved a collective sigh of relief when the plane took off late on the night of December

12 and we were on board. We had some trouble with all of our luggage (gifts, collections and field apparatus) and I had trouble keeping my sansabelt pants above my hips. I had lost 14 pounds. But John had gotten a lot of photographs, Harvey had enough data to prove at least some of his contentions, and I had had my taste of island

life. I had seen thousands of Albatrosses, and I had proven you can lose weight even if you eat well. As I write these words I look at the snowy landscape and I'm damned if I don't miss the Gooney Birds.

Biology Department University of Minnesota, Duluth

notes of interest

SCISSOR-TAILED FLYCATCHER AT DULUTH — On May 24, 1972, while driving on the Doe Road, which is about five miles east of Duluth, just off the Lakewood Road, I saw a Scissor-tailed Flycatcher. It was perched on a wire fence that surrounded a large field, and was within 30 feet of the road. The bird was an adult with a tail about 8 inches long. Each time it flew up from the fence to catch an insect, the tail spread open, showing crimson on the inside edge down to the tip. The tail spread again upon landing. The wing linings were crimson, also, and, in flight, it was a strikingly beautiful bird. This was a life bird for me, so I took several pictures, (see front cover) 25 in fact, then raced to pick up Jan Green so she could see it, too. Together, we watched it for 10 or 15 minutes. My daughter and I went back at 5:30 that afternoon, and it was there, but several others looked that evening, and again the next morning, but, unfortunately, the bird was not seen again. Marjorie M. Carr, 1834 Vermilion Road, Duluth, Minnesota 55803.

THE POSSIBLE SIGHTING OF A WILLIAMSON'S SAPSUCKER IN WORTHINGTON, MINNESOTA — On Friday evening, April 21, 1972 after I came home from work, I walked from my home along the lake the two blocks to our city park hoping to see some migrating birds. There was considerable activity in the park including Hermit Thrushes, White-throated Sparrows, Ruby-crowned Kinglets, Fox Sparrows, Myrtle Warblers, etc. Most of them were on the ground or the low fence bordering the park. Two sapsuckers were in a tree nearby. Birding was good after the rain which had ceased about two hours before. However, it was very cold - especially for my hands, and as darkness was coming on, I returned home very cold.

On Saturday morning, April 22, about 10:30 a.m. I returned to the park. It was bright, sunny and comparatively windless for our area, and the temperature was 38 degrees. Again, there were many migrating birds. I spent some time in the park and noted, what I surmised to be, five Yellow-bellied Sapsuckers on one tree, but did not use my binoculars

on them.

I decided to walk down May Street, which is a short dead end street ending at the lake. There is a residence and yard off May Street and adjoining the park, which is relatively undisturbed, since just a lone man lives there. The yard is really a small point of land out into the lake containing trees and shrubbery and has often produced good birding.

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I seated myself on a stone by the lake out of the wind to enjoy what I could see. The Myrtle Warblers, kinglets, and sparrows were bathing in some of the little ponds on the narrow stony beach left by the rain of yesterday. It felt warm in the sun out of the wind. The Hermit Thrushes were thick in the yard. Fox Sparrows and White-throats were scratching under the bushes. A Common Crow called from a tall tree, and the flickers were at work in an ant pile. Altogether, it was a great morning, and I was completely content to sit and watch. Suddenly, I was attracted to what, at first glance, appeared to be the striped back of a Red-bellied Woodpecker going up a Norway pine (a not very tall nor big tree). I was delighted, as I'd never seen a Red-bellied Woodpecker right in Worthington. However, when I observed the bird through binoculars, I felt that it was something I had never seen before. The head was brown, bill black, the back barred, but as the bird went up the tree, bright lemon yellow appeared on the lower breast flanked by blackish-brown barred sides.

I observed this bird for about fifteen minutes, as it went slowly up the tree. There ware many holes in the tree in parallel lines as in the trees where the sapsuckers seemed to stay. I decided to return home to get my bird books. When I returned, this bird was not on the tree, but there was a female Yellow-bellied Sapsucker going up the tree. I went over to the park and again saw the brown-headed bird. It flew into a low tree along the lake, and as it flew, I noted a white back or rump patch. By this time, with what I could find in my books, I felt it had to be a female Williamson's Sapsucker. I again observed the yellow breast and a black breast spot higher up. It was approximately the size of the Yellow-bellied Sapsuckers.

I brought a friend down to the park to observe this bird, but did not see it again, so no one other than myself saw it. I looked again for the bird during the week, but did not see it. Several Yellow-bellied Sapsuckers were seen-both males and females, but no Williamson's males, although I observed each sapsucker very carefully after this through binoculars. Helen Hatlelid, Box 173, Worthington, Minnesota 56187.

Editor's Note — This is the first record of the Williamson's Sapsucker in Minnesota. From Mrs. Hatlelid's excellent description this species can now be added to the hypothetical list for the state.

summer tanager at Detroit Lakes — On May 8, 1972 I received a telephone call from Manse Brackney stating that he had received a specimen of a tanager from a friend in Detroit Lakes, Minnesota. Because of the plumage of the bird he was not sure of the identification of the specimen. I picked up the bird from Manse and took it to the Bell Museum of Natural History for identification. Dr. Tordoff identified the bird as a sub-adult Summer Tanager. From information received from Manse Brackney it seems that the bird appeared in the yard of William Puetz of Detroit Lakes on May 3, 1972. The bird remained in and around the yard and at their feeder until May 6. On the morning of May 7th the bird was found dead under the feeder, apparently having flown into a window. This represents the eighth record for the state of Minnesota and the second specimen taken in the state. The first specimen was taken in May 1891 near Pipestone, Minnesota. Robert B. Janssen, 14321 Prince Place, Minnetonka, Minnesota 55343.

POSSIBLE HOUSE FINCH IN MINNEAPOLIS — During February and March, we observed many assorted finches at our backyard feeder at 2101 Irving Avenue South in Minneapolis. Among them was one which we identified initially as a House Finch, mainly because it differed from the Purple

Finches in having a much redder rump and a generally slimmer profile. In comparison with the pictures in Birds of North America, it looked more like the House Finch than the Purple Finch. We had somewhere gotten the impression that the House Finch was an occasional visitor to Minnesota during the winter, so we weren't surprised to see it. When I mentioned it to a bird-watching friend, however, he said that it was absolutely impossible and that the bird must be a Purple Finch. We looked at it some more, and decided that there might be some such variation in Purple Finches. The matter rested there until I saw David Freeland's report of a House Finch sighting in Excelsior in June 1971 (The Loon, Winter, 1971). Excelsior isn't far from west Minneapolis. I wouldn't state categorically that the bird we saw was or wasn't a House Finch; I hope that other birdwatchers will be alert to the possibility that the House Finch might be present in Minnesota so that future reports can be investigated before the bird leaves. Mary Arneson, Ruth E. Arneson, 2101 Irving Avenue South, Minneapolis, Minnesota 55405.

"FISHING" FOR HERRING GULLS — Recently I received a reply from the Bird Banding Laboratory at Laurel, Maryland concerning a report that I had sent to them about a banded Herring Gull. The gull had been banded by F. E. (Ted) Ludwig M.D. on Gull Island in the Huron Islands Wildlife refuge five miles offshore near Big Bay, Michigan in Lake Superior, on June 17, 1971. This refuge is 200 miles away from the location where I encountered the gull. I thought Loon readers might be interested in knowing how I obtained the band number. On October 15, 1971, I was trolling on Lake Superior in Reservation Bay which is located at the southeast end of the Grand Portage Indian Reservation. I was using an imitation minnow of the floating type and had approximately 350 feet of line out. I saw several Herring Gulls flying, but none on the water. Suddenly there was a jerk on my line. I started to reel thinking that a steelhead trout had struck my lure. The lake surface had a small chop so I was not able to see what all the commotion was right away. After reeling in about 100 feet of line I realized that instead of a fish I had a gull on the end of my line. I reeled in a wet, bedraggled and unhappy gull. I netted the gull and went to shore — about 100 yards away - to disengage the hook. When I took the gull out of the net the hook fell out of its bill and then I saw that the bird was banded. The number was 796-75082. I dried and smoothed its feathers and examined it and there did not seem to be any apparent damage to the immature gull which flew away when released hopefully to live out the normal life span of a Herring Gull. Stanley Anderson, 632 N. 60 Ave. W. Duluth, Minnesota 55807.

SUMMER PEREGRINE SIGHTING — According to the Audubon News Release of October 31, 1971, "At least four species of North American birds of prey continue to approach the danger point of survival, and another — the Peregrine Falcon — has already reached it, according to the National Audubon Society. . . . Most severely threatened of all the birds of prey, and already extinct as a breeding species in the northeast, is the swift and handsome Peregrine Falcon, which is now becoming extremely scarce throughout North America. Only one or two nesting pairs are reported in the American Birds survey." It was reassuring for my husband and me to observe this species at Anahuac National Wildlife Refuge in southeastern Texas February 26, 1971, and then again three days later, March 1, 1971, to see another one in flight south of Corpus Christie. However, it was a bit of a surprise to see one at Inver Grove Heights, Dakota County, July 1, 1971.

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Betty Murphy and I had stopped to observe a Red-tailed Hawk at approximately the same general area where we had seen Swainson's Hawks on several occasions. Light conditions on this clear, sunny morning were excellent. As the falcon approached from the southwest and crossed Highway 55 about six feet above eye level less than one hundred feet in front of us, we noted its large size and bold head pattern, its long pointed wings and compressed tail, its swift and powerful flight. In a minute or so it was out of sight, down over the hill to the northeast where the bend in the Mississippi River is not far from the highway. Fran Nubel, 2000 Cedar Lake Blvd., Minneapolis, Minnesota 55416.

HARLEQUIN DUCK AT SILVER LAKE — On Friday, April 14, 1972, we were driving around Silver Lake in Rochester, Olmsted County, Minnesota, and spotted what looked to be ducks on the east side of the lake. We drove to the other side to get a better view and realized that we were seeing something different. They were Harlequin Ducks, three females and two males. It was about 2 p.m. on an overcast day; there had been occasional sprinkles of light rain. The temperature was c. 44-45 degrees. We noticed the three females diving below the surface of the water first; then we saw the two males beyond them in the shallower water. We noticed the striking dark and light pattern on the dark duck. As we stood watching through our binoculars, the two males swam to within 30 feet of where we were standing. We watched them for 30 minutes and saw clearly the white line around the neck, up the side and along the back; the white dot behind the eye and the buffy side-patch at the water line. We noticed the longer tail that stuck up. We saw the white head spots on the females but watched the males more closely. There were a few Mallards on the shore and these birds were noticeably smaller than the Mallards. We left to get a friend and when we returned 15 minutes later, all the Harlequins were gone. We returned at different times on Saturday and Sunday, but didn't see them again. Later we checked with Peterson's Field Guide and Robbins et al Birds of North America. Rose Pendle and Helen Master, Rochester, Minnesota.

HARLEQUIN DUCKS IN CASS COUNTY — An Sunday, April 16, 1972 I was checking on early migrants in the Kabekena River area. This is about five miles northwest of Walker in Cass County. Ice still covered all of our lakes but the Kabekena always opens three or four weeks early, which makes it an ideal resting spot for the early arrivals.

Here there were, Mallards, Common Goldeneyes, Lesser Scaup, Common Mergansers and also two Whistling Swans. One of the swans was an immature as it was rather rusty colored. But the greatest surprise and pleasure was the sighting of a pair of Harlequin Ducks. Although this was a first on my life list for this species, identification was positive. I observed them for five minutes or more and they were within a hundred feet of me. The rather bizzare head markings, the reddish sides and white markings on the back of the male were clearly visible. The female had an overall dark appearance. the head spots were quite faint. When they flushed, the small size, dark wings, without wing patches further confirmed their identity.

That same morning two Bald Eagles were on a point about two hundred yards up the river feeding on something which I could not distinguish. I could see the white head and tail of one but the other was quite dark, evidently a younger bird. Harold R. Hanson, Walker, Minnesota 56484.

SPARROW HAWK CHASES JUNCO — At about 5:00 p.m., April 7, 1972, while driving home, I saw a Sparrow Hawk attempting to catch a Slate-colored Junco. This took place about 100 feet from the road and in a weedy pasture. The hawk dove at the junco several times, each time barely missing its prey. The junco managed to elude the hawk by flying among three farm dogs which were "hunting" in the weedy pasture. The hawk did not come closer than about 10 feet from the dogs and then apparently gave up the chase. — Earl D. Kopischke, Game Research Center, Madelia, Minnesota.

RED-TAILED HAWK ATTACKS PHEASANT — While driving to my office on March 28, 1972, I saw a Red-tailed Hawk hovering near a fence-line. I stopped to photograph the bird. As I stopped, the hawk dove into the weedy fenceline about 200 feet from the road. The hawk came up, flew to a fencepost and landed. He then watched the spot where he had just missed his prey. I immediately took my 9 x 30 binoculars and looked to see what he was watching. I saw a cock Ring-necked Pheasant crouched in the weeds. As I watched, the pheasant crept into thicker weeds. The hawk watched the pheasant for a few minutes and then flew away. — Earl D. Kopischke, Game Research Center, Madelia, Minnesota.

COULD THIS BE A LITTLE GULL? — On March 25, 1972, early afternoon, on a nice fair day at Colville Park, just below Red Wing, Goodhue County, I was watching the many gulls. There were Ring-billed Gulls mostly in the back-water near the electric plant, and Herring Gulls flying around near the River and over the River. I walked along the bank a little, then turned back when I noticed two very small gulls dashing around over the open water. They had white heads and tails, no markings except a very well marked dot behind the eye, and a smudgy place at the nape. The bill was black, eyes beady black. I studied them for a few minutes with my 8 x 30 Zeiss binoculars. Sometimes they flew to a few feet of me and turned at the shore. I noted especially that there was no black on the wings tips, rather a whitish edging of the wings and tips. I checked in Peterson and also Robbins to learn if any Bonaparte's Gull could have this marking. However the small size and markings described indicated only that these were Little Gulls. Peterson gives a quotation from Griscom which says the bill of the Little Gull is red only in summer, otherwise black. This question was brought up because European books give the bill as light or red. Also the book mentions the wing linings of the Little Gull as black to gray. I know these were not black, but dark enough to contrast with the white edgings. Violet Lender, 2817 Robbins Street, Minneapolis, Minnesota 55410.

Editor's Note — The Little Gull has been increasing in occurrence on the Great Lakes. It has recently been recorded in the Chicago area and along the Wisconsin shore of Lake Michigan. It is regular in the vicinity of Detroit and has nested near Lake Erie. It should be watched for in this area.

BROWN THRASHER VISITS FEEDER — This winter my neighbor (Earl Larson, 5847 Aldrich Avenue No., Minneapolis) and I have been sharing a special guest. We have the normal run of winter birds coming to the feeders such as: the Black-capped Chickadee, White-breasted Nuthatch, Slate-colored Juncos, Common Redpolls, Purple Finches, etc. Our special guest is none other than the Brown Thrasher. It seems the bird prefers eating scratch feed over sunflower seed. When eating at the feeder the thrasher is very aggressive, throwing feed in every direction as though looking

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for some special morsel at the bottom of the food container. The birds coloration isn't as bright as their breeding plumage. Mr. Larson has a double row of evergreen trees. It is here the bird finds protection from the elements. We first saw the bird February 2, 1972. During the next several weeks it would come on an average of six times a day and remain from five to eight minutes. Now that the snow is gone we see less of him. The last time I saw it was March 25, 1972. Dick Peterson, 5835 Aldrich Avenue North, Minneapolis, Minnesota 55430.



ANOTHER SUMMER TANAGER RECORD — On May 17, 1972, in Lac Qui Parle County, I saw a Summer Tanager. With the exception of a small blotch of light green on its breast, it was completely red in color, a lighter shade than the Scarlet Tanager. In other respects - size and the shape and color of the bill it resembled a tanager. I saw it first at the edge of a woods. From there it flew into a willow tree on the lawn. It stayed there for some time thus giving me a good opportunity to observe him. I left the area the following day so am unable to say how long he remained in the area. The farm residence where this observation was made is on the Lac Qui Parle River on the road from the state park to Madison,

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Minnesota (County road 20) about three miles west of Lac Qui Parle Lake. (Mrs. Robert J.) Louise Christianson, 23 Woodland Road, Minneapolis, Minnesota, 55424.

AMERICAN WOODCOCK — This bird, is surprisingly plentiful in the White Bear area although rarely seen, as it usually does not fly in day light unless flushed. Its breeding display, known as "singing," occurs in this area from early April until mid-May. The conditions for a "singing ground" are quite specific — open nearly bare ground, the size can be a ten foot square if surrounded by low brush and must be in a larger "clearing" if surrounded by trees. Coniferous tree farms, in the 5 to 15 year stage, especially if there are gaps in the "stand", are often used. In the spring there are normally 2 males to 3 females in the woodcock population. They start "singing" about one half hour after sunset and continue until 60 to 75 minutes after sunset. They also "sing" from first light in the morning until an hour before a bright sunrise or half an hour before

sunrise if cloudy.

Their song is a combination of display on the ground and in the air. They strut around, on the ground, from one to three or four minutes; then take to the air for about a minute, climbing in a spiral to 250 or 300 feet above the ground their wings whistling and a twittering note is given. They then return to approximately the same spot where they take off (if landing in a large open field, they may change landing spots somewhat). While on the ground they sound a rather quiet call usually called "tuck-oo" followed by a harsh nasal sound usually called a "peent" (much the same as frogs and toads). A person with good hearing can pick up these "peent" sounds 300 or 400 yards which makes it easy to locate woodcock singing grounds by stopping for a couple of minutes on back roads where there are openings in brush or woods. Once you have located a "singing ground" you can expect the bird back every evening until middle of May unless below freezing or stormy weather occurs. New houses do not seem to drive the woodcock away. I know several singing grounds less than 100 yards from a house, many are within 200 yards of houses.

Mrs. Slade and I are licensed to net and band the woodcock through the Minnesota Division of Game and Fish. It is surprising how many males we find returning to the same spot in following years. In 1971 we caught one male northeast of Hugo that had been banded in 1970 by a State Biologist just east of Mahtomedi. I netted a 1968 hatched bird in summer banding in 1968 and renetted a couple of miles away, on the same singing ground, in 1969 and 1970. That same singing ground was occupied by a yearling woodcock in 1971.

Woodcock seem to be polygamous. The males have a life expectancy of just over 2 years, the females just over 3 years. The normal clutch is 4 eggs. The most serious losses are due to accidents, cats running loose, and hunting, in that order. If you locate birds singing we would appreciate your marking the area and describing the "spot" so that we can band the bird. Of about 150 woodcock we have banded since 1966, two were reported shot, one in Missouri and one in Minnesota, both in the second year after banding on singing grounds. Mr. G. N. Slade, Dellwood, White Bear Lake, Minnesota 55110.

HOODED WARBLER IN MINNEAPOLIS — On Sunday, April 30, 1972, while watching a White-throated Sparrow in our back yard, my brother and I saw a small yellow bird that we couldn't immediately identify. It was obviously a warbler, but it was sitting on the grass where I wasn't accustomed to

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see warblers, and then occasionally darting up three or four feet into the air, apparently catching something, then plummeting back to the ground. It hopped around actively in the grass, too, and appeared to catch insects there without flying after them. The bird was basically bright yellow below, brownish-yellow above and had as its only distinguishing mark a number of white feathers in its tail which it flashed while sitting close down on the ground. Often it would perch for a moment in a bush or on a fence, never higher than four feet, at which times the white in the tail still showed, but not as much as when the bird was on the ground. We first saw the bird from a distance of 18 feet, and used both binoculars and a telescope to assist in identification. A bird guide check of several other yellow species produced nothing that looked like this one until we began to check the females. The Hooded Warbler female fit the description of this bird in both behavior and appearance. After reading about other identifying marks, in particular the yellow forehead that distinguishes the Hooded Warbler from Wilson's Warbler, we made closer examination of the bird and observed that it could not be anything but a Hooded Warbler. She was not disturbed by the presence of people in the yard, and continued to appear from time to time all day, perching on the back fence while people played croquet and catching insects while the neighbors gardened. We had unfortunately been so busy with identification of the bird that we neglected to check its range, other than to note that it was common in the eastern half of the country, so we missed the chance to notify people who might have been interested in seeing her. Of particular interest were the apparent tameness of the bird and her very white tail, which seemed to show more than our reference books would have led us to expect. We haven't seen her again since April 30th, and are forced to assume that she has migrated out of the area. Mary Arneson, 2101 Irving Avenue South, Minneapolis, Minnesota 55405.

Editor's Note — There are two other records for the Hooded Warbler in Minnesota, one seen May 17, 1942, also in Minneapolis and one banded and photographed in Washington County on June 2, 1962. A. C. Bent in his Life History series mentions a record from Heron Lake, Jackson County, but we have no other information on this record.

AN EARLY TURKEY VULTURE — We (my husband Ed Schmid, son Eddie, and I) were returning from Bemidji stopping in Cass Lake on February 19, 1972 to pick up some boys and girls to celebrate our son's ninth birthday. We were traveling south on Highway 371 in Cass County at about 40-50 miles per hour. The day had been sunny and warm and was quite bright at 3:30 p.m. There have been an unusual number of Common Ravens in our area so I was checking to see if the black bird feeding on the right shoulder of the road was a Common Raven or a Common Crow when it flew up to the right just a car length ahead of us into a small jackpine about 30 feet away. At that distance the red head was unmistakeable and visible to all riding with us. Might I say it was a surprise to me! I was looking for the characteristic flap and sail of the raven plus the heavy ruff of feathers sometimes visible at the throat, and spotted instead the red head of the Turkey Vulture! Ellen Schmid, Squaw Point Road, Star Route, Cass Lake, Minnesota 56633.

Summer 1972

BOOK REVIEWS

SIX CAME FLYING by Marquis Mac-Swiney of Mashanaglass arrived for review early this spring, during the height of the Whistling Swan migration up the Mississippi. MacSwiney's idea of taming Mute Swans was contrary to my distant and brief relationship with the migrant swans of the Mississippi Valley. MacSwiney, too, had reservations about the propriety of pinioning all six of the Mute Swans which conveniently arrived to live on the waterways and ponds of his estate in North Rhine Westphalia, Germany. Therefore only four of six swans were pinioned permanently, and the others merely wing clipped. The description of the process, together with a sketch of the equipment used, were enough to make me wince. However, Mac-Swiney's relationship with the swans proved entertaining to him, and Mute Swans are so treated and kept throughout the United States, England, and Europe. The relationship of man to half-tamed animals such as these birds will no doubt become more common as the population of the world increases and open space diminishes.

The way to a swan's heart, as to a man's is through the stomach. That is the route the author took, admitting to himself the whole business of partially domesticating the swans is "unnatural."

What is achieved by such domestication? Victory, says MacSwiney, over oneself and one's patience, and the opportunity to study the animal "in peace." One wonders at the battle-conquest terminology, followed by study of the animal "in peace." A better peace might be never to start a battle.

The author himself says one should "avoid meddling with nature." It seems he is a meddler and loves it.

In spite of some Reader's Digest type digressions from the story of the swans, Hans and Leda, and distracting attempts at personable diction, the author does make some careful obser-

vations of swan behavior. What looks like aggressive neck ruffling and wing arching may indeed be so, but it may also be an indication of excitement and anticipation of being fed.

If unmotivated neck-ruffling may be interpreted equally as contentment or aggression or merely ventilation of the skin, what becomes of the science of ethology? MacSwiney does not use the word "ethology" but he poses some interesting and difficult questions for that science.

This book makes good reading for a winter evening. It is not scientifically pretentious. There are footnotes and a brief bibliography, several pages of photographs and 19 drawings, one showing the homology between the bones of the wing, arm and hand.

Published by Alfred A. Knopf, New York, 1972. 270 pages. \$6.95 hard-cover.

Frederick Z. Lesher, 509 Winona Street, LaCrosse, Wisconsin 54601.

BIRDS OF NEW GUINEA. Text by Abram Rutgers. St. Martin's Press (New York) 1971. \$15.00.

A superb collection of 160 color plates by naturalist-artist John Gould (1804-1881). Portraits of birds are back to back on one page with a page of text opposite each plate. These are modern reproductions of Gould's original lithographs (1875-80). Mr. Rutgers has written an informative and interesting page of text opposite each plate.

The portraits of the birds are highly reminiscent of Audubon's works, eg., certain grotesque positions, bird with large moth in beak, minimum of background detail. However, I feel Gould was a better artist. His birds are never quite as awkward looking as some of Audubon's. In fact, the portrait of the Double-wattled Cassowary on the cover is comparable to any present-day artist who seeks fine detail.

A very interesting and enjoyable book. The plates of the doves and Birds-of-paradise are worth the price alone. — Harding F. Huber, 2109 Squire Lane, New Brighton, Minnesota, 55112.

PORTRAITS OF TROPICAL BIRDS, by John S. Dunning. Livingston Publishing Co. (Wynnewood, Pa., 1970). \$20.00.

A stunning and magnificent collection of 72 color photographs of some very beautiful and unusual tropical birds. In the introduction and the section in methods and equipment Mr. Dunning explains how he was able to get such superb photographs. It simply is a matter of mist-netting the bird, then releasing it in an enclosure already set up with natural surroundings, lights and camera focused on a prominent perch. If quiet is maintained the bird quickly calms down and soon we have a natural looking photo of a wild bird sitting in appropriate surroundings.

Whether you are interested in bird photography or not you should enjoy this volume just for the beauty of the 72 excellent color photo-portraits. — Harding F. Huber, 2109 Squire Lane, New Brighton, Minnesota 55112.

BIRD WALK THROUGH THE BIBLE may not interest the active birder gunning for a 600 species yearly list, but the birder with an interest in literature and the metaphorical use of birds and their attributes will find in this book an accurate reference to biblical birds.

Part Two, "Birds of the Bible: A Glossary," pages 31 through 179, makes up the bulk of the book. Do you wonder why in "Song of Songs" 2:11-12 a sure sign of returning spring is the "voice of the turtle"? A singing turtle? No, but the mispronunciation of the French word "tortue," according to author Holmgren. Three and one-half pages are devoted to distinctions between doves and pigeons made in the Bible, and to various trans-

lations of the Hebrew and Greek into English. Four species of doves in the genus Streptopelia exist in the Holy Land says the author, but none are native to the United States. Two species of the genus have been introduced, the Ringed Turtle Dove and the Spotted Dove. Of course, the common dove in most of the United States is the Mourning Dove.

The author's comprehensive knowledge of birds and biblical scholarship enable her in this section on "Doves and Pigeon" to move from the contents summarized in the preceding paragraph to Jesus' reference to doves and on to the use of "doves' dung" or "doves' milk" (not really milk) as starvation food during wartime seige (2 Kings 6:25). Finally, the dove is used to represent the Holy Spirit or presence of God in various paintings, carvings and embroideries illustrating biblical passages.

The longest entry in the glossary is the some 30 pages devoted to "Birds of Abomination," including a 4 page table showing the phonetic Hebrew name of the birds to be abominated with the translations of 11 different English versions. The translations of "shahaf" range from "cuckow" in the King James Version, to "larus" Douay, "sea mew" Jewish Holy Scriptures (JPS), and "long-eared owl" New English Bible.

Most of the taboo birds listed in Leviticus 11:13-19 and Deuteronomy 14:11-20 are either scavengers or predators liable to carry a burden of vermin and disease. Of course taboo on these birds is not consistent with the starvation food of "doves' dung" mentioned previously, or with modern recognition that nearly all birds can be subject to disease and vermin.

Appendices 1 and 2 of Part Three reveal that there are only 60 Hebrew designations for birds or general groups of birds appearing in the Bible, and only 12 Greek designations. Of the 12 Greek designations, two, "peristera" for dove or pigeon and "peteina" for bird occur 22 times among only

47 New Testament passages referring to birds. 203 birdlore passages occur in the Old Testament.

Appendix 3 is a check-list of birds of Bible lands, giving both the scientif-

ic and common names.

This is a book to rummage in for information to fill out a truly encyclopedic understanding of birds and the verbal uses to which they are put. The author obviously loves her subject and demonstrates both sentiment for and knowledge of Bible birds.

Bird Walk through the Bible. Virginia C. Holmgren. The Seabury Press,

New York, 1972. \$6.95 hard.

Frederick Z. Lesher, 509 Winona Street, La Crosse, Wisconsin 54601.

On September 14, 1968 I was fishing in the Rum River between Anoka and St. Francis. The area is still quite wild and on a previous trip to it on August 28, 1968 I had seen an Osprey. On this particular September day I was standing hip-deep in the river and was in the process of changing fishing lures. I heard a loud splash and as I looked up saw an Osprey rising from the surface on the opposite shore. He was flying directly toward me. We were both completely surprised to see each other for as I had been standing quite still it seems possible that the Osprey did not consider me anything but a tree stump. The bird veered away at mid-stream and flew up the river passing me at a distance of about 40 feet and at a heighth of about 15 feet above the river. This chance encounter of two fishers so impressed me that on my return home I wrote this poem.

THE OSPREY

A splash! And looking up
I see the osprey rising from the river.
So intent was each in his pursuit
We did not see each other.
Two fishers on the river —
He to sustain body's life;
I seeking soul's refreshment.
Good luck to you, my friend!
May Great Pan each his fishing prosper.

Charles L. Horn, Jr.

REQUEST FOR INFORMATION: SANDERLING

For the past two years, the Long Point Bird Observatory has undertaken a study on the relationship between fat deposition and fall migration in the Sanderling. In conjunction with this study, a large number of birds have been color-marked and sightings of these marked birds away from Long Point have indicated that most of the birds fly directly from the study area to the East Coast.

During 1972, the Observatory hopes to individually color-mark and color-code several hundred Sanderling in order to further investigate this phenomenon. The color-coding will involve three aspects: color-marking with feather dye, wing-tagging and banding with the normal aluminum band.

Birds will be feather-dyed on the breast and abdomen with one of four colors: red, yellow, green, or white (no color); according to the percent of the bird's total body weight attributable to fat.

The birds will be wing-tagged on **each** wing with semi-permanent wing tags of the following colors: black, blue, brown, green, red, orange, yellow and white. The wing-tagging will individually identify each bird.

The placement of the aluminum band will indicate the age of the bird. Birds banded on the right leg will be adults and those banded on the left leg will be immatures.

The Observatory would be pleased if anyone sighting these birds would report the following information to us:

Date of sighting

Location (including nearest city or town)

Color of feather-dye on the breast and abdomen

Color of the wing tag on the right wing

Color of the wing tag on the left wing

Leg on which the bird is banded

Co-operators will receive a short note explaining the project's application to the preservation of the Long Point peninsula in a natural state and the date on which the bird was last seen on Long Point. Reports of marked birds should be sent to:

Long Point Bird Observatory, Long Point, Ontario, CANADA

PURPOSE OF THE MOU

The Minnesota Omithologists Union in an organization of both professionals and amateurs interested in birds. We foster the study of birds, we aim to create and increase public interest in birds and promote the preservation of birdlife and its natural habitat.

We carry out these aims through the publishing of a magazine, The Loon; sponsoring and encouraging the preservation of natural areas; conducting field trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.



SUGGESTIONS TO AUTHORS

The editors of **The Loon** need articles, shorter "Notes of Interest" and black/white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewriten, double-spaced and on one side of the sheet with generous margins. Notes of interest should be generally less than two typewritten pages double-spaced. If reprints are desired the outhor should so specify indicating number

required. A price quotation on reprints will be sent upon receipt of information.

Club information and amouncements of general interest should be sent to the Newsletter editor. See inside front cover. Bird-sighting reports for "The Season should be sent promptly at the end of February, May, August ana November to Mrs. Janet Green. See inside front cover.

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The LOON Minnesota's magazine of birds and nature, is published four times each year by the Minnesota Ornithologists' Union, the statewide bird club. Permanent address: J. F. Bell Museum of Natural History, University of Minne-sota, Minneapolis 55455. Anyone interested in birds and nature may join. Any organization with similar aims may affiliate. All MOU members receive our two quarterly publications: The Loon and the MOU Newsletter.

MEMBERSHIPS AND SUBSCRIPTIONS: Mrs. Elizabeth Campbell, 5267 W. Bald Eagle Blvd., Saint Paul, Mn. 55110. To join the MOU and receive both MOU publications, send Mrs. Campbell \$4\$ for a regular yearly subscription. Or other classes of membership that you may choose are: Family \$5\$ yearly; Sustaining \$25 yearly. Life \$100. Also available from Mrs. Campbell: back issues of The Loon (\$1 each ppd.) and MOU checklists of Minnesota birds (20 for \$1 ppd.). Gifts, bequests, and contributions to the MOU Endowment Fund should olso be sent to Mrs. Campbell.

EDITOR OF THE LOON: Robert B. Janssen, 14321 Prince Place, Hopkins, Mn. 55343. (phone 938-7464). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details. Associate Editors, Kim R. Eckert and Paul Egeland.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor to "The Season," request the report forms from the **EDITOR OF "THE SEASON," Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804.** (area 218, pages 525-55554) phone 525-5654).

EDITOR OF THE MOU NEWSLETTER: Mrs. Marlyn Mauritz, Route 4, Box 886, Excelsior, Minn. 55331.
Publishes announcements and reports about activities of the MOU and its affiliated clubs. (Club officers should keep both MOU editors informed.)

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The President Writes About . . .

HAWK RIDGE

In every organization, there are times when the role of its members can have a special impact that adds substantially to its purpose for being. Such appears to be the case with the Hawk Ridge project. Here is a graphic demonstration of what can be accomplished with a united effort.

Today the tremendous endeavor of the Duluth Audubon Society is being supported by the affiliated clubs, by individuals and by our MOU organization. It has been gratifying to sense the strong new kindredship growing between our state-wide membership as we all rise to a common cause of saving Hawk Ridge. In many ways, various club members have expressed new appreciation of the value of their membership in the MOU and in the supporting groups.

In Hawk Ridge, we all have an important special cause . . . we have an opportunity to share in saving the key outlook area for the nations greatest hawk flyway. Here, too, is an opportunity to say individually, "Count me in!"

We hope every member of the MOU and every member of each affiliated club will want to have a personal part in contributing toward making the Hawk Ridge project a great success. Now is the time to send in your check or pledge. Then, each year in the future, as your heart quickens to the beauty of a hawk in flight, you can feel glad anew.

MARY BORELL

A WINTER STUDY OF THE BIRD POPULATION IN ST. YON VALLEY, ST. MARY'S COLLEGE, WINONA, MINNESOTA

by James P. O'Brien

Introduction by Brother Theodore Voelker, F.S.C.

In June and July of the summers from 1969-1972, a population study of the birds in St. Yon Valley, part of St. Mary's College property has been made. Mist-netting and banding of the birds were the means used. This winter we decided to implement the summer work with a study of the bird population from October 1, 1971 to March 28, 1972. This study will be explained in the following paper written by James O'Brien who made the study for his graduation thesis. The purpose of the study was to determine how many resident or nestlings banded in the Valley remained there of those species which ordinarily winter in our area. Another study will be done this winter for further evidence.

The total number of all species banded in 1969 was 802, in 1970: 386, in 1971, 501 and the 1972 study is not yet complete. The number of birds banded which remain in our area for wintering is included in O'Brien's

paper.

All species banded in the Valley have decreased in numbers except the Eastern Wood Pewee, Eastern Bluebirds, Blue-winged Warblers and Robins. The following paper tells a tale all its own regarding birds remaining throughout the winter in their summer residence which this past winter provided plenty of good cover and food.

DESCRIPTION OF AREA

St. Yon Valley is situated on the eastern edge of Saint Mary's College campus, Winona County, Minnesota. It consists of 45 acres which had been used as farmland until the late '50's. Geographically the latitude is 44° 02' north and the longitude is 91° 41'

west. The valley extends one and onehalf miles around the total extremity of the property. St. Yon's is surrounded on three sides by hills and serves as a drainage of the area into Gilmore Creek. The base of the valley is 760 feet above sea level, while the tops of the hills surrounding the valley are on the average of 1,220 feet above sea level. The upper slopes of the hills are covered with remains of second growth eastern deciduous forest, the dominant trees being northern red oak, red maple and green ash

A small apple orchard and grape arbor were planted near the base of the valley on the northeast slope of the hills. During its farm use corn, alfalfa, and oats were planted. The forest on the upper slopes was burned a number of times with brush fires through the years. In the valley 116 herbaceous plants have been identified, and the number of trees and

shrubs identified number 40.

The valley has not been distributed agriculturally for about 15 years except for the planting of various types of pine trees along the whole border of the bottom of the forest. Also a small artificial lake fed by the creek has been formed at the entrance of the valley from Highway 14 which does attract some waterfowl. Otherwise the only changes taking place are the results of natural growth. This is an ideal territory for nesting, migrating, or wintering birds supplying plenty of cover and an abundance of food.

METHODS AND MATERIALS

The most important equipment used in this study were man's natural senses of sight and hearing as far as bird identification was concerned. A knowledge of the vegetation in the Valley was also essential. A set of 7x35 government issue binoculars was used for sighting the birds. A tape of An Evening in

Sapsucker Woods (Columbia) was very helpful in learning the songs and calls.

With the quadrants used by Walch (1971) as a reference, the areas of last autumn blooms and first spring flowers were located. With the warm, wet October and late autumn frost, many plants continued to flower into the first week of November. Some specially chosen trees were measured both in fall and again in spring for evidence of growth. For this purpose a steel tape measure was used and each tree was specially tagged.

The numbers and species of birds were recorded on each trip to the Valley. These counts were made at least twice a week until the heavy snow and then less often. Many trips were made to make sure the feeders were kept filled. On October 1, a feeder for sunflower seed and a bag of suet were suspended from the crossbar of a goal post near the hillside woods on the north-east side of the playing field. Later another smaller feeder was hung as well as a large piece of suet. A ground feeder with four legs and a roof was placed beneath the hanging feeders for those birds which prefer ground feeding the Slate - colored Juncoes and Tree Sparrows. the Mixed bird food was used in this feeder To protect the unused food from predators, a metal barrel was placed at the foot of one of the goal posts to store the extra food to be used in the feeders.

Mist nets of the Japanese variety were used for trapping the birds, one 9 meters and one 12 meters in length. These nets made of 1½ inch meshed black nylon thread were 3 meters deep and were tightly stretched between two 10 foot electrical conduit poles which were pointed on one end so they could be more easily driven into the earth. Whenever the nets were unfurled for catching birds, they were always checked at half-hour or hour intervals.

The nets were placed in the area

near the feeders so as to attract more specimens. Any birds caught were identified, banded, data recorded, and the banded bird was then released. Permission for the banding was obtained from the Fish and Wildlife Service, Laurel, Maryland, who furnished the various sized aluminum bands each with its designated number and proper size to fit the leg of those species netted. Special pliers were used to open and close the bands which were placed on either leg of the bird.

PRELIMINARY REPORT August 24 to October 1, 1971

Saint Yon Valley was very green when this preliminary study began. Goldenrod was the most noticeable flower blooming there, followed by the late purple and heath asters. There were fresh pocket gopher mounds being built near the swale area. The apples in the orchard were ripe. More Blue Jays were observed than any other species of bird, at least five to seven were seen or heard on every trip. One Cathird was reported each visit near the quadrant 15 J until September 20. American Goldfinches and Robins were present every morning. A Barred Owl hooted once in the southern wooded slope. An Eastern Meadowlark was perched in a tree around quadrant 14 L. An Indigo Bunting was seen near the dam.

About September 20, the valley started to show signs of approaching autumn. The sumac leaves started to change to their brilliant red, the leaves of the black walnut trees were turning to yellow and beginning to drop. A few of the maple leaves also added their beauty to the scene. There was a marked lessening in the amount of goldenrod in bloom, while semed to be more bladder campion and chicory making their last stand before the arrival of the first killing frost. The numbers of asters remained quite constant and there were still many grasshoppers, a few honey bees, some ants and crickets.

RESULTS AND DISCUSSION October 1 to December 31, 1971

On our first visit to Saint Yon Valley on October 1, we were greeted by a huge crop of shaggy mane mushrooms showing their white heads on both the playing field and along the roadsides leading up the hill. Short-lived as they are they began to turn black and disappear within a few days. October 22, 25, and 30 also produced an abundance of these mushrooms. A list of flowering plants in bloom shows how beautiful the valley was even late into the month of October, since our first killing frost did not occur until a late date in 1971. However throughout the month of October, the blooming plants gradually decreased in numbers but they managed to hold forth until the killing frost on November 7.

By October 1, the leaves of the sumac, black walnut, and maples had already changed color. The other varieties of trees in the valley turned to their fall colors as the month went by, so that by November all leaves of all trees had changed. The oaks and the locusts were the last to change. A large group of black locusts on the south wooded slope of the valley were strikingly green standing as they did amid the stripped white birches. By this time the trees which had had their earliest change of colors were already losing their leaves rapidly. The cottonwoods and the quaking aspens were the first to lose their leaves, while the oaks and apple trees never did completely lose theirs all winter.

A wide variety of mammals populate St. Yon Valley. The usual fall insects were present in great numbers. These like the flowers and tree leaves died off with the coming of the November killing frost.

During these months large numbers of Red-winged Blackbirds continued to migrate across the valley, going to their daily feed lots in the corn fields atop the hills from their roosts in the marshes along the river and returning again before dusk. Huge flocks of

"red-wings" were seen on eight separate days in October and November making these crossings of the valley. The total number seen on these days was 572. One day we counted 57 migrating Common Crows and on two separate days we sighted a total of 57 Canada Geese in migration.

Our actual banding began in November. During this month the greatest number of any species were Slatecolored Juncoes. There were 18 banded by December 8. The first day of netting we banded a Red-bellied Woodpecker which never was caught again. Four Blue Jays were banded before January 1. They were easily caught in the morning, perhaps because they were hungry and more daring in approaching the mist net. The White-breasted Nuthatches also found the feeders early and three were caught in November. Our first recovery of three summers of banding was a Downy Woodpecker caught on December 4. He had previously been banded July 11, 1971.

From our monthly bird count summaries, there were at least 7 Blue Jays in the valley; since we have banded only 5 there must be a few more yet to be caught. From Table 3 in Cyr and Freking, (summer 1971), we find that in three consecutive summers that 12 Blue Jays had been banded. This fact seems to indicate that many of the nesting summer birds and their young have moved to different areas to spend the winter. A great many of our winter banded birds such as the juncoes and the Common Redpolls will not be present next summer but we hope next winter's study will produce some recoveries. With more summer and winter bird banding work, it should be possible to find out what actually happens to a bird population in a given area.

In October, the Blue Jay, Robin, Red-bellied Woodpecker, Pied-billed Grebe, Downy Woodpecker, Eastern Bluebird, and Red-winged Blackbirds were our most common inhabitants of the valley. Juncoes made their first appearance at our feeder on October 2. The grebes remained in Lake LaSalle from September 27 to November 3. Two Yellow-shafted Flickers were last seen on October 4. Robins were common throughout October. One Robin was still seen there on December 1.

In November the Pileated Woodpecker was heard and seen for the first time on the same day as the Redbreasted Nuthatch which was seen only once. Just before the departure of the Pied-billed Grebes, a Horned Grebe made his appearance for one day only. Although the Hairy Woodpecker population remained quite the same up to this time, the "downy" population dropped from ten to four. Blue Jays remained common and the White-breasted Nuthatch increased somewhat. The first Common Redpoll was seen flying along the creek on November 15.

In December only the real nonmigratory remained along with the winter visitors. Bad weather reduced our number of sightings and we were able to band only twice during the entire month. With the arrival of the first snow, our regular visitors to our feeders, viz., Black-capped Chickadees White-breasted Nuthatches, and Blue Jays were augmented by the arrival of American Goldfinches and Cardinals. This was evident by our first banding of goldfinches on December 4. Also on this day we had a female Cardinal in the net but she escaped before we had a chance to band her. The Downy Woodpecker became a regular visitor to the suet and both the Hairy and the Red-bellied Woodpeckers remained in the area. Although we never actually saw either on the suet, at the rate it disappeared they must have been regular customers. Common Crows and two Red-tailed Hawks were constant visitors at the tops of the hills.

The number of Slate-colored Juncoes increased yet there seemed to be something peculiar about this increase. We would band a group of new birds and then have a repeat of one or two of these banded birds. After these re-

peats, it seemed a new group moved in as we would capture a number of unbanded birds. This probably points to the fact that juncoes travel in waves and the first arrivals do not necessarily stay in the same area or else they do considerable amount of moving about in that area. There were many groups of juncoes in nearby areas. It seemed that one group would remain at our feeders for perhaps a week or 10 days and then move to a new area. Whatever the case might be, one group did not stay permanently at our feeder because new birds were being banded and the total population did not seem to grow significantly. Also among the netted birds we had varying numbers of males, females, or juveniles in the groups banded. Only two Starlings were seen in the valley and they never approached our feeder. We had a considerable number of House Sparrows at the beginning of our study but by December 31 we had none approaching our feeder.

January 1 to April 1

With the arrival of the cold weather, our number of banding and sighting days both decreased. We were able to band on only two days in January. On the 18th, our first recovery was made of a Black-capped Chickadee, which had been banded in St. Yon Valley in June 1971. On January 17, after a long cold spell, it was interesting to note that the Cardinals and White-breasted Nuthatches began to give their spring territorial songs for the first time. In February, many northern migrants were present at the feeder. Three Purple Finches were banded in February, along with our first Common Redpoll.

March was a very active month for us and the birds. We banded on 11 days having netted over 110 birds on these days. Four of our five recoveries were made in this month, viz.: a Cardinal from July 1970, a Downy Woodpecker from July 1971, both having been banded in St. Yon Valley. Besides

this we recovered two American Goldfinches one of which had been banded near Camp Ripley, Minnesota by Mr. Ryan in March 1971 and a second goldfinch which had been banded at North St. Paul by Mrs. Murray Olyphant, Jr. on May 5, 1970.

At the beginning of the month the common northern migrants were still present and Pine Grosbeaks were spotted in our area for the first time although we did not band any. Toward the middle of the month, the southern migrants began to return to the valley. The first Robins were seen on March 11; five Canada Geese and two Great Blue Herons flew over the valley the same day. Six Song Sparrows and a Swamp Sparrow were present but did not approach the feeders. Other migrants at this time included the Yellow-shafted Flicker, Common Grackle, Red-winged Blackbirds, Killdeer, and Eastern Phoebe. Although the Tufted Titmouse usually resides in the valley. he was not heard this year until the middle of March.

We finally banded a few of the woodpeckers which we knew were regular visitors to the suet. A male and female "downy" were caught along with a female "hairy." The Pileated Woodpecker was still present although we never saw him at the feeder. Along with birds of the southern migration, a number of chickadees must have moved in. Before March we had banded only two of these birds, but 12 new "black-caps" were netted after March 1. The greatest number of birds banded in March were American Goldfinches.

There were no flowers in bloom at the close of our work on March 28. Both February and March were below normal average temperature, which accounts for the lack of such early blooms as bloodroot, skunk cabbage, or water cress. The only sign of plant growth were a few thistles beginning to green and a spattering of new curled dock sprouts.

TABLE I BIRD SPECIES IDENTIFIED IN ST. YON VALLEY

Common Name

Horned Grebe Pied-billed Grebe Great Blue Heron Canada Goose Cooper's Hawk Red-tailed Hawk Ruffed Grouse Ring-necked Pheasant Great Horned Owl Barred Owl Belted Kingfisher Yellow-shafted Flicker Pileated Woodpecker Red-bellied Woodpecker Hairy Woodpecker Downy Woodpecker Tree Swallow Blue Jay Common Crow Black-capped Chickadee **Tufted Titmouse** White-breasted Nuthatch Red-breasted Nuthatch Brown Creeper House Wren Cathird Robin Eastern Bluebird Golden-crowned Kinglet Cedar Waxwing Starling Myrtle Warbler Palm Warbler Eastern Meadowlark Red-winged Blackbird Baltimore Oriole Rusty Blackbird Brewer's Blackbird Common Grackle Brown-headed Cowbird Cardinal Indigo Bunting Purple Finch Pine Grosbeak Common Redpoll Hoary Redpoll Pine Siskin American Goldfinch Vesper Sparrow Slate-colored Junco

Oregon Junco Tree Sparrow Chipping Sparrow Harris' Sparrow White-throated Sparrow Song Sparrow

TABLE 2 BIRDS FOUND IN SAINT YON VALLEY BOTH SUMMER AND WINTER

Birds Banded Red-bellied	Sum. 1969	Sum. 1970	Sum. 1971 3		Winter 1971-1972
Woodpecker	1	0	0	1	1
Hairy Woodpecker	0	0	1	1	1
Downy Woodpecker	21	16	13	50	2
Blue Jay	3	5	4	12	5
Black-capped Chickadee White-breast	18	13	7	38	14
Nuthatch	2 2	7	4	13	3
Cardinal	11	7	3	21	1
Pine Siskin	1	0	0	1	0
American Goldfinch Totals 1	53 .10	45 93	29 61	127 264	131 158

SEEN BUT NOT BANDED

Common Crow	2	2	. 0	3
Red-tailed	0			
Hawk	2	2	2	2
Barred Owl	2	2	2	2
Pileated				
Woodpecker	0	0	1	1
Ruffed				
Grouse	2	2	0	4
Great Horne	d			
Owl	0	0	0	1

Summer 1969 Louise Augustine and Sister Julie Huelskamp

Summer 1970 Larry Weber and Robert Heagele

Summer 1971 Sister Carole Freking and Roger Cyr (Mrs. Roger Cyr)

Winter 1971-1972 James P. O'Brien

TABLE 3 MONTHLY BIRD SUMMARY SEPTEMBER

SEPTEM	BEK	
Average Species of	Number Birds	Number of Days on Which Birds Were Seen
Yellow-shafted Flicker		1
Red-bellied Woodpecker		1
Hairy Woodpecker		1
Downy Woodpecker		1
Blue Jay	4-5	6*
House Wren		1
Robin		3
Catbird	1-2	5
Eastern Meadowlark		2
Baltimore Oriole		1
Cardinal		2
Indigo Bunting		2
American Goldfinch		3
# During September the each species were not preliminary trips were familiarize myself with species of birds. *Also please note the m sighting days was 6	always k made the nu	of birds of ept. These mainly to mbers and
остов	ER	
Pied-billed Grebe	2.0	12
Red-tailed Hawk	1.3	3
Killdeer	1.0	1
Belted Kingfisher	1.0	1
Yellow-shafted Flicker	1.7	3
Red-Bellied Woodpecker	1.5	12
Hairy Woodpecker	1.0	2
Downy Woodpecker	1.1	10
Tree Swallow	2.0	1
Blue Jay	4.9	18
Common Crow	1.5*	6
Black-capped Chickadee	2.0	8
White-breasted Nuthatch	1.8	14
House Wren	1.0	2
Robin	3.9	16
Eastern Bluebird	2.4	5

2.0

2.0

1.0

1.5

2.0

7.9

1.0

2.3

2.75*

Starling

Cardinal

Myrtle Warbler

Rusty Blackbird

Brewer's Blackbird

Common Grackle

American Goldfinch

Brown-headed Cowbird 2.0

Red-winged Blackbird

Palm Warbler

1

4

1

10

2

1

7

1

4

	e NumberW	Number of Days on hich Birds Vere Seen	Averag		umber of Days on
Vesper Sparrow	1.0	1			ere Seen
Slate-colored Junco	8.1	14	Slate-colored Junco	7.3	6
Tree Sparrow	1.0	1	Total sightings made in		_
Chipping Sparrow	1.0	2	JANUA		
Harris' Sparrow	2.0	1	Red-tailed Hawk	1.0	1
White-throated Sparrow		1	Pileated Woodpecker	1.0	2
Song Sparrow	1.0	1	Red-bellied Woodpecker		1
*See Table 4. The num		_	Hairy Woodpecker	1.0	1
is larger there because			Downy Woodpecker	1.0	1
ings.	or migrate	ry signt-	Blue Jay	2.7	7
Please note: 22 sightings	takan in t	ho month	Black-capped Chickadee		4
of October.	taken in ti	ne month	White-breasted Nuthatch		3
			Cardinal	2.0	1
NOVEM			American Goldfinch	3.5	4
Horned Grebe	1.0	1	Slate-colored Junco	6.0	5
Pied-billed Grebe	2.0	1	Total sightings made is		
Canada Goose	*	2			- 0.
Red-tailed Hawk	1.0	2	FEBRU		
Pileated Woodpecker	1.0	2	Red-tailed Hawk	1.25	4
Red-bellied Woodpecker		13	Belted Kingfisher	1.00	1
Hairy Woodpecker	1.0	4	Pileated Woodpecker	1.00	1
Downy Woodpecker	1.25	4	Red-bellied Woodpecker		2
Blue Jay	4.7	19	Hairy Woodpecker	1.00	1
Common Crow	1.3	6	Downy Woodpecker	1.33	3
Black-capped Chickadee		6	Blue Jay	3.15	6
White-breasted Nuthatch		18	Common Crow	2.33	3
Red-breasted Nuthatch		1	Black-capped Chickadee		7
Brown Creeper	2.0	1	White-breasted Nuthatch		5
Robin	1.6	5	Robin	1.00	1
Golden-crowned Kinglet		2		12.00	1
Red-winged Blackbird	*	5	Cardinal Binah	1.67	3
Common Grackle	1.0	1	Purple Finch	2.00	2
Cardinal	1.1	7	Pine Grosbeak	2.00	1
Common Redpoll	1.0	1	Common Redpoll	4.33	3
American Goldfinch	1.7	6	American Goldfinch Slate-colored Junco	6.00 5.20	7
	12.9	19	Total sightings made in		5 8
Oregon Junco	1.0	1	MARC	_	– o
Song Sparrow	1.0	_	Killdeer	1.25	4
Total sightings made in *See Table 4 for migrat			Mourning Dove		4
days.	ion counts	on these		1.00	3
days.	RED		Belted Kingfisher Yellow-shafted Flicker	1.33 2.00	3
Red-tailed Hawk	1.5	2	Pileated Woodpecker	1.00	2
Red-bellied Woodpecker		4	Hairy Woodpecker	1.00	4
Hairy Woodpecker	1.0	1	Downy Woodpecker	1.25	8
Downy Woodpecker	1.0	2	Red-bellied Woodpecker		6
Blue Jay	1.8	5	Eastern Phoebe	1.33	2
Common Crow	2.0	3	Blue Jay	3.40	10
Black-capped Chickadee		1	Common Crow	1.69	9
White-breasted Nuthatch		3	Black-capped Chickadee		12
Robin	1.0	1	Tufted Titmouse	1.00	2
Cardinal	1.0	1	White-breasted Nuthatch		10
American Goldfinch	3.0	2	Robin	6.78	9

The Loon

Species	rage Number of Birds	Which Birds Number of Were Seen	BANDED SPECIE WINTER 19	s su		4
Eastern Bluebird Cedar Waxwing	2.50 3.00	2 2	Species	New Band- ings	Winter Repeats	
Eastern Meadowlark	2.00	1	Red-bellied Woodpecker	1	0	0
Red-winged Blackbir	d 5.16	6	Hairy Woodpecker	1,	0	0
Common Grackle	7.00	5	Downy Woodpecker	2	0	1
Cardinal	2.50	10	Blue Jay	5	0	0
Purple Finch	5.62	8				U
Pine Grosbeak	1.50	2	Black-capped Chickade	e 14	7	1

7

14

10

1

1

6

10.43

13.00

5.20

2.00

1.00

3.00

1.20

Total sightings made in March 14

White-breasted Nuthatch

Cardinal

Purple Finch

Common Redpoll

Totals

American Goldfinch

Slate-colored Junco

3

0

0

0

10

6

26

1

14

19

131

34

225

0

1

0

0

2

0

5

TABLE 5
RECOVERIES OF BANDED BIRDS
DURING WINTER STUDY

Date	Species	Band	Place	Date
		Number	Banded	Banded
11-12-71	Downy Woodpecker	101-158605 St.	Yon Valley	6-16-71
1-18-72	Black-capped Chickadee	122-81956 St.	Yon Valley	7-6-71
3- 6-72	American Goldfinch	125-37886 Cam	p Ripley, Mn.	3-4-71
3-13-72	Cardinal	75-104136 St.	Yon Valley	7-26-70
3-28-72	American Goldfinch	118-15321 N. St	. Paul, Mn.	5-5-70
Bander o	of Goldfinch 125-37886	L. S. Ryan Little	Falls, Minnesota	
Bander o	of Goldfinch 118-15321	Mrs. Murray Oly	phant, N. St. Paul,	Mn.

CONCLUSIONS

Common Redpoll

American Goldfinch

Slate-colored Junco

Tree Sparrow

Song Sparrow

Swamp Sparrow

Red-tailed Hawk

From actual count of numbers of summer birds wintering in our valley, we know that we did not band all winter residents, but did catch the greater share of them. Since we recovered only three birds of those banded in three summer's work in Saint Yon Valley, we suspect that even with plentiful food and cover, winter species do not necessarily remain in the same areas where they nested or were hatched.

There must be some migration and change of species from one area to another with the change of seasons. We do know that Blue Jays have been known to move to areas with greater supplies of acorns when the area they are living in runs short of a plentiful crop. Some winters these birds will move from Minnesota to Wisconsin

or vice versa when the supply of acorns is greater in one state than in the other. Also at the height of spring migration, there is always some Blue Jay migratory movement. Continued banding in the valley next winter should give more information on this theory of where winter residents tend to reside.

From our monthly bird summaries, it was possible to estimate the number of each species populating Saint Yon Valley during the winter of 1971-1972. All through the Winona area, we had a great influx of Pine Grosbeaks, Pine Siskins, Slate-colored Juncoes, Common Redpolls, American Goldfinches, and Evening Grosbeaks. A considerable number of Robins and Cedar Waxwings spent the winter near Lake Winona, feeding on the hackberries. Our continued work next winter

should show if the northern migrants we banded this winter will come back in as great numbers as this year or if they will return again to our valley.

We feel this winter study was a necessary and valuable adjunct to the three summer's work spent in the banding of birds in Saint Yons.

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St. Mary's College, Winona, Minnesota

THE 1972 SPRING SEASON (March 1 to May 31)

by Kim R. Eckert

Except for a sudden warm-up in the middle of March, it could be said that there was no spring this year. For the most part it was very cold through the first half of May, and then suddenly warm during the rest of the month. We seemed to have gone directly from winter into summer during the weekend of May 13-14.

March temperatures were about average on the whole; the first and last thirds were cold, but the middle was very warm. Most of the state had near normal March precipitation, though southern parts were drier than normal, and the north-central was wetter. Most snow cover in the state melted away suddenly during the mid-

March warm-up.

April temperatures averaged about 3° below normal across the state, with the first week of the month no less than 10° below normal! Precipitation was above normal in the southwest, but below normal in the north. By the 15th, the lakes in the northern twothirds of the state were still icecovered, and by the end of the month lakes were still frozen north of a line from Mille Lace Co. to East Grand Forks!

May averaged warmer than usual,

especially in the north which was about 9° above normal, making it one of the 3 warmest Mays in history in that area! Generally the eastern half of the state was drier than normal, while the west received as much as 21/2 times the normal rainfall. By the second week of May all lakes were finally free of ice, but the western 20-30 miles of Lake Superior was 100% icecovered into June!

All of this had an adverse effect on migration. Just about every observer complained about the dull spring, especially shorebirds and warblers. There were good influxes in mid-March and mid-May to match the sudden warming, but the rest of the season was disappointing. KE and PE were joined by HK on May 20 for the third Big Day attempt, but even though things were much better organized than the previous 2 years, we only managed 153 species in the 90° temperatures. Most migrants had already flown north with the heat, while others never arrived during the earlier cold, so we settled for the same total as in our first year.

Nevertheless, a record 297 species were recorded, which means that there were enough rarities to make up for the lack in commoner migrants. How-

ever, some of these records are open to question, as are many of the unusual dates reported. Never have we used so many Requests For Details forms. However, because of the new format in this report, a summary of the better records will not be listed here as was customary.

There were 61 observers this spring, which is only a slight increase over the past 2 years. As usual, northern observers are particularly scarce: there were only 17 of them as compared to 44 in the south.

Finally, a word about the new style of this report. At the time of this writing (Oct. 29) this report is 2 months behind schedule, and only 3 weeks ago hardly any work had been done on it. Had the usual procedure of compiling early and late dates for all migrants been continued, this report would have been another month behind. This type of report is much easier to compile and write, and much more interesting and readable. The old style was followed only because information on arrival and departure dates of many migrants is incomplete, and in the old format such data was supplied. So there is something to be said for both styles. I know what I prefer, and I know what some of my "bosses" prefer, but let's hear what the readers want in their magazine.

Loons through cormorant: A peak of 200 Common Loons was seen on 5-2 in Lake of the Woods Co. (J. McIntyre). Red-throated Loons were mon Loons was seen on of a large of the control of

Herons, etc.: Little Blue Herons were noted at 2 locations: a sub-adult was seen way out of range at Virginia, St. Louis Co. on 5-27 thru 5-29 (R. Carlson), and adults were seen at Lake Johanna, Pope Co. (where they later nested) on 5-19 and 5-31 (BH) Cattle Egrets occured mostly in the west. Single birds were seen on 5-20 and 5-28 in Stevens Co. (KE, PE, HK), and on 5-25 at Ashby, Grant Co., where they later nested (KE). This species again nested at Lake Johanna, Pope Co., and an average of 10 were seen there from 5-12 on (BH). Migrants were also seen at Rothsay Wildlife Area in Wilkin Co. where 3 were found on 5-27 (KE), and 2 were also noted at LaCrescent, Houston Co. (FL). A Common Egret was seen by many observers north of its normal range near Canyon, St. Louis Co. from 4-12 to 4-17, and at Duluth on 4-18 (same bird?) (PH). A Yellow-

crowned Night Heron was out of range at Lake Johanna, Pope Co. from 5-7 on (BH). The species was noted 3 times at its usual Houston Co. area from 4-28 on. Least Bitterns continue to be overlooked: they were only at Goodhue Co. on 5-14 (EB), and in Wright Co. from 5-25 to 5-30

Swan and geese: On 4-8 in Wabasha Co. 5000 Whistling Swans was an impressive peak (RBJ). The best Canada Goose peak was only 2500 in Blue Earth Co. on 3-19 (EK). There were 7 Whitefronted Goose reports: 18 in Cottonwood Co. from 3-19 to 3-27 (LR), Olmsted Co. on 3-23 (CW), 50 on 4-1 in Renville Co. (KE), 4-23 in Ottertail Co. (KE, JG), 4-26 in Aitkin Co. (JB, TS). 5-2 in Sherburne Co. (SR), in Marshall Co. on 5-11 (AR), and many observers had one from 4-3 to 5-16 in Hennepin Co. A peak of 500 Snow Geese was at Lac Qui Parle Co. on 4-16 (BH).

Ducks: Agassiz NWR again recorded some very high and accurate waterfowl peaks: Mallard, 4780; Gadwall. 4016: Pintail. 950; Green-winged Teal, Ducks: Agassiz NWR again recorded some very high and accurate waterfowl peaks: Mallard, 4780; Gadwall, 4016; Pintail, 950; Green-winged Teal, 1040; Blue-winged Teal, 6810; American Widgeon, 1180; Shoveler, 970; Wood Duck, 326; Redhead, 2360; Ring-necked Duck, 3640; Lesser Scaup, 20,060; Common Goldeneye, 4000; Bufflehead, 510; Ruddy Duck, 850. A Cinnamon Teal drake was seen on 4-12 and 4-17 at Sherburne NWR (SR), and another was seen sometime in April by someone in Murray Co. somewhere (fide, more or less by someone named HK), On 4-16 in Wabasha Co. a peak of 1000 Canvasback occured (JAB). Greater Scaup were identified in 13 counties from 3-11 to 4-27, with a peak of 200 in Aitkin Co. on 4-16 (JB, TS). A late Lesser Scaup was seen in Cottonwood Co. on 5-24 (LF), a late Common Goldeneye on 5-20 in Stevens Co. (KE, PE, HK), and a late Bufflehead in Marshall Co. on 5-23 (AR). There were 2 Oldsquaw reports: 4-16 in Lake Co. (M. Penner), and 20 in Cook Co. on 5-25 (MMC). No less than 7 Harlequin Ducks appeared: a flock of 5 was at Rochester, Olmsted Co. on 4-16, White-winged Scoters were seen on 4-18 in Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-31 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (M. Penner), 5 on 5-13 in Cook Co. (JJ), on 5-19 in Duluth and Lake Co. (JJ), on 5-19 in D

Common Scoters were seen in Lake Co. on 5-23 (JAB).

Hawks, etc.: Early Turkey Vultures were found on 3-28 in Hennepin Co. (VL) and on 3-29 in Aitkin Co. (LP). Eight Goshawks were seen in St. Louis, Crow Wing, Washington and Hennepin Cos. from 3-2 to 5-23. A Krider's Red-tailed Hawk was identified on 5-20 in Stearns Co. (KE, PE, HK). An early Red-shouldered Hawk showed up north of its supposed range on 3-14 in Crow Wing Co. (J. Rosenband), and another was seen farther west than normal in northwest Nicollet Co. on 4-1 (KE). Broad-winged Hawks were reported twice in March, but with no substantiating details. There were 7 Swainson's Hawks reported, but two of them from mid-March with no details. The other 5 records were: 4-9 in Cottonwood Co. (LR), 4-22 in Hennepin Co. (OJ), 4-26 in Grant Co. (KE), 5-20 in Ottertail Co. (MS), and on 5-28 in Lac Qui Parle Co. (KE). An early Rough-legged Hawk was in Clay Co. (S.). An early Rough-legged Hawk was in Clay Co. (S.). An early Rough-legged Hawk was in Clay Co. (S.). An early Rough-legged Hawk was in Clay Co. (S.). There were 2 Ferruginous Hawks reported: on 4-16 in Clay Co. (EA), and on 3-31 at Lac Qui Parle Wildlife Area in Chippewa Co. (BL, R. Glassel, L. Campbell, A. Bolduc, D. Rhume). Golden Eagles were seen on 3-28 in Carver Co. (VL), on 4-9 in Hennepin Co. (VL), on 4-9 in Hennepin Co. (VL), on 4-9 in Hennepin Co. (VL), on 4-10 in Carver Co. (FB), and in Jackson Co. on 5-6 (HH). About 74 Bald Eagles were reported (15 adults: 21 immatures, 38 unknown), from St. Louis, Clearwater, Cook, Itasca, Cass, Mille Lacs, Crow Wing, Clay, Dakota, Sibley, Marshall, Faribault, Sherburne, Wabasha, Big Stone, Hennepin and Goodhue Cos. Thirty-four Ospreys were recorded from St. Louis, Clearwater, Cook, Beltrami, Itasca, Cass, Mille Lacs, Lyon, Crow Wing, Olmsted, Cottonwood, Sherburne, Wright, Wabasha, Stevens and Scott Co's, No less than 6 Peregrine Falcons were seen, which may be some sort of spring record: on 3-11 at Waterville, LeSueur Co. (BDC), 3-14 to

3-22 in Hennepin Co. (OJ), in Wright Co. on 4-23 (BH), in Marshall Co. on 5-3 (AR), on 5-10 in Duluth (MMC), on 5-13 in Yellow Medicine Co. (RBJ). There were 8 Pigeon Hawk reports: on 3-12 in Hennepin Co. (OJ), on 4-1 in Crow Wing Co. (TS), on 4-8 in Grant Co. (KE), on 4-23 in Aitin Co. (JB, TS), in Clay Co. on 4-25 and 5-4 (LCF), on 5-16 in Itasca Co. (WHL), on 5-25 in Cook Co. (MMC), and on 5-28 in St. Louis Co. (BDC). A Sparrow Hawk was involved in a housing shortage on 4-24: while "looking at my duck house for a possible nest, a Blue Jay attacked it (the hawk)." And earlier on 4-7 in the same house: "have a Screech Owl in wood duck house in back yard" (JJ).

"have a Screech Owl in wood duck house in back yard" (JJ).

Grouse through coot: The only Spruce Grouse were 2 on 5-23 at Lost Lake, St. Louis Co. Greater Prairie Chickens are still easy to find at Rothsay Wildlife Area, Wilkin Co. An average of 35-40 were seen by many observers until 5-10. Another was seen near Felton, Clay Co. on 5-27 (KE). Sharptailed Grouse were listed 4 times: on 4-14 in St. Louis Co. (MMC), 12 in Aitkin Co. on 4-21 and 4-22 (JG, JB. TS, RBJ), and on 4-23 in Carlton Co. (JG). Bobwhite were again absent from the southeast and continue to be seen farther west (introduced birds?): 2 on 4-13 at Mountain Lake, Cottonwood Co. (LF). Gray Partridge were more widespread than usual, appearing in 14 counties: Clay, Cottonwood, Faribault, Murray, Blue Earth, Watonwan, Wilkin, Wabasha, Dakota, Nobles, Rice, Scott, Nicollet and McLeod Cos. Turkeys have become established in a wild state in Whitewater Wildlife Area, Winona Co. Several observers have seen and heard birds from March through May in the vicinity of Beaver. There were 13 Sandhill Crane reports from 4-9 through 5-28 in Clay, Marshall, Blue Earth, Sherburne, Clearwater, Wilkin, Jackson, Morrison, Ramsey and McLeod Cos. A peak of 95 was at Marshall Co. on 4-16 (AR), and 81 were in Clay Co. on the same date (EA). In fact, on 4-16 cranes were seen in 4 counties by 5 observers! Rails showed up early in Lyon Co.: a Virginia Rail was seen on 4-20 and a Sora on 4-4 (HK). A Univ. of Minn. student did research this spring and summer on the Yellow Rail at the Waubun, Mahnomen Co. marsh. As of 5-28 he had caught 12 rails, and when asked to estimate the number present in the area, he could only say "hundreds." Only 3 Common Gallinules were found: on 5-9 in Houston Co. (FL), on 5-14 in Goodhue Co. (EB). and on 6-1 in Henepin Co. (ES). A peak of 13,710 American Coot was counted in Marshall Co. on 4-26 (AR).

nepin Co. (ES). A peak of 13,710 American Coot was counted in Marshall Co. on 4-26 (AR).

Shorebirds: After two consecutive years, shorebirds this spring were very disappointing. Even the Marshall sewage ponds could not produce very good numbers. There was a peak of 50 Semipalmated Plovers in Aitkin Co. on 5-23 (JB), and one was there on the late date of 6-3 (TS). Piping Plovers were in Duluth by 4-26, and as many as 12 were observed through May by many people. American Golden Plovers peaked well in Cotton-wood Co.: 2500 were estimated on 5-13 and 5-14 (LF, LR). A very early Black-bellied Plover was in Lyon Co. on 4-16 (HK), and a late one was in Aitkin Co. on 6-15 (TS). An early American Wood-cock was in Crow Wing Co. on 3-20 (JB), and the species was also noted on 5-23 in Marshall Co. (AR), which is one of the few records from the western prairie counties. Another woodcock, obviously a Republican, "flew into window of Gov. Elmer (?) Anderson's city residence — recovered and flew off." A Long-billed Curlew was in Aitkin Co. from 4-20 to 4-23 (JB, TS, JG, RBJ). There were only 6 Willet reports, 3 of them from Duluth where they are uncommon: 6 on 4-28, and 1 each on 5-15 and 5-23 (MMC, JG, JAB). Marshall only had 1 on 5-4 (HK), and the other 2 were in Sibley (ES) and Hennepin (OJ). The sewage ponds did produce some early dates: Lesser Yellowlegs on 3-26 (HK), Pectoral Sandpiper on the same date (HK). 2 Baird's Sandpipers on 3-31 (BL). Least Sandpiper also on 4-9 (HK, KM), and Semipalmated Sandpiper also on 4-9 (HK). The only Knot was inland at Frontenae, Goodhue Co. on 5-20 (AFR). A White-rumped Sandpipers and Sandpiper in Aitkin Co. on the same date (TS). On 6-3 late Least and Semipalmated Sandpipers, Dunlin and Sanderling were also in Lyon Co. (PE). There were 6 dowitcher

reports with call note data: Long-billed in Ottertall Co. on 5-13 (KE) and in Aitkin Co. on 5-17 (JB, TS); Short-billed in Grant Co. on 5-6 (KE), in Stearns Co. on 5-14 (DCF), on 5-16 and 5-17 in Cottonwood Co. (LR), and on 6-2 in Aitkin Co. (TS). Stilt Sandpipers were identified in Mille Lacs Co. on 5-23 (MI), 5-17 in Cottonwood Co. (LR), and by many observers in Lyon Co. from 5-16 to 5-21. Western Sandpipers appeared at 3 locations: 5-6 to 5-31 in Lyon Co. with a peak of 8 on 5-21 (HK, KM), 4 in Cottonwood Co. on 5-25 and 5-26 (LR), and on 6-1 in Duluth (PH), Marbled Godwits appeared early on 4-9 in Wilkin and Lyon Cos. (KE, HK), and a peak of 54 was counted in Wilkin Co. on 4-15 (KE). The Hudsonian Godwit was seen 7 times: 3 on 4-13 and 4-20 in Lyon Co. (HK), on 4-28 in Mille Lacs Co. (MI), in Chippewa Co. on 4-29 (RBJ), on 5-6 in Ottertail Co. (KE) and Cottonwood Co. (LR), 9 in Lyon Co. on 5-13 (PE, RBJ), and 8 on 5-23 in Aitkin Co. (JB, TS). The American Avocet only appeared twice, on 5-4 at Cottonwood, Lyon Co. (HK), and on 5-13 at Minneapolis, Hennepin Co. (many observers).

can Avocet only appeared twice, on 5-4 at Cottonwood, Lyon Co. (HK), and on 5-13 at Minneapolis, Hennepin Co. (many observers).

Gulls and terns: Glaucous Gulls were in Duluth on 3-7 and 4-27 (MMC), and in Lake Co. from 3-11 to 4-15 with a peak of 13 on 3-26 (many observers). Iceland Gulls also showed up in Duluth on 3-10 and 4-29 (MMC), and at Two Harbors, Lake Co. on 3-24 and 3-26 (JG). An early Franklin's Gull was in Lyon Co. on 3-21 (HK). A peak of 1000 Bonaparte's Gull was estimated at Duluth on 5-12 (MMC). The most puzzling report of the season was of 2 adult winter-plumaged Little Gulls on 3-25 at Red Wing, Goodhue Co. (VL). If correct, this would be the first state record. The birds were seen well at close range, but the written details were somewhat vague. (See p. 56 in the Summer Loon). The rear white wing edging typical of this species was described as "a whitish edging of the wings and tips." This is open to question. Also the Little Gull in all plumages shows very blackish wing linings. The details read: "these were not black, but dark enough to contrast with the white edgings." This is open to question. The other problem is that the Little Gull is known on the Great Lakes only in the fall, not in the spring, and not along inland rivers. Like I say, a most puzzling report. Early Forster's Tern were noted on 44 in Nobles Co. (HH) and on 4-9 in Lyon Co. (HK). If identifications were correct, Common Terns were the earliest on record: 4-11, 4-14 and 4-16 in Hennepin Co. (VL, CH); on 4-11 and 4-15 in Cottonwood Co. (LR). Caspian Terns were seen from 5-4 to 6-11 in Duluth, Mille Lacs, Ottertail, Lac Qui Parle, Goodhue, and Lyon Cos.

Cuckoos and owls: A Yellow-billed Cuckoo was early on 5-6 in Goodhue Co., as was a Blackbilled on 5-4 in Wabasha Co. (CW). Snowy Owls were observed in Duluth, Cook, Clay, Ottertail, Anoka, Dakota, and Hennepin Cos. from 3-1 to 4-128. The Hawk-Owl that had wintered in the Sax Zim area of St. Louis Co. remained until 4-8. The Burrowing Owl continues to decline in the state; th

Whip-poor-will through flycatchers: Whip-poor-wills were more common than usual; they were in Clay, St. Louis, Cook, Crow Wing, Hennepin, Freeborn, Lac Qui Parle, Sherburne, Itasca and Renville Cos. from 5-3 on. A concentration of 113 Yellow-shafted Flickers was observed in a half hour in Clay Co. on 4-17 (LCF). The Red-bellied Woodpecker continues to be "resident" north in Crow Wing Co. (JB, TS). By far the most outstanding find of the year was a Williamson's

Sapsucker on 4-22 at Worthington, Nobles Co., for a first state record (HH). The bird was a female and was excellently described (see p. 52 in the last issue of The Loon). Two Northern 3-toed Woodpeckers were last seen on 3-5 near Deerwood, Crow Wing Co. to top off last winter's invasion (TS). Western Kingbirds were observed from 5-14 in Grant, Clay, Stearns, Lac Qui Parle, Lyon, Marshall, Big Stone, Murray, Wright, Morrison, Pope, Anoka, and Hennepin Cos. Scissor-tailed Flycatchers showed up for the first time in recent years, both along the North Shore. One was at Lutsen, Cook Co. on 5-16 (fide JP), and another was at Duluth on 5-24 (MMC, JG): could they have been the same bird? Two very early flycatchers were observed on 4-5 with no details. a Least Flycatcher in Washington Co. (WWL) and an Eastern Wood Pewee banded in Rice Co. (OR).

Swallows through wrens: An early Tree Swallow arrived in Houston Co. on 3-25 (FL), and a Cliff Swallow was also early on 4-8 in Crow Wing Co. (TS). Two Black-billed Magpies were at Thief Lake, Marshall Co. on 4-30 (MS), and one was at Gary, Norman Co. on 5-12 (EA). Common Rayens drifted south of their usual range at 3 locations: on 3-12 at Taylor's Falls, Chisago Co., good details (JAB); on 4-1 at Onamia, Mille Lacs Co. (MI); and on 3-22 in Ottertail Co., no details (AMB). A peak of 150 was at Duluth on 3-5 (JG). A Clark's Nutcracker was at a feeder in Duluth for one day only on 3-9 (Mrs. L. Nylander). Boreal Chickadees were seen twice in Lake Co. on 3-11 and 4-15 (KE, JG, RBJ). Tufted Titmice were seen 7 times in Hennepin, Fillmore, Wabasha, Washington and Goodhue Cos. Winter Wrens were early in Fillmore Co. on 3-25 and in Hennepin Co. on 3-26 (RBJ). A Carolina Wren was observed on 5-11 in Goodhue Co. (CW). in Goodhue Co. (CW).

(RBJ). A Carolina Wren was observed on 5-11 in Goodhue Co. (CW).

Mockingbird through Starling: Seven Mockingbirds were reported: 4-19 in Olmsted Co. (CW), 4-30 at St. Paul, Ramsey Co. (B. Smith), 5-10 at Tofte, Cook Co. (JP), 5-21 and 5-25 at Duluth (MMC, PH), 5-25 at Little Marais, Cook Co. (MMC), and on 5-31 at Braham, Isanti Co. (WHL). A partial albino Robin, white above and orange below, was observed in Grant Co. on 5-2 (KE). Wood Thrush are definitely on the increase in northern Minn. There were 7 reports from northern counties: 5-10 and 5-17 in Crow Wing Co. (JB, TS), 5-13 at Agassiz NWR, Marshall Co. (AR) and at Dixon Lake, Itasca Co. (MS), 5-14 near Forada, Douglas Co. (KE), at Duluth on 5-17 and 5-28 (JG, ES), and in Clearwater Co. on 5-26 (RD). Several thrushes arrived extremely early if identifications were correct. Wood Thrush on 4-11 in Olmsted Co. (CW), and on 4-16 in Sherburne Co. (SR); Swainson's Thrush on 4-11 in Cottonwood Co. (LF); Graycheeked Thrush on 4-5 in Rice Co. (OR), and on 4-16 in Ramsey Co. (JJ); Veery reported with good details on 4-23 in Ramsey Co. (BH). It is likely that most of these were Hermit Thrush. Speaking of Hermit Thrush, one was reported to have been in Ramsey Co. on 4-7 "flitting in Vadnais." Eastern Bluebirds were early on 3-11 in Rice Co. (OR) and in Lyon Co. (HK). A Mountain Bluebird turned up at Agassiz Refuge in Marshall Co. on 3-15 and 3-16. Water Pipits were only found in 2 counties: in Olmsted Co. on 4-1 (CW), and in Lyon Co. on 3-26, 4-9, 4-14 and 4-29 (HK, KM, PE). A Sprague's Pipit was reported with no details from St. Joseph, Stearns Co. on 5-17 (MC), and another was at the usual spot in Clay Co. on 6-2 (PE). Bohemian Waxwings were present in Grant Co. from 3-3 to 3-17 (KE), in Mille Lacs Co. on 3-8 (MI), in Clay Co. on 3-12 and 3-25 (LCF), in Carver Co. on 3-24 (MM), in Duluth on 4-9 and 4-15 (LM, K. Sundoust), and in Hennepin Co. on 4-25 (OJ). Late Northern Shrikes were reported on 5-6 in Murray Co. no details (AD), and on 5-27 in Duluth: seen at 100 ft.

Vireos and warblers: The Bell's Vireo was a bit north of its usual range in Goodhue Co. on 5-9 (JAB), in Ramsey Co. on 5-11 (RH), and at Burnsville, Dakota Co. on 5-27, 28, and 29 (PE). Six

observers reported the Prothonotary Warbler, making it more common than usual: 5-10 in Olmsted Co. (CW), 5-11 in Hennepin Co. (BDC), 5-13 in Houston Co. (EB), 5-16 in Hennepin Co. (MM), and in Goodhue Co. on 5-20 (RBJ). Black-throated Blue Warblers were seen in Washington Co. on 5-2 (J. Olyphant), on 5-12 in Hennepin Co. (BDC, CH), and on 5-23 in St. Louis Co. (JAB). A Pine Warbler was early in Cottonwood Co. on 4-22 (LR). Louisiana Water-thrush were also more common this spring: they were in 6 southeast counties from 5-1 on. The Connecticut Warbler was seen in 7 counties from 5-7 to 5-27. A late Mourning Warbler was still in Hennepin Co. on 6-6 (PF). The Yellow-breasted Chat continues to be scarce: the only one present was in Faribault Co. on 5-12 (SK). For the most part, warblers were down in all areas. the most part, warblers were down in all areas.

House Sparrow through grosbeaks: House Sparrows seem to be driving Cottonwood Co. to drink: one observer reported, "our township is loaded." Eastern Meadowlarks were reported twice in the northwest quarter of the state: on 3-20 in Ottertail Co. (AMB), and 2 collected near Itasca State Park in Clearwater Co. was the first local record (R. Oehlenschlager). Orchard Orioles were reported from 6 counties from 5-12 to 5-26. Two Summer Tanagers turned up in western Minn.: one was at Detroit Lakes, Becker Co. from 5-3 to 5-7 (fide EB), and another was in rural Lac Qui Parle Co. on 5-17 (Mrs. L. Christianson). These are the 8th and 9th state records (see the last issue of The Loon for details). Cardinals appeared 4 times in the northern half of the state: one was reported with no date at Gonvick, Clearwater Co. (RD), on 5-14 one was at Deerwood, Crow Wing Co. (TS) and another was near Forada in Douglas Co. (KE), and on 5-26 one was at Ashby, Grant Co. (KE), and on 5-26 one was at Ashby, Grant Co. (KE), and on 5-26 one was at Ashby, Grant Co. (KE), and on 5-26 one was at Ashby, Grant Co. (KE), and on 5-10 one was at Sherburne NWR on 4-5. No details were submitted, except that the observer said he was very surprised to see it (SR). A female Black-headed Grosbeak was at a feeder in West St. Paul, Dakota Co. from 4-19 to 4-26, and a hybrid Black-headed X Rose-breasted was banded in Washington Co. on 5-11 (J. Olyphant). Two Blue Grosbeaks were at Blue Mounds State Park in Rock ton Co. on 5-11 (J. Olyphant). Two Blue Gros-beaks were at Blue Mounds State Park in Rock Co. on 5-19 (S. Gilbertson).

"Winter" finches: After last winter's invasion, finches were still widespread this spring. Hundreds of Evening Grosbeaks were in Itasca Co. on 4-18 and 4-19 (MS). Pine Grosbeaks lingered into late April and May in Washington Co. on 4-18 (WHL), in St. Louis Co. on 4-29 (NH), and in Mille Lacs Co. on 5-3 (MI). Either redpoils were being misidentified in mass, or the Hoary Redpoil staged the greatest migration ever. No less than 12 observers identified this species in 11 different counties. Birds were seen throughout March in Lyon. Crow Wing, Hennepin, Wright, Washington. observers identified this species in 11 different counties. Birds were seen throughout March in Lvon, Crow Wing, Hennepin, Wright, Washington, Chisago, Grant, Clay, Morrison, St. Louis and Lake Cos. The species also lingered well into April: 4-1 in St. Louis Co. (NH), 4-9 and 4-13 in Duluth (MMC, JG), 4-10 in Grant Co. (KE), and until 4-19 in Crow Wing Co. (TS). A very late peak of Common Redpolls was in Cook Co. when 1000 were estimated on 5-19 (JP). A Greater Common Redpoll was banded in Chisago Co. (FKS). Two adult Pine Siskins were observed feeding a juvenile in Minneapolis, Hennepin Co., which indicates probable nesting there (VL), and in the same area a late siskin was seen on 6-5 (EB). Red Crossbills were seen in Duluth, Clearwater, Chisago, Washington and Hennepin Cos. in March and early April, and as late as 5-16 in Duluth (MMC). White-winged Crossbills are usually not as common. but they were quite widespread, appearing in 9 countles: Duluth, Crow Wing, Lyon, Mille Lacs, Nobles, Hennepin, Cottonwood, Stearns and Ramsey Cos. Reports in May were from Nobles Co. on 5-3 and 5-6 (HH), and in Duluth on 5-18 and 5-12 when 100 were present (K. Sundquist).

Sparrows and longspurs: A possible early Savannah Sparrow was described in Wabasha Co. on 3-18: "forked tail, no central spot, song not that of Song Sparrow" (OJ). A possible Baird's Sparrow was observed singing for 20 minutes at Salt Lake, Lac Qui Parle Co. on 5-21 (FN). LeConte's Sparrows were seen on 4-22 in Scott Co. (PE), 4-30

in Cottonwood Co. (LF), 5-7 in Wilkin Co. (KE), 5-11 in Cook Co. (JP), 5-20 in Dakota Co. (RBJ), 5-25 in Aitkin Co. (TS), and in Wilkin, Clay, and Marshall Cos. on 5-27 (KE). Two Henslow's Sparrows were singing far north of their usual range near Forada, Douglas Co. on 5-14 (KE). The only Sharp-tailed Sparrow was at the Waubun marsh, Becker Co. on 6-2 (PE). Lark Sparrows were more widespread than usual: from 4-18 to 5-27 in Dakota, Nobles, Hennepin, Cook, Clay, Nicolet, Lyon, Sherburne and Renville Cos. A peak of 500 Slate-colored Juncos was in Rice Co. on 5-22 (OR). Oregon Juncos were observed in Duluth, Grant, Ottertail, Cottonwood, Lac Qui Parle, Faribault, Lyon, Wright, Hennepin, Ramsey, Carver and Morrison Cos. An early Chipping Sparrow was noted without details on 3-26 in Jackson Co. (HH), A Field Sparrow was also noted without details north in Ottertail Co. on 5-3 (AMB). A Harris' Sparrow that was seen early in Olmsted Co. on 3-4 may have wintered (AFR). Fox Sparrows were early on 3-11 in Olmsted Co. (CW) and in Hennepin Co. (OJ), and on 3-12 in Wabasha Co. (WDM). Two very late Fox Sparrows were in Washington Co. on 5-28 (WWL), An apparent suicide was committed by a lonely Lincoln's Sparrow in Clearwater Co.: on 5-12 it "Killed itself on window (only one)" (RD). Lapland Longspurs were noted from 3-12 in Lyon Co. when 2300 were counted (KM, HK), until 5-25 in Duluth (PH). They were also noted from Nicollet, Aitkin, Hennepin, Grant, Wilkin, Ottertail, Clay, and Rice Cos. One Smith's Longspur was found among the 2300 Laplands in Lyon Co. on 4-23 and at least 12 of them were Chestnut-collared, (KE, JG). Addenda to Winter Report: Two Green-winged Teal were at Fergus Falls, Ottertail Co. on 12-18, and a Canvasback was there all winter (KE).

CONTRIBUTORS:

Agassiz Refuge staff, AR
Elizabeth G. Anderson, EA
James A. Baumhofer, JAB
Jo Blanich, JB
Arthur and Margaret Boe, AMB
Donald Bolduc, DB
E. M. Brackney, EB
Betty and Doug Campbell, BDC

Mable Coyne, MC
Marjorie M. Carr, MMC
Ella May Dahlberg, ED
Richard C. Davids, RD
Mrs. Arnold DeKam, AD
Whitney and Karen Eastman, WKE
Kim R. Eckert, KE
Alpha and Fred Eckhardt, AFE
Paul Egeland, PE
Laurence and Carol Falk, LCF
Mrs. Loren A. Feil, LF
David and Carol Fiedler, DCF
Pepper Fuller, PF
Janet C. Green, JG
Harold R. Hanson, HRH
H. Hatlelid, HH
Mr. and Mrs. Wayne Hawkinson, WH
Nels J. Hervi, NH
Bruce A. Hitman, BH
P. B. Hofslund, PH
Robert E. Holtz, RH
Charles L. Horn, CH
M. Ivanovs, MI
Robert B. Janssen, RBJ
Joan Johnson, JJ
Oscar L. Johnson, OJ
Richard H. Jorgensen, RHJ
Earl D. Kopischke, EK
Mrs. Sherwood Krosch, SK
Henry C. Kyllingstad, HK
Mrs. Robert Leach, RL
Mrs. William H. Lender, VL
F. Z. Lesher, FL
William H. Longley, WHL
Mrs. W. W. Lundgren, WWL
Lester T. Magnus, LM
Don and Wynn Mahle, DWM
Kevin Martell, KM
Mary H. Muehlhausen, MM
Fran Nubel, FN
Jean Peterson, JP
Alden F. Risser, AFR
Lester Rupp, LR
Orwin A. Rustad, OR
L. S. Ryan, LSR
Terry Savaloja, TS
Madeline Schuller, MS
Sherburne Refuge staff, SR
Evelyn T. Stanley, ES
Forest and Kirsten Strand, FKS
Carol Urness, CU
Carol Welch and Rose Pendle, CW

AN EASTERN BLUEBIRD NESTING STUDY IN SOUTH CENTRAL MINNESOTA

by Orwin A. Rustad

Almost everyone is familiar with the Eastern Bluebird and many are concerned because its numbers have decreased greatly in the past two or three decades. Because of this concern, a nest-box project was started in 1967 with an attempt to increase the Bluebird population locally. We were encouraged by our results, and gratified with the public response to the project. Several were stimulated to start similar projects in other areas. Many towns people have made the "Bluebird Trail" a part of their Sunday afternoon drive to show their children, and also their friends from "out-of-town," a look at their first Bluebird. This report will summarize the field data for the first five years of the study, during the years 1967-1971.

The study area is located about 10 miles N.W. of Faribault, Minnesota in Rice County along a moderately used gravel road, beginning at the junction of County Road #64 and State Highway #21 on the northwest shore of General Shields Lake in Erin Township. The nesting boxes were placed on roadside fence posts at intervals of about one-tenth mile along the northwest and west shore of the lake, continuing southeast from the lake on State-aid Highway #37 to the east shore of Hunts Lake, and then eastK

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ward terminating near the southwest shore of French Lake in Shieldsville

Township.

The rolling topography of the area has many patches of maple-basswood woodland on the hills, with the more moderate slopes utilized for agriculture. The chief crops being corn, soybeans and alfalfa. The low pasture areas in the proximity of the lake shore have scattered small trees and bushes forming a Savannah-like habitat quite ideal for the attraction of nesting Bluebirds and other song birds.

The spring migrants usually arrive in March, with the average arrival dates between the 15th and 18th of the month, based on a 33 year record of migration for the area by the writer. The earliest date being the 22nd of February and the latest April 13th. The male usually arrives somewhat

ahead of the female.

In construction of the nesting boxes we followed earlier recommended designs with a 31/4" x 31/4" floor (inside dimension). After a season of use, a large house was found to be more acceptable. All boxes were rebuilt with a 4" x 4" floor. The 11/2" diameter entrance hole was located with its bottom edge six inches from the floor for the purpose of discouraging predators. However, we still encountered a certain amount of predation. The roof slanted forward with an over-hang of about 11/4" or more. Between 35 to 41 houses were used each year. (Table 1) All construction of the nest boxes was done by my brother Rudy, who assisted immeasurably with the total project. (A copy of the Bluebird house plans may be had by sending a selfaddressed, stamped envelope to the writer).

Most of the fence posts in the study area are still wooden, and were used whenever possible for the attachment of the houses. Land owners were very cooperative in permitting us to use their fence-line posts for our bird houses. In several cases, we had farmers ask us to put up Bluebird houses on their property. It was gratifying

to know that our public relations was paying off. In one case a farmer took down his fence line without our knowing about it. But he very carefully, and thoughtfully moved all our nest boxes from his fence posts on to nearby utility poles. All the broods came off successfully. For houses to be attached on steel posts, a simple wooden sleeve was attached to the back of some of the houses for hanging very quickly and easily over the post.

The houses were placed well away from bushes to discourage House Wrens. Also, we tried to place houses not any closer than 1/10th of a mile from a farm to discourage House Sparrows. Therefore, we had very few to contend with. If possible, the entrance hole was faced in the direction of an open field or pasture having a tree some 200 feet distance away with a suitable low perch for the adult Bluebird to sit on to have a clear view of the entrance. Ideally, the direction for facing the entrance is southeast or south so as to protect the entrance from driving, early spring rains from the northwest. But this was not found to be very critical, if the over-hang of the roof is sufficient and the house deep enough. We faced various houses in all directions and found but one house with a kill from the elements. during the five year period. This was found to be much more critical for the Tree Swallows using some of the same houses in the area.

It was found advisable to take down the nest boxes in the fall for cleaning and repairs, and not put them back up again until early spring. This eliminated the winter use of the boxes by House Sparrows and by mice.

Early erection of the boxes in the spring was found to be important, as early migrants will scout the area for nest boxes well before nesting begins. Boxes should be out at least by the middle of March, and certainly not any later than the end of the month. Nest building starts as early as April 8. By April 24 (the over-all average date for the start of nest building) the season is already well in

progress, with the last of the nests for the first brood started by June 8.

Patches of snow may very well be on the ground when egg-laying begins around April 16. This was the earliest date recorded in the project for the laying of the first egg of the season. The over-all average was found to be May 7, and the latest date June 11. Usually one egg is laid each day until the full clutch of 4-5 eggs has been reached. (Table 1).

The incubation period and the length of time the young remain in the nest was found to be about the same for a given nest. This would vary from 14 days to as long as 21 days, with an over-all average of 17-18 days.

By May 19, the earliest the first broods were on the wing, with June 27 the over-all average. The young of the late nesting pairs would have to wait until as late as June 10 to depart.

The start of the second nesting season is easily confused with the late dates of the first nesting birds. For this reason, the use of colored leg bands for the adults would be useful and recommended. The earliest date for the building of the second nest was frequently found to be as early as June 6, but also as late as July 25. The overall average was June 21.

While the male is near by tending the young of the first brood, the female is on the second clutch of eggs. The first egg for the second nesting is often laid as early as June 9, with the latest recorded in the study area on August 16. The over-all average was July 20. No record of a third nesting was recorded for this area.

Seasonal variation of clutch size increased in size from April to mid-June, and decreased thereafter. Data in Table 2 shows a favorable correlation with the study of the Laboratory of Ornithology, Cornell University with an over-all average clutch size for the Rice County study of 4.50 eggs for the five year study. The Cornell study in Area 4 (Penn. study) had 4.57 eggs as the over-all clutch size average, and in Area 14 (including Iowa, Minnesota, Nebraska, South Dakota) the

over-all average clutch size was 4.54.

The over-all success of any species depends upon its final productivity. (Table 1). The breeding success has been divided into three parts:

First, the percentage of the eggs

that hatched.

Second, the percentage of eggs laid with young that successfully left the nest (Percentage Success).

Third, the percentage of young that

successfully left the nest.

In the Cornell study, the percentage of nests partially successful varied from a low of 52.1 per cent in Area 14, to 78.3 per cent in Area 5 (Delaware, New Jersey, and Maryland). In the Rice County study the percentage success ranged from a low of 47.55 to

a high of 75.86 per cent.

Desertion of the eggs was relatively high, from a low of 4.5 per cent in 1968, to a high of 23.7 per cent in 1970. (Table 1). Much of this was traced directly to heavy nest-box competition by the Tree Swallows and to a lesser extent by the House Wren. When an egg was found to have a small hole poked in it, the work of the House Wren was suspected, which usually drove off the Bluebird. A short time later, a nest of sticks was started over the Bluebird nest. An interesting record in my field-notes points out where a Tree Swallow had first driven off a Bluebird from her clutch. The Tree Swallow soon built a nest on top of the Bluebird nest and started to lay eggs. A short time later, a House Wren drove off the Tree Swallow and successfully built its nest on top of the Tree Swallow nest . . . forming a three-decked nest filling the box tightly to the roof. The House Wren successfully brought forth a brood of

However, the Tree Swallow was the greatest threat to the Bluebird. It would "worry" the incubating Bluebird by sitting on top of the house. Also, it would fly in pairs or small flocks over the Bluebird house by the hour, waiting for the Bluebird to leave the house. When this happened, one of the Tree Swallows would quickly

slip into the house and sit with its head out the entrance not permitting the Bluebird to return. After a few days, the more docile Bluebirds would leave the area. The Tree Swallows would then build their own nest on top of the Bluebird nest and eggs and

lay its own clutch of eggs.

In several instances, the same practice occured, but instead of leaving the eggs the Bluebird would leave her young for a short time. When this happened the Tree Swallow slipped into the house and again wouldn't permit the Bluebird to return to feed its young. A wait of a day or two would drive off the pair of Bluebirds, and successfully starve to death the young. Again, a new nest was built on top of the Bluebird nest and the dead young birds. The Tree Swallow would then successfully lay its own clutch of eggs.

In situations such as those mentioned, it is very tempting to destroy the nests of invading birds to "help out" the Bluebirds. However, the only nests that should be destroyed are those of the House Sparrow. Even though the Tree Swallow and the House Wren are competitive, they are very useful, insectivorous birds. Also, it must be remembered that these birds are protected by law and the destruction of their nests and eggs is

illegal.

As we have an extremely high population of Tree Swallows in the area. nesting space for them becomes a premium. We have experimented, with some success, supplying more nesting boxes to the areas of highest concentration by placing as many as four houses within an area of 50 feet of each other. This, in many cases, has helped lessen the competition for the Bluebird dwelling but still successfully bringing off broods of both species. An attempt with multi-dwelling houses for the Tree Swallows was started in 1971 with very little success. But as the dwelling was erected late in the season, the attempt probably didn't have a fair chance. This will again be tried during the 1972 nesting season for the purpose of supplying

more nesting space in a smaller area for the Tree Swallows thus taking pressure off other areas more general-

ly used by the Bluebirds.

Losses due to infertility ranged from a low of 1.1 percent in 1968, to a high of 7.4 in 1971. The over-all average for the five year period amounted to 4.2 per cent. (Table 1). This was well within the average in the Cornell study. Their study showed lows of 2.6 and 3.0 percent in the extreme east and west, and to a high of 12.1 percent in Florida. Most of the losses, due to infertility, showed regional percentage of less than 7.0 percent, in the Cornell study.

Eggs missing varied a great deal, from none in 1967 to a high of 9.1 per cent in 1968 and 9.7 percent in 1969. The over-all average was 4.38 percent. (Table 1). Predation was evident in most cases where the eggs were missing from the nest. Frequently, egg shells or even the entire eggs were found in the grass just below the nest-box. The nest was usually found to be in disarray. Racoons were suspected

of this activity.

Only one case was found with the Parasitic blow fly in the nest. The larvae were attached to several of the young birds in this one nest, and had started to suck blood. But by discovering the situation early enough, the larvae were picked off the young with very little apparent damage done to them. The brood successfully left the nest.

CONCLUSION

The records show that the five year Bluebird project was quite successful, and brought forth 260 young to the local area. We had a 62.95 percentage success as an over-all average for the entire project, with a low of 47.55 percent success in 1969, and a high of 75.86 percent success in 1968. The project locally measured up favorably with the Cornell Study of 52.1 percent in the Area 14 study, and 78.3 percent in Area 5 study.

Tree Swallows were the biggest problem encountered for nest-box

competition.

Table 1. EASTERN BLUEBIRD NESTING PROJECT for the years 1967 - 71

An analysis of field data sheets. A. Nest Boxes	1967	1968	1969	1970	1971
Total available boxes No. boxes used by Bluebirds,	35	41	40	39	41
first nesting	10	14	11	12	14
second nesting	7	5	6	3	9
Total number of Bluebird nests Percentage of nest boxes	17	19	17	15	23
used by Bluebirds Other uses for nest boxes:	28.5	34.1	27.5	30.7	34.1
House Sparrows	0	1	0	3	1
House Wren	2	0	2	6	8
Tree Swallow	16	22	19	13	14
Empty	7	4	8	5	4
B. Eggs.		-	O		-
Total number of eggs laid, Bluebird	65	87	82	72	107
Average number of eggs per clutch	3.82	4.57	4.82	4.80	4.65
Percentage of eggs deserted	9.2	4.5	12.1	23.6	16.8
Percentage of eggs infertile	4.6	1.1	2.4	5.5	7.4
Percentage of eggs missing	0.0	9.1	9.7	1.3	1.8
Number of eggs that hatched	47	68	44	46	67
Percentage of eggs that hatched	72.30	78.16	53.65	63.88	62.61
C. Young Number of young Bluebirds					
that died in the nest	4	2	5	1	0
Number of young lost to predators Number of young fledged	0	0	0	0	0
(left nest successfully)	43	66	39	45	67
successfully left the nest) Percentage of young that	66.15	75.86	47.55	62.50	62.61
hatched, that left the nest Average fledged (number of	91.48	97.05	88.63	97.94	100.00
young that left the nest	2.52	3.47	2.29	3.00	2.91

Table 2. Seasonal Variation in Clutch Size for 10 day periods

	Averge	Clutch Size
Date	Cornell Univ. Study (1) Region 4.	Rice County Study.
April 20 - April 29	4.82	4.58
April 30 - May 9	4.74	4.77
May 10 - May 19	4.74	4.82
May 20 - May 29	4.75	4.34
May 30 - June 8	4.61	4.00
June 9 - June 18	4.47	4.72
June 19 - June 28	4.25	4.89
June 29 - July 8	4.11	4.43
July 9 - July 18	3.94	4.00
Over-all Average Clutch Size* (Region 4: Pennsylvania)	4.57*	4:50
Over-all Average Clutch Size Region 14, Iowa, Minnesota		
Nebraska, South Dakota		
1. The Eastern Bluebird: Its Breeding S	eason, Clutch Size, a	nd Nesting Success
By David B. Peakall	1 1000	

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THE 1972 GREAT BLUE HERON MIGRATION IN MINNESOTA

by Max Partch

To obtain records of first sightings in Minnesota and surrounding areas, a number of cards were sent to potential Great Blue Heron observers early in 1972. Requests for information were sent to M.O.U. members randomly selected to cover the state and to many employees of the Department of Natural Resources as well as other interested observers. Records are sparse in part of the southeast, the upper Minnesota River valley, most of the Red River valley and much of the arrowhead country. (see map).

The number of first sightings reported, when tabulated per week, show that 78.5 percent of all observations were between mid March and mid

April (Table 1).

The lower number of observations during the fourth week in March seems to be correlated with the weather. During the third week of March of the maximum daily temperature at Minneapolis reached 40°F. or above on six of the seven days. Then a cold air mass moved in so that only two of the ten days in the fourth week had a maximum temperature of 40°F. or above. April had only four days with a maximum of less than 40°F.

Many reports did not actually extend the statewide northward migration range but they did indicate a significant change in heron habitat as open-water conditions changed. The report cards, unfortunately, did not ask for the exact habitat of the first herons seen or for the specific activity of the birds but much of this information was volunteered anyhow. The earliest 1972 Great Blue Heron record is of a flying bird near Cold Spring March 6. The Great Blue Heron is easily seen and readily recognized and twenty-five percent of all first sightings were of flying birds. Of the 142 reports which gave sufficient data, 41 percent indicated that the

Table 1. Sightings Per Week					
S	o. of 1st ightings leported	Reports	Days of 40° F. or above at Mpls.		
March					
1st Week (1-7)	2	2	1/7		
2nd Week (8-14)	2 3	2 2	2/7		
3rd Week (15-21) 32	10	6/7		
4th Week (22-en	d) 23	9	2/10		
April					
1st Week	48	17	4/7		
2nd Week	25	5	6/7		
3rd Week	17	4 2	7/7		
4th Week	6	2	9/9		
May					
1st Week	4	1	7/7		
2nd Week	1	0	7/7		
3rd Week	1	0	7/7		

herons were located along rivers, creeks, or other moving water. Such habitats are the first to be ice-free in the spring. The first river record was of a heron at the edge of open water below Trempealeau Dam (No. 6) on the Mississippi River, March 7. Twenty-seven percent were associated with lakes although lakes were not necessarily open at the time. Two observers each reported a single heron at Gilfillan Lake, North Oaks. March 18. A first sighting at Kramer Lake in Stearns County on April 14 was of a single heron that stood on the ice in the middle of the lake during most of the day. Finally in late afternoon the bird flew away. In March there were almost twice as many sightings of flying birds as there were of observations near lakes. In April this relationship was reversed. The first heron reported at a marsh was on March 21 at Fairmont. The following day a single heron was at a marsh near Madelia, again far south in Minnesota. Herons were at potholes near Delta. Manitoba on April 7. Other locations of first sightings include two in flooded fields and one each at sewage ponds, by a ditch, along a roadside, and even one in an upland woods.

Seventeen of the first sightings were "near" a heron colony and nine were "at" colonies. Twenty-three colonies in Minnesota and three in Wisconsin were reported. There are many other colonies where no observations were made.

Except for four large concentrations, all reported at colonies, the number of herons reported at the first sighting was ten or less (Table 2).

first sighting was ten or less (Table 2). Some of the numbers reported greater than five may have been a total for the day rather than a single first sighting. Sixty-four percent of all reports involving six or more birds were at or near a colony. Eighty-five percent of first sightings were of three or less birds (Table 2). Sixty percent of first sightings were of one bird. It is significant that Great Blue Herons do not migrate in sizable flocks.

The reports cover a period of eleven weeks. During at least nine weeks

Table 2.

Numbe of Herons Seen at First Sighting
No. of Herons Seen
No. of Observations

•	116.0113	Secii	140.	on opper ad
	1			95 26 13 7
	1 2 3 4 5 6			26
	3			13
	4			7
	5			6
	6			6 5 1
	7			1
	8			1
	9			1
	10			3

a northward migration pattern is indicated. The accompanying map is based on 163 records but only 52 of these actually extend the edge of the migration range week after week (Table 1 and circles on map). There were not enough reports from adjacent states to draw accurate migration lines outside Minnesota.

The earliest arrivals appeared to be associated with the Mississippi River valley but by the second and third week of March the southern one third of Minnesota was sprinkled with early arrivals. The records on the map from the Dakotas show a most interesting time sequence which for some unexplained reason seems to lag far behind the advanced Minnesota dates.

By the fourth week of March a definite diagonal NW-SE leading edge appeared in the migration. The herons were apparently held back by the more rigorous climate, and therefore less open water of the forested northeast section of the state. This trend continued until Lake Superior was reached by the second week of April when two herons were seen at the mouth of the Caribou River. It was not until the fourth week of April that more herons were observed along the north shore of Lake Superior. The last date reported of a heron entering arrowhead country was May 1. Unfortunately the northern reports do not extend beyond the first week in May. There are probably areas in the Boundary Waters Canoe Area that have no herons until the second or third week in May. One wonders if or when such birds nest since there are young in the nest in southern Minnesota by that time.

Fred Lesher's records since 1966 at LaCrosse, Wisconsin place the March 19, 1972 arrival date as the earliest. His latest date for those years is March 27 with an average of March 23. Three Stearns County records this year were earlier than the two herons first seen at the Cold Spring Heron Colony March 13, 1971. On March 16, 1972 one was seen flying near the Cold Spring colony, two were flying near the mouth of the Sauk River at St. Cloud on March 10 and three were at the Cold Spring colony on March 11. From Royalton, Cass Lake and on up to Thunder Bay, however, there were comments about this being a "late" spring. A warming trend in mid March had evidently temporarily affected only the southern and western parts of Minnesota before the cold again engulfed the entire state. The herons moved from southwestern Minnesota to Delta, Manitoba in three weeks. During the eight weeks between the March 6 observation at Cold Spring in Stearns County and the May 1 observation in central St. Louis County the heron migration moved 184 miles or 23 miles per week. The distance of 28 miles between the early Cold Spring sighting on March 6 and the arrival at



the Royalton colony on April 2 was traversed in 27 days at the rate of about one mile per day. With the aid of all the faithful ob-

servers who made this study possible

we will hope to compare this 1972 migration of Great Blue Herons with that of 1973. Biology Dept. St. Cloud State College, St. Cloud, Minnesota 56301

notes of interest

MINNESOTA'S FIRST VERIFIED POMARINE JAEGER — August 15, 1972, was a dark overcast day in Duluth, with a northeast wind of 25 mph. The temperature was 56 degrees. At 11 am, I drove to Minnesota Point, and upon arriving at the ball field, saw a large dark bird flying toward the 20 gulls that were resting in the center of the field. Without binoculars, I could see the white shafts in the primaries and the central tail feathers, and knew it was a jaeger, but which specie? It chased one of the Herring Gulls out over the dunes toward the lake. By this time, the entire field had erupted. There were numerous shorebirds, at least 2000 Purple Martins, and perhaps 500 swallows, all in the air. It took about three minutes to park the car, get my camera and tripod, and run to the top of the dune. There on the beach was my first jaeger, sitting on the outstretched wing of a dead gull. I do not believe it was the same gull that had been chased moments earlier. I took two pictures before the bird flew off. Its back was toward me, so all I could see was the dark back, dark cap, buffy cheek patches, and yellowish bill with a dark tip. It flew as far as the Superior Entry, turned and headed back. It passed about fifty feet in front of me, down to the Recreation Building, then back toward the Superior Entry. In the hour that followed, this remarkable bird made at least twenty flights from the end of Minnesota Point to the Recreation Center. With the wind as strong as it was, there was little need for wing movement. It soared most of the time. There were Herring Gulls milling along the beach, and by comparison, the size was about the same, or nearly so. The underparts were light grayish with a dark breast band over an inch wide, heavy barring on the sides, and dark legs. The projecting tail feathers were two inches long, three-fourths of an inch wide, blunt at the tip, and twisted. The tail fanned when a change in direction or landing was made. Then the central tail feathers were turned vertically, and appeared raised above the tail when the bird was in profile. My bird book was in the car, but as many times as I've read about jaegers, I had no doubt now that it was an adult Pomarine. It landed four times, never gliding into a landing, but dropping suddenly, resting for a few minutes, then off again. Finally, it did not return from the end of the Point, so I assumed it was gone. When all my equipment was put back in the car, the jaeger came into view once more, this time about fifty feet behind a Common Tern. The chase wasn't serious, though, and it veered off toward the lake, and disappeared behind the dunes. Once again, I set up the tripod, put the 400 mm lens on the camera, and ran. The beach was littered with debris in that area, and the bird was sitting in the middle of it, 100 feet away. I lowered the tripod, got down on my hands and knees, so as to be as small as possible, and started taking pictures. I crawled five feet closer, snapped the picture, then crawled another five feet, and snapped again. This went on many times, until I was only thirty feet away. I've never taken pictures with such deliberation, especially when I got close. The jaeger was unconcerned about me, and looked my way only once. Something or someone else must have startled it, as it stood up, held its wings above its back for a few seconds, and lifted effortlessly into the wind. I took the picture, which was frame filling, with the wings raised, just before the bird took off. By now, I was

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out of film. With any luck at all, and if my photographic endeavors were successful, that last picture would show all of the definitive markings and characteristics of a Pomarine Jaeger. It was 3 p.m., and in my excitement, I hadn't realized how cold I was. My hands were numb. My face, however, suddenly felt warm and flushed, and I looked up to see what had disturbed my subject. Six people were standing on top of the dune. How long they had been there, I could only guess. To say they were amused by what they had just witnessed would be the understatement of the year. I mumbled something intelligent like "You have to be a birdwatcher or be married to one to understand some of the things we do." I thanked them for being considerate enough to wait and not frighten the bird. Whether out of thoughtfulness or curiosity, they did not spoil the best stalk I have ever made. Marjorie M. Carr, 1834 Vermilion Road, Duluth, Minnesota 55803

A CAROLINA WREN'S VISIT TO WASHINGTON COUNTY — A strange bird was heard singing in our oak woods in the morning of 10-24-71, and in the afternoon of 10-25-71. The song was strange to me; a bright ringing warble or whistle going up the scale, repeated three times, with distinct fast

rhythm.

On 10-26-71, I had time only to put up one mist net in hopes of trapping some birds for banding purposes. The net was placed right at the edge of the road near our mail box, and is 6 meters long. It was checked one-half hour after being set up and the mystery of the bird with the strange voice was solved. I had caught a new life species — a Carolina Wren. The bird upon close examination of the skull with the aid of a jeweler's loupe and high intensity lamp proved to be a Hatching Year (HY) bird and if its song revealed its sex, then it possibly was a male. Wing measure was 60.55 mm, and the Fat Class was O. It was banded with #109-104193. Upon release from my hand, it flew almost directly down to the ground and disappeared into some thick evergreens and was last seen that day a few minutes later flying low into some dogwood bushes across the driveway. The time of banding was 9 a.m.

It was again heard singing in our area on 11-03-71, but I did not see it. On 11-06-71 which was a Saturday, the weather turned quite cold and I retrapped it in a Potters trap baited with sunflower seed, peanut butter and corn (my standard bait for any trap) and some suet. I noted that there was a nasty cold wind that day and possibly this prize wren was having trouble finding food. Up until this date none of us had noticed the wren coming in to any of the feeders and possibly what had originally attracted him to our property were some of our huge brush piles of which we have seven.

On 11-07-71, all hell broke loose for this wren at 4 p.m. A young neighbor ran up to the house with tears streaming down her cheeks with the Carolina Wren held gently in her hands. Her father has a small tool shed which was an attraction for mice in the winter. He kept a small mouse trap set at all times on a shelf about five feet off the ground. The tool shed is open at both ends and apparently the wren in trying to get out of the bitter cold had sought a shelter from the onset of winter weather. The neighbor's father was just rounding the corner of the shed at 3:55 p.m. when he heard the trap go off. To his amazement the Carolina Wren had landed on the trap, was CAUGHT BY THE NECK, and upon release from the small trap was still ALIVE!! The trapping of the wren had sent the mouse trap hurdling to the ground. When Murray examined the wren he could not determine or find any broken bones in the birds neck or wings, but obviously it was in a severe state of shock. We decided that there was nothing we really could do for it if we kept it in the house overnight, so we let it go not knowing

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what would happen. It could not fly very well but did manage to become slightly airborne and managed to creep and crawl to one of the brush piles near the driveway about 25 feet away from where we were standing. We wondered if this tragic near miss from death would perhaps mark the

last time we would see this most provocative bird.

Miracle of all unbelievable miracles!! From my kitchen window on 11-11-71, the Carolina Wren was seen by me feeding on the ground beneath several log feeders strung on a wire in our back yard. It was behaving as if nothing traumatic or unusual had happened to it at all. From then on we were in business: its preferred feeders were these log feeders and it would take bits of suet every time it landed on one. It was heard singing one more time at 7:15 a.m. on 11-17-71, and from then on it was silent around our area anyway.

From 11-25-71 on, it was seen almost every day at the feeders eating suet, especially since the snow started to fall on 11-25-71. On 12-01-71, and 12-02-71, it had a long drink of water from our heated bird bath on our deck which is on the south side of our house one floor up from the ground. From these two last dates on it would come and drink several times a day.

On 12-17-71, the temperature plummetted to -10 degrees F. and the wren

managed to survive the severe cold.

Thanks to an offering of meal worms from Mrs. Rex (Elizabeth) Campbell, I started to place meal worms in a small rectangular glass dish, which I placed in full view of the wren when he came for a drink. (right next to the heated bird bath on the deck). The Carolina Wren ate at least 8 worms at once on 12-16-71 in the afternoon, and then on the next day when it was so very cold it must have consumed at least 30-35 during the day. I would put out at least 10 worms at one time and even when the worms were frozen solid from the cold, the wren would demolish every one. Here was a new routine taking shape and so on with an order of 1000 mealworms, I was making seceral trips to the glass dish on the deck each day.

On 01-04-72 the temperature nose-dived to -16 degrees F. Winter was here to stay. The wren was seen only once on the log feeders at 11 a.m. eating

suet. It was almost too cold to move as I did not see it again that day.

On 01-05-72, I put out about 20 mealworms on the porch as I was going to be out for most of the day. The worms were all gone at noon when I came home for lunch. I put 20 more worms out in the dish before I went out again in early afternoon. I attended Mrs. Francis Lee Jaques (Florence's) funeral at 2 p.m. The worms that I had out at noon were still there in the dish when I returned in late afternoon. The temperatures had moderated quite a bit. At least up to zero. I did not see the Carolina Wren again. Jane C. Olyphant, 8609 Hidden Bay Trail, N.; St. Paul, Minnesota 55109.

A BALTIMORE ORIOLE WINTER RECORD — During the winter of 1971-1972 at least two Baltimore Orioles attempted to winter in the Twin Cities area. The first of these was reported in "The Loon" (Vol. 43, 125-126), this individual was reported till December 17, 1971 in Anoka, Anoka County. During the course of the Bloomington Christmas Count one of the members of the count reported another oriole in south Minneapolis. On January 5, 1972 I had the opportunity to visit the area where the bird was reported. The location was a residential home on the corner of 60th and Xerxes Avenue South. The temperature that morning had hit a low of -16 degrees but when I reached the area, because of clouds, the temperature had moderated somewhat. It was still below zero, however, and I had little hopes of seeing the bird. I parked in front of the house but saw nothing other than a Starling. I drove to the rear of the house thru an alley looking for a feeder but saw

none. I did see a bird fly to the front of the house which I thought might be the oriole. When I returned to the front of the house here was a beautiful male Baltimore Oriole sitting on the front steps of the home! A few cut oranges were placed near the front steps and this is what the oriole was feeding on. I do not know how long the bird survived but the next six days were quite mild with temperatures in the 20's and 30's. However a cold wave struck on the 14th and 15th when it reached a -24 and -30 degrees respectively. It hardly seems likely that the bird survived this cold spell. To the best of my knowledge this is the first January record for the Baltimore Oriole in Minnesota. Robert B. Janssen, 14321 Prince Place, Hopkins, Minnesota 55343.

HOUSE SPARROW FEEDS YOUNG TREE SWALLOW — Our home is on a hill overlooking Battle Creek Lake in Woodbury, Ramsey County, east of St. Paul. On July 18, 1972 we observed three young Tree Swallows sitting on a telephone line outside our dining room window. They were not seen to fly all day but they chirped incessantly! In the evening when we were sitting in the yard watching them, we observed a female House Sparrow land on the line next to the young Swallows and feed them. She would then fly away and return later and feed another young swallow. We saw her feed the swallows five different times. Mrs. James Groebner, 116 Woodbine Court, St. Paul, Minnesota 55119.

IBIS SEEN IN ROSEVILLE — At approximately 6:45 A. M. (C.D.T.) on Tuesday, July 11, 1972, I was proceeding eastward on County Road C-2 in Ramsey County. I noticed a large, strange-looking bird flying over the intersection of Hamline Avenue and County Road C-2, several hundred yards ahead of me. The bird was flying due west (straight toward me but slightly to my right). When first seen. it suggested a long, streamlined Wood Duck (dark above and below except for an elliptical white belly patch). I slowed the car and took careful note when I realized that the very long "tail" was actually the bird's legs trailing behind! As the bird came closer, I could easily see the long neck and the long, downcurved bill. The sky was overcast but very bright, and my observation was made with the naked eye. The bird was not very high, however, and I estimated that was flying at an altitude of about 35 feet and passed by at about 100 feet to my right. The color was everywhere (except the belly) a reddish-brown with no apparent markings. The belly was a dirty, gray-white. The bird was clearly an immature ibis, but the exact species could not be determined under these less-than-ideal conditions. The popular field guides show the white of the belly extending up underneath the throat and chin of the two darker species, but sharply confined (as in the bird I saw) to the belly in the immature White Ibis!! My conclusions: the bird was definitely an ibis, probably a White-faced Ibis, possibly (remotely) a Glossy Ibis or White Ibis. The last two species would be far, far out of their normal ranges. Ronald L. Huber, 2896 Simpson St., Roseville, Minnesota 55113.

OSPREY IN A GREAT BLUE HERON NEST — In "The Loon," Volume 44, Number 1, Mr. J. Mathisen reported about three cases where Ospreys have taken over Bald Eagle nests. In the summer of 1970 I made an observation resembling his report. For many years there used to be a Great Blue Heron rookery at the Old Stines Beaver Pond, about 6 miles northwest of Onamia, Mille Lacs County. Also an Osprey pair used to nest there for a number of years. I visited this pond for the first time in 1967 and found there 9 Great Blue Heron nests and one Osprey's. Next year the Ospreys did not nest

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there. In 1969 the Osprey's nesting tree broke down. 1970 they took over a Great Blue Heron nest and reared two young. The nest stood in a dead tree, about 20 feet off the ground and 10 feet from its top. During 1971 they were absent. In the spring of 1972 the tree was gone. The herons deserted the rookery in 1970 because most of the branches that supported their nests were gone. M. Ivanovs, Onamia, Minnesota 56359.

FEEDING BEHAVIOR OF A WHITE-WINGED CROSSBILL — Russell Ruter, in an article on crossbills in the March, 1970 issue of Ontario Naturalist, published some photographs of a feeding Red Crossbill. He had found an injured crossbill and made the photographs during the birds recovery. In discussing the eating behavior of this crossbill he mentions that he believes "The Ontario Naturalist is the first to make public a picture of a crossbill taking seeds from a cone" (21). In his search through the literature he indicates that he could find only three descriptions of crossbills eating cones. He goes on to describe some of his personal observations of White-winged Crossbills eating cones.

It was our delightful experience, on the days of January 14 and 15, 1972 to witness a male White-winged Crossbill eating spruce cones. Since the tree in which the bird fed was immediately outside our living room window, we were able to observe the bird intermitantly for about $6\frac{1}{2}$ hours on January 15.

Rutter indicated that the cross-bills "snip off" cones. In one of Bent's descriptions the word "clipped" is used (536). The behavior of this crossbill, however, could not be described as snipping or clipping cones. The bird typically grasped the tip end of the cone and gave it a tug. If it did not immediately come free, the bird deliberately twisted the cone clockwise relative to the bird. The twisting was done by grasping the cone near its apex and then turning the cone. The bird repeated the biting, twisting motion as many as five times to free the cone.

When the cone came free, the crossbill removed the cone to a comfortable branch a few inches or a few feet away. Rutter indicates that his crossbill held the cone with the inner claw on each foot (19). Our bird behaved more in the manner described by Bent (535). It most often grasped the cone primarily with its left foot while holding onto the branch primarily with its right foot. The cone was also rotated in a clockwise direction as seeds were removed. The rolling motion was accomplished by the bird's tugging upward while pulling seeds from the left side of the cone near its left foot. Only occasionally did the bird not "pick" the cone first before eating.

Through the time that we observed the bird, it fed almost exclusively from the one spruce tree even though others close by also had numerous cones. Possibly this was due to the more sheltered location of the tree. There was a light breeze blowing following an early morning dip in the temperature to 33 degrees below zero.

Bent reports in his discussion of crossbills that one person observed the clipping and dropping of 59 cones in 30 minutes (536). During a tenminute period, our crossbill picked and dropped 22 cones Of the 22, only one was dropped accidently. At no time did the bird go after a cone that had been dropped before any seeds had been removed from it. The cones were simply let fall, some remaining in the lower branches of the tree while others were scattered about on the ground. As with observations indicated by Bent, this bird seemed to remove only a small portion of the seeds in any cone (536).

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Bent, Arthur Cleveland

1968 Life Histories of North American Cardinals, Grosbeaks, Buntings, Towhees, Finches, Sparrows, and Allies. Part One. New York: Dover Publications, Inc.

Rutter, Russel J.

1970 "On Crossbills and Cones." Ontario Naturalist (March):18-21. Laurence L. and Carol J. Falk, Route 2, Box 46, Moorhead, Minnesota 56560.



A CATBIRD WINTERS IN BLOOMINGTON — During early November 1971 a Catbird was noted by Mrs. J. Richard Johnson coming to the feeder in her yard at 9901 Dellridge in Bloomington. I saw the bird at her feeder on December 17, 1971 around noon when the temperature was -1 degree! The bird looked a little disheveled but healthy (from my field notes). The bird was feeding primarily on suet according to Mrs. Johnson. The bird made daily visits to the feeder and I saw the bird again on January 9, 1972 when the temperature was in the 20's. My notes stated that the bird looked in better condition than when seen in December. My next visit to the Johnson's feeder was on February 6, 1972 when the temperature was below zero all day long. I saw the Catbird in the early P.M. and it appeared to be having some difficulty with its feet, it hopped on one leg and withdrew the other up into his body (again from my notes). I next visited the feeder on March 2, 1972 and after several hours wait I did not see the bird. Ray Glassel and Mrs. Johnson had seen the bird the day before, March 1. The bird was not observed after this day. Why the bird disappeared at this time, after surviving below zero

weather in December, a -30 degree in January and many days of below zero weather in February, is a mystery. Robert B. Janssen, 14321 Prince Place, Hopkins, Minnesota 55343.

LONG BILLED CURLEW OBSERVATION — On April 20, 1972, my husband, Steve, and I and Terry Savaloja were checking the wild rice paddies about five miles east of Aitkin, Minnesota, in Aitkin County for shore birds and waterfowl. We joined Lloyd Paynter, a birder from Aitkin. We left our cars to get a better look at the field to the south of a paddy on County Road 56, Section 12, T47N, R26W, and all saw a Long-billed Curlew standing in the plowed portion of the field. It called out and then flew up to the north over the rice paddy, circling back and alighting in almost the same place. The very long downcurved bill was easily seen as the bird swung over us. The cinnamon underwing linings were also easily seen as the bird occasionally flew a short distance in the field while it probed for long night crawlers, pulling them into its bill somewhat like spaghetti. Snow fell the next day and the bird was easily photographed. Other observers who saw the bird were Mark Carlson, Rex and Liz Campbell, John and Janet Green, Robert Janssen and Carl Pospichal (manager of nearby Rice Lake Refuge). The bird was last seen on April 23rd. Jo Blanich, Box 96, Crosby, Minnesota 56441.

SMITH'S LONGSPURS IN LYON COUNTY — The Smith's Longspurs were in a field north of a bridge about midway between Ghent and highway 59 on October 24, 1970. They were feeding in a field near a small stream. The field had been plowed but in a manner which left considerable stubble. We counted 16 among a considerably larger number of Lapland Longspurs. There may have been more, but because of the lumps of soil and depth of furrows it was difficult to be sure how many more. My wife and I watched them with 8x40 Y and E (Japanese) binoculars noting the white patch at the bend of the wing, the distinctive cheek markings and the generally pinkish buff underparts. The day was fair and the mid-afternoon light excellent. The birds were 50 to 125 feet away. I am well acquainted with this species from North Dakota where I observed them regularly at Valley City and in Emmons and Wells counties. Henry Kyllingstad, 205 Sixth St., Marshall, Minnesota 56258.

Editor's Note: Mr. Kyllingstad has seen Smith's Longspurs in the springs of 1971 and 1972 in the same general area indicating they are to be looked for annually in western Minnesota.

MOUNTAIN BLUEBIRD SEEN — On March 15, 1972 I observed a Mountain Bluebird one mile east of Agassiz NWR headquarters along Marshall County Highway #7. The bird was hovering along the road shoulders. Positive identification was not made the 15th because I did not get a good enough look at the bird. Also I did not believe a Mountain Bluebird would be in the marshes of northwest Minnesota. The following day Assistant Manager Tom Atkins and myself went to the same area I had observed the bird and with the aid of a spotting scope made a positive identification. Virgil Erickson (refuge staff) mentioned he observed a Mountain Bluebird on the refuge during the spring of 1963. Thad L. Fuller, Agassiz National Wildlife Refuge, Middle River, Minnesota 56737.

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BOOK REVIEW

Davids, Richard C. How to Talk to Birds, and other uncommon ways of enjoying nature the year round. Alfred A. Knopf. New York, 1972

I have just read a book that I enjoyed so much, I couldn't resist telling somebody about it and as there was nobody around to listen to me, why not write a book review? May I mention that this is not a review of a book sent to me as a review copy, but lent to me by a friend, because she liked it and thought I ought to know something about the author.

Why a person likes a particular book is hard to define. Surely, if I were to dissect this one with the cold incisiveness of the professional scientistreviewer I likely would find many statements of fact which are not quite "Kosher," but I didn't read the book with that in mind and I don't intend to go back and search for scientific booboos. I think I like this book, because it leaves me with such an impression that this man loves natural things so strongly that it hurts. It's like the delicious pangs of nostalgia or the feeling that certain strains of music leave with you. I never fail to hear the "Rhapsody in Blue" or "Addio! del passato" from La Traviata without having those same bittersweet pains, and there were parts of this book which left me with the same types of feeling. I don't suppose it will rank with me on the same level as "Two Little Savages" and "A Sand County Almanac" do, but after all if I am ever exiled and forbidden all books except two, these are the ones I'll take with me. Still I wouldn't be ashamed to put this book

on the same shelf as the other two, and it is one that I'll purchase so I can refer to it.

What is the book about? I really can't tell you. Certainly "how to talk to the birds" is only a minor part of it. I guess "uncommon ways to enjoy nature the year around" is more descriptive. I particularly enjoyed his chapter on wildlife freeloaders maybe because I welcome gray squirrels to my feeder and I don't hate starlings and cowbirds either. I insisted that my wife read the chapters on seed catalogs and the lowdown on plants. I thought they were charming.

I think that most M.O.U. members will find this book enjoyable, possibly not with the same degree that I did, but most of you will find it interesting and instructive at least.

There is one final thought that strikes me. Why don't I find the names of such obviously keen observers as Richard Davids and the Paul Flucks among the membership lists of scientific organizations like the Wilson Society and the American Ornithologists Union? It seems to me that there would be a mutual benefit to both the nature lover and the scientific organization. In past decades, it was such people that organized scientific societies. Now days it is almost rare that you find the twain meeting. Maybe I'll get a chance to sit down with Mr. Davids some day and will try to dissect this anomoly to find out the cause.

P. B. Hofslund, Biology Department, University of Minnesota Duluth, Minnesota 55812

PURPOSE OF THE MOU

The Minnesota Omithologists Union in an organization of both professionals and amateurs interested in birds. We foster the study of birds, we aim to create and increase public interest in birds and promote the preservation of birdlife and its natural habitat.

We carry out these aims through the publishing of a magazine, **The Loon**; sponsoring and encouraging the preservation of natural areas; conducting field trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.



SUGGESTIONS TO AUTHORS

The editors of **The Loon** need articles, shorter "Notes of Interest' and black/white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewriten, double-spaced and on one side of the sheet with generous margins. Notes of interest should be generally less than

two typewritten pages double-spaced. If reprints are desired the author should so specify indicating number

required. A price quotation on reprints will be sent upon receipt of information,

Club information and announcements of general interest should be sent to the Newsletter editor. See inside front cover. Bird-sighting reports for "The Season should be sent promptly at the end of February, May, August ana November to Mrs. Janet Green. See inside front cover.

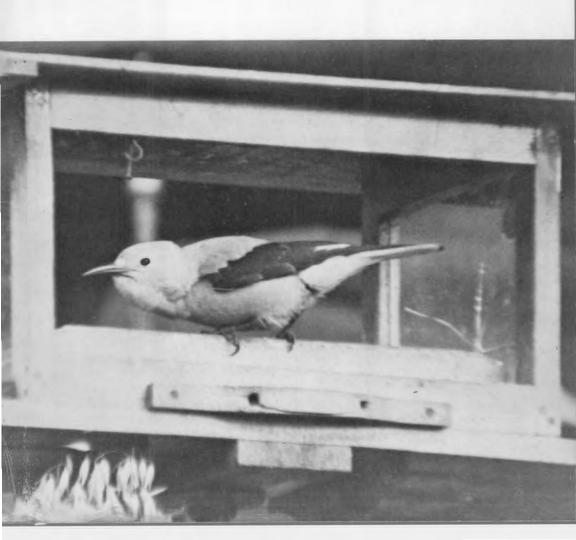
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WINTER 1972

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The LOON Minnesota's magazine of birds and nature, is published four times each year by the Minnesota Ornithologists' Union, the state-wide bird club, Permanent address: J. F. Bell Museum of Natural History, University of Minne-sota, Minneapolis 55455. Anyone interested in birds and nature may join. Any organization with similar aims may affiliate. All MOU members receive our two quarterly publications: The Loon and the MOU Newsletter.

MEMBERSHIPS AND SUBSCRIPTIONS: Mrs. Elizabeth Campbell, 5267 W. Bald Eagle Blvd., Saint Paul, Mn. 55110. To join the MOU and receive both MOU publications, send Mrs. Campbell \$4 for a regular yearly subscription. Or other classes of membership that you may choose are: Family \$5 yearly; Sustaining \$25 yearly. Lite \$100. Also available from Mrs. Campbell: back issues of The Loon (\$1 each ppd.) and MOU checklists of Minnesota birds (20 for \$1 ppd.). Gifts, bequests, and contributions to the MOU Endowment Fund should also be sent to Mrs. Campbell.

EDITOR OF THE LOON: Robert B. Janssen, 14321 Prince Place, Hopkins, Mn. 55343. (phone 938-7464). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details. about birds and nature. See back cover for di Associate Editors, Kim R. Eckert and Paul Egeland.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor to "The Season," request the report forms from the **EDITOR OF "THE SEASON," Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804. (area 218, phages 525-5654)** phone 525-5654).

EDITOR OF THE MOU NEWSLETTER: Mrs. Marlyn Mou-Publishes announcements and reports about activities of the MOU and its affiliated clubs. (Club officers should keep both MOU editors informed.)

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The President Writes About . . .

WILDLIFE ADJUSTMENT TO URBAN LIVING

The purpose of this article is to suggest new hope for the adjustment of many types of wildlife to people — and thus to their survival in or near populated areas. It is possible that the idea of the incompatibility of wildlife and people has been over-played in the past — or has wildlife changed? Has the urban experiences of a number of generations of some species of wildlife given them fresh imprints of toleration and trust? Perhaps this is merely a return of the natural trust that was shattered by the early settler's war on almost everything that flew, walked, crawled or swam.

The writer's first observation of this rebuilt trust was in finding that city squirrels, Mallards, blackbirds and Mourning Doves were not scary like the country ones of his boyhood home area. Later experiences at Diamond Lake in Minneapolis showed a great variety of species to have developed a tolerance for people. As long as their habitat was relatively intact, and as long as the people about them did them no harm, the wildlife has thrived abundantly while growing more friendly.

All of this leads up to the possibility of saving much local wildlife by deliberately exposing it to people. However, this must be done under conditions in which consistent respect and trust can be developed.

Nature centers and natural areas of city parks may be the best catalyst for the job. Through public use of nature trails, it is highly possible that wildlife are being trained to adjust to being neighbors of man.

Perhaps a study of the role of nature centers and nature trails on the survival of wildlife species could be very interesting and beneficial.

The wary wild goose, the deer, the Wood Duck, the Robin and many other species are today more populous because they have adjusted to living near people. A further excellent example can be seen within the urbanized area of Diamond Lake in south Minneapolis. Here we find many species surprisingly-well adapted to man. Among the regular highly-successful nesters in this street-and-home-surrounded small lake are: Sora, American Coot, Redhead, Wood Duck, Ruddy Duck, Pied-billed Grebe, Ring-necked Pheasant, Yellow-headed Blackbird, Catbird, Brown Thrasher, Black-capped Chickadee, Downy Woodpecker, and Yellow-shafted Flicker, as well as other more common species. In addition, a great variety of migrants use the area and seem to be reassured by the local birds that have learned to trust people.

In some cases, this may be false trust. And lack of fear could cost the creature's life. But, too much fear could cause the creature to run out of habitable space. Also, hopefully, we are moving toward a new reverance for the ecology of life that will make our relationship to our fellow creatures more rewarding than ever. So next time you meet a wild creature on a trail, make a friend. It could be good for both of you.

Mary Borell

TREE SWALLOW NESTING STUDY ON A BLUEBIRD TRAIL IN SOUTH CENTRAL MINNESOTA

By Orwin A. Rustad

We are fortunate in our area to have the Tree Swallow on the "Bluebird Trail," as we than can help two of our most useful and beautiful species of birds, both of which are having nesting difficulties resulting from the change in the environment brought on by man.

The nesting project started essentially as a Eastern Bluebird nesting study in the spring of 1967, but was soon broadened to encompass both species. It was also discovered that the nesting box requirements for the Tree Swallow are basically the same as for the Eastern Bluebird.

This report will summarize the field data for the first five years of the study, during the years 1967-1971, and will coincide with an earlier report published in **The Loon**, Volume 44, No. 3 Fall 1972, "An Eastern Bluebird Nesting Study in South Central Minnesota."

The study area is located about 10 miles N.W. of Faribault, Minnesota in Rice County along a moderately used gravel road, beginning at the junction of County Road #64 and State Highway #21 on the northwest shore of General Shields Lake in Erin Township. The nesting boxes were placed on roadside fence posts at intervals of about one-tenth mile along the northwest and west shore of the lake, continuing southeast from the lake on State-aid Highway #37 to the east shore of Hunts Lake, and then eastward terminating near the southwest shore of French Lake in Shieldsville Township.

The rolling topography of the area has many patches of Maple-Basswood woodland on the hills, with the more moderate slopes utilized for agriculture. The chief crops being corn, soybeans and alfalfa. In the lowland areas

trees and bushes form a savannah-like habitat quite ideal for the attraction of nesting song birds.

In construction of the nesting boxes the bluebird house is readily accepted by the Tree Swallow, therefore, it is recommended that the design be such as to attract both species. The floor size should be 4" x 4" (inside dimension), with an entrance hole of 11/2" diameter having its bottom edge six inches from the floor for the purpose discouraging predators. Even though the Tree Swallow can easily use an entrance of 3/8" diameter, this is much too snug for the bluebird. The inside surface of the board below the entrance hole should be quite rough to serve as a toe-hold to aid the birds in leaving the nest box. This was found to be much more critical for the Tree Swallow than for the bluebirds. Early in the season, before nesting has started, empty boxes are occasionally used by Tree Swallows as a roost for protection from the elements. In our early experience, it was found that boxes with a somewhat smooth inside surface, made it difficult for the birds to get out, and often trapped them inside. If the box was checked in time, the birds could be removed and thus saved. Otherwise, we have found birds dead from starvation. We have tried several methods such as the use of small cleats nailed cross-wise below the entrance, and hardware cloth, but a roughened board surface seems most satisfactory. (A copy of the Bluebird - Tree Swallow nesting box plans may be had by sending a selfaddressed, stamped envelope to the writer).

Most of the fence posts in the study area are still wooden, and were used whenever possible for the attachment of the nesting boxes. Houses placed on trees were quite acceptable to Tree Swallows, but were usually ignored by the bluebirds. However, houses on trees were also attractive to House Wrens. For this reason we rarely placed houses on trees, unless the lower branches were quite high from the ground, which apparently made the location less desirable to the House Wren.

Tree Swallows prefer nesting sites near water such as lakes, rivers and marshes. Most of the houses placed near the lake shore were quickly occupied by Tree Swallows. The greater the distance from the lake, with placement of the houses on surrounding hills in areas with few trees, the more likely it was that the house would be used by the bluebird. Very few of the houses on the hill tops were occupied by the Tree Swallows.

The number of houses was increased near the lake shore, placing some of the houses as close as 20 feet apart. These were readily occupied by the Tree Swallows, showing no reluctance to having another family of the same species nesting near by. The bluebirds showed no hesitancy in nesting near Tree Swallows, however, this tolerance was not shown towards another pair of bluebirds nesting in the immediate area. A distance of about 1/10th mile appears to be the preferred distance between the nests of the bluebirds. By increasing the number of houses near the water, more of the boxes were made available and used by the Tree Swallows, thus the pressure on bluebird houses located a greater distance from the water appeared to be somewhat reduced.

Ideally, the direction for facing the entrance is southerly (preferrably southeast) so as to protect the entrance from the driving rains of late spring and early summer. During the period of June 23-26, 1968 we had a week of very adverse weather in this area. especially so for insectivorous birds. with cold, driving rain and at times high winds. As a result, we had a kill of 92 young Tree Swallows in the nesting boxes.

The official weather report for the period, as recorded locally for the U.S. Weather Bureau at the Radio Transmitter of Radio Station KDHL

in Faribault, is as follows:

Table 1

Date	Tempera	ture (F.)		Wind	Precipitation
June, 1968	Max.	Min.	Dir.	Vel.	Inches
20	86	61	SSE	15-20-25	******************
21	79	59	NW	15-20-25	
22	80	52	SSE	10-15	
23	73	64	NW	10-15	
24	68	62	NE	10-15	
25	57	50	NNE	15-20-25	
26	71	49	NW	20-25-35	
27	71	49	NNW	15-20-25	

High winds developed on June 20, with falling temperatures and rain over the next seven days. During most of the week, winds were northerly gusting up to 35 m.p.h. (Table 1). None of the young Tree Swallows were feathered so they had no natural protection from the cold weather. The adults stayed on the nest in an attempt to keep the young warm and dry. During the first days they were successful. However, the duration of the storm and the driving rain caused most of the nests to become wet, thus chilling the young more. The high winds and rain also made food-gathering of insects by the adults very difficult or impossible.

On June 26, after a week of inclement weather, 54 young Tree Swallows were found dead in the nest. These were in boxes with the entrance facing generally in a northerly direction. If the storm had stopped at this point, it is very possible that the young in the houses facing south would have been spared. But the storm continued. On June 27, 38 more young Tree Swallows were found dead. After eight days of high winds and rain it was apparent that the direction the houses were facing made a difference. The cause of death was no doubt from exposure, as the young were very cold to the touch and in many cases were wet. Secondly, starvation was very evident. Due to the cold, the young were barely able to move their heads in a food-response when a finger was placed near their beaks. Normally, they would have raised their heads with mouths wide open when the box was opened. None of the adult Tree Swallows were found dead. All the young bluebirds still in the nest were well feathered out, and thus survived the storm without any apparent difficulty as they soon left the nest after the storm was over.

The first spring migrant Tree Swallows arrive in April, with the earliest date being April 2 and the latest May 1. The average arrival dates range from April 17 to the 21, based on a 13 year record of migration of the Tree Swallows in this area by the writer.

Nest building for the Tree Swallows starts quite early, mostly to establish territory because egg-laying doesn't occur until nearly a month later. The earliest start of nest building on the trail was recorded on April 11. This is just two days after the bluebirds

start nesting. However, the Tree Swallows at this early date only put a few pieces of grass in the box to set up territory. The latest nest to be started was the June 22, with the average May 7. The beginning nests usually don't have feathers added to the material, and are often confused with that of the bluebirds. However, the grass used by the bluebirds nest is usually somewhat finer and the nest is more tightly built. With a little experience, the difference in the construction of the two nests can usually be determined. Not until a few days before egg-laying commences, are the feathers added to the Tree Swallow nest at which time positive identification of the nest can be made. The culmination of nest building of the Tree Swallow occurs with the addition of a white flank feather of a chicken (rarely a colored one) which curves over the top of the nest and serves to cover the eggs (much as a comforter) when the adult leaves the nest. Several times the writer has deliberately removed this one feather from the nest and dropped it to the ground, while the adult was off the nest and sitting on a high line wire near by. In each case, one of the adults (usually the female) would swoop down, quickly pick up the feather from the ground, and return it to the nest even while we were standing comparatively near by.

The earliest date for egg laying for the bluebird was found to be April 16. However, the earliest date recorded in the study for egg laying by the Tree Swallow was May 7. The over-all average date was found to be May 29, and the latest date July 13. Usually one egg is laid each day until the full clutch of 5 to 7 eggs has been reached. (Table 2).

Table 2

Tree Swallow Nesting Project for the years 1967 - 1971
(Faribault, Rice County, Minnesota)

A statistical analysis of weekly data sheets:	1967	1968	1969	1970	1971
A. Nest Boxes					
Total available boxes	35	41	40	39	41
Number of nest boxes used by					
Tree Swallows	16	22	19	13	14
Total number of Tree Swallow nests	18	27	23	13	15
Percentage of nest boxes used by Tree Swallows	45.71	53.65	47.50	33.33	34.14
Other uses for nest boxes:	20112	00.00	21.00	00.00	0
Eastern Bluebird	10	14	11	12	14
House Sparrow	0	1	0	3	1
House Wrens	2	0	2	6	8
Empty	7	4	8	5	4
3. Eggs					
Total number of eggs laid,					
Tree Swallows	94	146	130	67	78
Average number of eggs laid per clutch	5.22	5.40	5.65	5.15	5.20
Number of eggs deserted	19	0	0	15	0
Percentage of eggs deserted	20.2	0	0	22.3	0
Number of eggs infertile Percentage of eggs infertile	10 10.6	2 1.3	12 9.23	4 5.96	3 3.84
Number of eggs missing	2	4	22	7	8
Percentage of eggs missing	2.12	2.73	16.92	10.44	10.25
Number of eggs that hatched	64	138	96	41	67
Percentage of eggs that hatched	68.0	94.5	73.8	61.1	85.8
C. Young					
Number of young Tree Swallows					
that died in nest	2	67	12	0	7
Number of young lost to predators Number of yound fledged	0	12	0	0	0
(left nest successfully)	62	59	84	41	60
Percentage Success (Percentage					
of eggs laid with young that suc-					
cessfully left the nest)	65.9	40.4	64.6	61.0	76.9
Percentage of young that left the nest	96.8	42.7	87.5	100.0	89.4
Average fledged (number of young) that left per nest	3.44	2.18	3.65	3.15	4.00

The incubation period varied from 15 to 23 days, with an over-all average of 19 days. The earliest date for the young to hatch was May 28, with July 18 the latest. The over-all average being May 14.

By June 12, the first broods were on the wing, with July 1 the over-all average. The young of the late nesting pairs would have to wait until as late as July 27 to depart from the nest. The largest clutch size appeared to be earliest in the season, but decreased in size as the season progressed. (Table 3). The first nests of the season averaged seven eggs per nest. However, towards the end of the season, the average decreased to four eggs per nest in late June, to as few as 2 or 3 per nest in July.

Most of the nests (42 percent) were with eggs during the period of May

20 to the 29 (Table 3). During the period of May 30 to June 8, 30 per cent of the nesting took place. From these dates until the middle of July there was a sharp decline in nesting.

The over-all success of any species depends upon its final productivity (Table 2). The breeding success has

been divided into three parts:

First, the percentage of eggs that

hatched.

Second, the percentage of eggs laid, with young that successfully left the nest. (Percentage Success).

Third, the percentage of young that

successfully left the nest.

The percentage of nests partially successful varied from a low of 61 percent in 1970, to a high of 94 percent in 1968. The percentage success (percentage of eggs laid with young that successfully left the nest) ranged from a low of 40 percent in 1968 to a high of 76 percent in 1971. The percentage of young that successfully left the nest varied from a low of 42 percent in 1968 (which was the year of the inclement weather that killed a large number of young in the nest) to a high of 100 percent in 1970.

Table 3

Seasonal Variation in Clutch Size and Number of Nests with Eggs For 10 Day Period

	lutch	Number of Nests with eggs (Percen- tage)	
April 30 - May 9	7.0	4.22	
May 10 — May 19	5.73	3 14.08	
May 20 - May 29	5.76	42.25	
May 30 — June 8	5.40	30.98	
June 9 — June 18	6.00	2.81	
June 19 — June 28	4.00	1.39	
June 29 - July 8	2.5	2.81	
Over-all average clutch si	ze: 4.19)	

Desertion of the eggs was relatively high in 1967 and in 1970, but none were deserted in the other three years. In 1967, 20 percent of the eggs were deserted and in 1970 22 percent. (Table 2).

Losses due to infertility ranged from a low of 1.3 percent in 1968, to a high of 10.6 percent in 1967. The over-all average for the five year period amounted to about 6.18 percent. This is somewhat higher than the over-all average for the bluebird which amounted to 4.2 per cent for the same period of time.

Eggs missing varied a great deal from a low of 2.12 per cent in 1967 to a high of 16.92 per cent in 1969. The over-all average was about 8.49 percent for the five year period. This was considerably higher than for the bluebirds during the same five year period which amounted to an over-all average of 4.38 per cent.

Among the bluebirds, desertion of eggs was relatively high, from a low of 4.5 per cent in 1968, to a high of 23.7 per cent in 1970. Much of this was traced directly to heavy nest-box competition by the Tree Swallow and to a lesser extent by the House Wren. When an egg was found to have a small hole poked in it, the work of the House Wren was suspected, which usually drove off the bluebird. A short time later, a nest of sticks was started over the bluebird nest by the House Wren. An interesting record in my field notes points out where a Tree Swallow had first driven off a bluebird from her clutch. The Tree Swallow soon built a nest on top of the bluebird nest, and started to lay eggs. A short time later, a House Wren drove off the Tree Swallow and successfully built its nest on top of the Tree Swallow nest, forming a three-decked nest filling the box tightly to the roof. The House Wren successfully brought forth a brood of young.

Even with additional houses made available, the Tree Swallow was still the greatest threat to the bluebird. It would "worry" the indubating bluebird by sitting on top of the house. Also, it would fly in pairs or small

flocks over the bluebird house by the hour, waiting for the bluebird to leave the house. When this happened, one of the Tree Swallows would quickly slip into the house and sit with its head out the entrance not permitting the bluebird to return. After a few days, the more docile bluebirds would leave the area. The Tree Swallow would then build their own nest on top of the bluebird nest and eggs, and lay its own cluch of eggs.

In several instances, the same practice occurred, but instead of leaving the eggs the bluebird would leave her young for a short time. When this happened the Tree Swallow slipped into the house and again would not permit the bluebird to return to feed its young. A wait of a day or two would drive off the pair of bluebirds, and successfully starve to death the young. Again a new nest was built on top of the bluebird nest and the dead young bluebirds. The Tree Swallows would then successfully lay its own clutch of eggs and bring off a brood.

Even though we are fortunate to have both the Tree Swallow and the bluebird in our area and nesting on the same trail, admittedly there have been times when we were less than enthusiastic with the competition encountered by the Tree Swallows on a trail originally planned for blue-

birds. In situations such as those mentioned, it is very tempting to destroy nests of invading birds to "help out" the bluebirds. However, the only nests that should be destroyed are those of the House Sparrow. Even though the Tree Swallow and the House Wren are competitive, they are very useful, insectivorous birds. Also, it must be remembered that these birds are protected by law and the destruction of their nests and eggs is illegal.

We have found no Parasitic blow fly larvae in the nest of the Tree Swallow. Only one nest of the bluebird had the larvae present during the five year period.

Conclusion:

The records show that the five year Tree Swallow project was quite successful, and brought forth 406 young to the local area. We had a 61.76 percentage success as an over-all average for the entire project, with a low of 40.4 per cent in 1968 and a high of 76.9 per cent in 1971. The Tree Swallow study measured up favorably with the bluebird average of 62.95 per cent success for the same period of five years on the same trail. The Tree Swallows were found to be a serious contender for nesting space on the "Bluebird Trail." 1134 East Division Street, Faribault, Minnesota 55021.

THE 1972 SUMMER SEASON

Janet C. Green and James A. Baumhofer

In modern times (since about 1940) 233 species have occurred as breeding summer residents of Minnesota. In the summer of 1972 observations were made of 214 of these species with actual nesting reported for 145 of them. Some of the species that were missed in 1972 have been reported in the last two or three years and presumably still nest in the state: Chukar, Great Gray Owl, Short-eared Owl, Saw-whet Owl, Acadian Flycatcher, Philadelphia Vireo, Henslow's Sparrow, Sharp-tailed Sparrow. Others that were missed last summer are known to be irregular

or casual nesters in Minnesota and are not expected to be found every year: Barn Owl, Hawk Owl, Bewick's Wren, Carolina Wren, Yellow-breasted Chat, White-winged Crossbill. One species that was not seen, the Peregrine Falcon, has almost certainly been extirpated from the breeding avifauna of Minnesota as it has from the rest of the Eastern United States.

That leaves five species whose current breeding status in Minnesota is uncertain: Willet, American Avocet, Burrowing Owl, Louisiana Waterthrush, Lark Bunting. There has been

no evidence indicating breeding for any of them since 1964 or 1965. Have they really disappeared or have bird watchers just not looked hard enough for them? All except the Louisiana Waterthrush are western prairie birds and their extirpation is a distinct possibility with the intensive farming and drainage now practiced on the Minnesota prairie. Next season let's hope that someone does some rigorous field work and turns up some positive answers. And let's hope that this trend toward habitat elimination does not go on forever.

Highlights of the 1972 summer season include the second consecutive year that Cattle Egrets have been found nesting (in two colonies) and the first confirmed breeding for the Little Blue Heron in Minnesota. Red Crossbills staged a statewide invasion in mid-summer but no nestings were noted. Two species that are normally just winter visitants lingered into June: Bohemian Waxwing and Whitecrowned Sparrow.

In the species accounts that follow the observations have been summarized to provide information on three aspects of the avifauna: abundance, distribution, and breeding. The total number of counties in which a species was seen gives a rough estimate of how common it is compared to other species in the state. This type of "commonness" is really dependent on a species' conspicuousness, widespread distribution, as well as actual numerical abundance. By this measure the top ten birds for last summer were Sparrow Hawk, Killdeer, Mourning Dove, Yellow-shafted Flicker, Eastern Kingbird, Common Crow, House Wren, Robin, Red-winged Blackbird, American Goldfinch, Song Sparrow.

Information on distribution is given by listing the counties where there is a range boundary within the state, and by giving the location within the county at the fringes of the breeding range. The observer's initials are used for the more unusual observations or to indicate that the bird was seen in more than one location within the county.

Precise knowledge of the breeding range of most species in Minnesota is nonexistent so as many data are provided as possible. Sometimes exact locations are given to help other people find the more unusual species in subsequent years.

Breeding information has handled in two ways. In the listing of counties in which breeding was reported, county names without parentheses are those for which a nest or brood card was filled out. These breeding cards are filed in the M.O.U. file by species and provide the only hard data on breeding distribution (and other breeding information) for the state. I urge anyone who has unpublished field notes that give evidence for breeding for any species, but especially those that have a range boundary within the state, to write me (JCG) for the cards so that their data can be added to our file and our knowledge. Where the county name appears inside parentheses no breeding card is on file and the evidence is only the observer's personal assessment of what constitutes "nesting." This obviously varies from "present all summer" to an actual nest found, but unless the data are given there is no way of judging exactly what "nesting" means.

For migrant shorebirds the two or three latest spring dates and the earliest fall dates are given plus an occasional concentration when that information is available to indicate the migration peak. Fall shorebird dates were early with many showing up in late June and early July. Information from other sources indicates that nesting in the arctic was very poor because of the late season, and many unsuccessful birds started their fall migration early. The same situation may have been true for some northern passerines within Minnesota. Extensive mist netting in a bog near Itasca State Park by Dwain W. Warner turned up very few juvenile birds in July and August (report at the Dec. 2, 1972 meeting of the M.O.U.). And Tennessee Warblers became numerous in Duluth in late July and early August rather than the second half of August which is their usual migration peak there. The two middle weeks of June were much colder than average as was the first week in July with an all time low of 27° on June 10th and 38° on July 7th at the Duluth airport. Was this the cause of the poor nesting season that Dr. Warner was able to document?

Common Loon: breeding cards from 15 counties including Pope and Kandivohi, nesting reported in 3 others; seen in 8 other counties including Hennepin, Carver, Swift, Stevens.

Red-throated Loon: 6-4 Duluth MMC.

Red-necked Grebe: nested in Pope, Kandiyohi; seen also in Clearwater, Wright (8-5 ES).
Horned Grebe: seen in Clearwater (RCD).

Eared Grebe: 6-24 (6) Heron Lake, Jackson Co. JAB.

Western Grebe: nested in Kandivohi (50+young, Sundburg Lake BAH), Stevens (30+young, Olson Lake JAH); seen also in Clearwater (Kiwosav RCD). Marshall (300, Agassiz KRE), McLeod (Schilling Lake VL). Pope (25+, Simon Lake BAH), Nicollet, Lac qui Parle, Swift, Lyon.

Pied-billed Grebe: breeding cards from 8 counties, nesting reported in 4 others; seen in 13 other counties including N. St. Louis Superior National

Forest JCG).

White Pelican: nested in Lac qui Parle (100 young, Marsh Lake BAH), Jackson (75 young, Heron Lake JAB); seen also in Clearwater, Marshall, Stevens.

Double-crested Cormorant: nested in Clearwater, Pope. Lac oui Parle. Big Stone, (Grant); seen also in Kandivohi, Stevens, Swift. Winona.

Great Blue Heron: nested in Big Stone (50 nests), Pope (300 nests). Mille Lacs (38 nests). (Clearwater), (Grant: Ashbv), (Lake: Basswood Lake). (Hennepin: Elm Creek), (McLeod: Campbell Lake); seen in 23 other counties.

Green Heron: nested in Pope, Wright, Dakota, AITKIN, CROW WING, (Mille Lacs); seen in 15 other counties including MARSHALL (7-5 Agassiz

LITTLE BLUE HERON: nested in Pope (8 nests at Lake Johanna produced 31 voung BAH). 8-5 & 13 (2 adults) Ashby, Grant Co. KRE.

CATTLE EGRET: nested in Pope (1 nest found in June, about 20 adults and 20 young in July, Lake Johanna BAH). Grant (8-13, 10 adults and 2 voung on island. Pelican Lake KRE); also seen in 2 locations in Big Stone Co. (7-8, one adult each BAH). Common Egret: nested in Big Stone, Pope (300 nests) (Grant: Ashbv); seen in 12 other counties in southern half of state.

Black-crowned Night Heron: nested in Hennepin (6-7, 800-1000 adults/young, Elm Creek, D. Weaver', Pope (500 nests, Lake Johanna), (Grant: Ashby); seen in 10 other counties including Clearwater (Upper Rice Lake EW).

Vellow-crowned Night Heron: nested in Houston (LaCrescent); 6-25 (RBJ). 7-3 & 23 (BAH), one adult, Lake Johanna, POPE Co.; early July, one adult photographed by Mrs. Carl Oiala in rice beds north of Aitkin, AITKIN Co. (fide TS). Least Bittern: seen in Wright, Kandiyohl, Big Stone. Nicollet, Carver, Winona, Houston, CROW WING (6-18 Deerwood TS).

American Bittern: nested in (Crow Wing), (Mille Lacs); seen in 18 other counties.

WHITE-FACED IBIS: 7-11 immature seen flying, Ramsey Co.. R. L. Huber. Trumpeter Swan: 7-22 5 adult, 4 young) Carver Park DAB.

Canada Goose: nested in Hennepin, Ramsey, Cottonwood, Chippewa, (Aitkin), (Mille Lacs), (Blue Earth); seen also in Sherburne, Jackson, Big Stone, Lac qui Parle, Marshall.

Mallard: breeding cards from 6 counties, nesting reported in 7 others; seen in 20 other counties.

Black Duck: nested in Aitkin, Washington (Hugo, EC); no other reports.

Gadwall: seen in Clearwater, Mahnomen, Aitkin (6-1, TS), Big Stone, Lac qui Parle, Nobles, Lyon. Pintail: nested in Big Stone, Hennepin, (Altkin; TS); seen also in Clearwater, Mahnomen, Pope, Kandiyohi, Wright, Sherburne, Lyon.

Green-winged Teal: nested in (Aitkin; TS); seen also in Marshall, Mille Lacs, St. Louis (Duluth), Crow Wing, Pope, Kandiyohi, Big Stone, Sherburne, Renville, Nicollet.

Blue-winged Teal: breeding cards from 3 countles, nesting reported in 8 others; seen in 20 other countles.

American Widgeon: seen in Mahnomen, Clearwater, Hennepin (OIJ), Swift, Blue Earth.

Shoveler: nested in (Aitkin; TS); seen in Mahnomen, Sherburne, Lyon, Swift, Renville.

Wood Duck: breeding cards from 7 counties including Lake, nesting reported in 9 others; seen in 11 other counties including N. St. Louis (Superior National Forest JCG).

Redhead: nested in Big Stone, Pope, Hennepin; seen also in Mahnomen, Clearwater, Pope, Wright, Lyon.

Ring-necked Duck: nested in POPE (Lake Johanna BAH), Crow Wing, Sherburne, Hennepin, (Beltrami), (Hubbard), (Clearwater), (Becker), (Mahnomen; JM), (Itasca); seen also in Marshall. Canvasback: nested in Hennepin, (Mahnomen); seen also in Marshall, Houston (6-23, FCS). Lesser Scaup: seen in St. Louis, Cass, Pope, Winona, Lyon, Wright, Hennepin.

Common Goldeneye: nested in N. St. Louis; no other reports.

Ruddy Duck: nested in Cottonwood, (Hennepin); seen also in Mahnomen, Kandivohi, Pope, Swift, Big Stone, Lac qui Parle, Nicollet.

Hooded Merganser: nested in Houston, Winona, (Crow Wing), (Aitkin), (Clearwater); seen also in Lyon (HCK).

Common Merganser: nested in N. St. Louis; seen also in Clearwater, Lake, Cook. Red-breasted Merganser: seen in Cook only.

Turkey Vulture: seen in Lake, St. Louis, Mille Lacs (6-8, three, MI), Clearwater, Mahnomen (EW; JM), Winona, Houston.

Goshawk: seen in Hubbard, N. St. Louis. Sharp-shinned Hawk: seen in Cook, Lake, St. Louis, Clearwater, Mille Lacs.

Cooper's Hawk: nested in Anoka, Isanti, (Crow Wing); seen also in Hubbard, S. St. Louis, Sher-

Red-tailed Hawk: nested in Isanti, Washington, Rice, (Hubbard); seen in 17 other counties.

Red-shouldered Hawk: nested in CROW WING (2 nests near Deerwood TS); seen also in Mille Lacs (6-7 Onamia MI), Anoka (St. Francis CLH). Broad-winged Hawk: nested in Isanti, Anoka, Chisago, S. St. Louis, (Clearwater), (Mille Lacs), (Crow Wing), (Hennepin); seen also in Cook, Lake, Becker, Sherburne, Washington.

Swainson's Hawk: 6-12 Felton, Clay Co. JAB.

Baid Eagle: nested in Clearwater, Mille Lacs; seen also in Cook, Chisago (7-8 Imm. St. Croix River JCG), Lac qui Parle (7-22 Imm. Marsh Lake BAH). Marsh Hawk: nested in (Crow Wing); seen in 16 other counties.

Osprey: nested in (Crow Wing); seen also in N. St. Louis, Cook, Clearwater.

Pigeon Hawk: 7-31 Minn. Point, Duluth JAB.

Sparrow Hawk: breeding cards from St. Louis, Chisago, nesting reported in 6 others; seen in 26 other countles.

Soruce Grouse: nested in N. St. Louis: seen also in Cook, Lake.

Ruffed Grouse: nested in St. Louis, Lake, Cass, Sherburne, Isanti, (Itasca), (Hubbard), (Becker), (Clearwater), (Beltrami), (Mille Lacs), (Crow Wing), (Anoka), (Isanti); seen also in Cook.

Greater Prairie Chicken: 6-25 Clay RBJ.

Sharp-tailed Grouse: nested in Aitkin; seen also in Mahnomen (EW; JM).

Bobwhite: 6-16 Faribault, Rice Co. fide OAR.

Ring-necked Pheasant: nested in Dakota, Henne-pin, (Morrison), (Rice); seen in 19 other counties as far north as Aitkin, Clearwater, Clay.

Gray Partridge: nested in Dakota; seen also in Rice, Blue Earth, Watonwan, Cottonwood, Nobles, Lyon, Lac qui Parle, Pope (JCG), Clay (KRE).

Sandhill Crane: nested in (Aitkin: Rice Lake National Wildlife Refuge and NE of McGregor, fide TS). (Clearwater: young being fed in rice paddles at Kiwosay, RCD); seen also in Sherburne (6-17 ShNWR staff).

King Rail: nested in Jackson (Heron Lake JAB). Virginia Rail: nested in Nicollet; seen also in Mahnomen, Aitkin, Pope, Hennepin, Wright.

Sora: nested in Hennepin, Crow Wing, Stevens, (Mille Lacs); seen in 15 other counties including N. St. Louis (Superior National Forest JCG).

Yellow Rail: -8 (EW), 7-31 (KRE) Mahnomen. Common Gallinule: nested in Hennepin, Houston;

seen also in Ramsey.

American Coot: breeding cards from 3 counties, nesting reported in 2 others; seen in 13 other counties as far north as Mille Lacs, Clearwater. Semipalmated Plover: 6-19 (25), 6-21 (7) Aitkin; 7-20 Aitkin, 7-27 Clay.

Piping Plover: nested in Duluth.

Killdeer: breeding cards from St. Louis and Pope, nesting reported in 7 others; seen in 25 other counties; flocking (25-40) 7-2 Lyon, 7-26 Duluth.

American Golden Plover: 6-2 Aitkin, 6-4 Duluth; 7-31 (35) Duluth.

Black-bellied Plover: 6-9 (15), 6-15 Aitkin; 7-31 (10) Duluth.

Ruddy Turnstone: 6-2 Aitkin, 6-14 Lake; 7-27, 29

American Woodcock: nested in St. Louis, Chisago. (Mille Lacs), (Crow Wing), (Hubbard); seen also in Clearwaten, Lake, Cook, Sherburne, Wright, Anoka, POPE (6-18 Glacial Lakes State Park

Common Snipe: nested in Aitkin, (Mille Lacs); seen in 13 other counties as far south as Pope, Kandiyohi, Hennepin (VL); flocking (100) 7-19

Upland Plover: nested in Clay, Anoka; seen also in Clearwater, S. St. Louis, Aitkin, Stearns, Dakota, Ramsey, Hennepin, Renville, Swift, Watonwan.

Spotted Sandpiper: breeding cards from 3 counties, nesting reported in 3 others; seen in 14 other counties.

Solitary Sandpiper: 6-28 Aitkin, 7-2 Lyon, 7-12 Duluth.

Greater Yellowlegs: 7-8 Big Stone, 7-10 Lyon: 7-26 (15) Duluth.

Lesser Yellowlegs: 6-28, 30 Aitkin, 7-7 Aitkin, 7-8 Big Stone; 7-19 (50) Aitkin.

Pectoral Sandpiper: 6-19, 30 Aitkin; 7-15 Marshall, Hennepin, 7-16 Lac qui Parle; 7-25 (55) Duluth. White-rumped Sandpiper: 6-5 Beltrami; 6-19, 21, 28 (20) Aitkin, 7-16 Lac qui Parle.

Baird's Sandpiper: 6-3, 19, 28 Aitkin; 7-15 Marshall, 7-16 Wright.

Least Sandpiper: 6-6 Cottonwood; 6-25 Chisago, 7-2 Lyon, 7-5 Duluth.

Dunlin: 6-6 Duluth; 7-10 Lyon, 7-23 Lake.

Dowitcher sp.: 6-2 Aitkin; 7-9 Duluth, 7-14 Aitkin. Stilt Sandpiper: 7-16 Lac qui Parle, 7-26 Duluth. Semipalmated Sandpiper: 6-10 Hennepin; 6-28 Ait-kin, 7-2 Lyon; peak (flocks 15-25) 7-25 to 31.

Western Sandpiper: 7-2 Lyon HCK; 7-31 (2) Duluth

Buff-breasted Sandpiper: 7-28 Duluth, 7-30 Cook.

Marbled Godwit: seen in Becker, Mahnomen. Lac qui Parle (7-16 Salt Lake RBJ), KANDIYOHI (6-10 Regal BAH).

Sanderling: 7-2 Lyon, 7-19 Duluth; 7-28 (20) Du-

Wilson's Phalarope: 6-8 Mahnomen EW, 6-25 Clay RBJ, 7-2 (14) Lyon HCK, 7-15 Marshall EW, 7-16 Lac qui Parle RBJ - all reports.

Herring Gull: nested in N. St. Louis; seen also in S. St. Louis, Lake, Cook, Mille Lacs, Pope (64 HCK), Cottonwood (7-22 Mrs. LAF), Ramsey (REH), Hennepin (EWM).

Ring-billed Gull: nested Hennepin Is., Mille Lacs Co. (MI); seen also in Duluth (6-3; 7-25, 100, JCG), Clearwater, Stearns, Big Stone, Pope (50-75 all summer, Lake Minnewaska).

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Franklin's Guil: seen in Marshall, Clay Clearwater, Big Stone, Lac qui Parle, Pope, Swift, Jackson, Nobles, Meeker, Nicollet, McLeod (June & July); movement of young birds in late July.

Forester's Tern: seen in Marshall, Clearwater, Big Stone, Pope, Swift, Nobles, Hennepin, Wright. Common Tern: nested in Duluth (JCG) and Hennepin Is., Mille Lacs Co. MI); seen also in Crow Wing, Clearwater, Mahnomen (7-12 EW), Clay (7-10 L&CF), Pope (HCK), Hennepin (6-11, twenty JAB), Ramsey, Houston, Winona.

Caspian Tern: 6-2 Hennepin, 6-4 (9) Duluth.

Black Tern: nesting reported in 7 counties, seen in 21 other counties including N. St. Louis (10 pair, Low Lake, Superior National Forest JCG). Mourning Dove: breeding cards from 5 counties, nesting reported in 7 others; seen in 23 other counties including Lake (7-6 Beaver Bay JCG). Yellow-billed Cuckoo: seen in Clearwater (RCD), Clay, Hennepin, Anoka, Washington, Rice.

Black-billed Cuckoo: seen in 22 countles from Lyon to Cook.

Screech Owl: seen in Clav (6-9 to 11, ten+attracted by recording, Moorhead, B. Cummings), Stevens, Nobles, Rice, Hennepin.

Great Horned Owl: nested in Sherburne, Isa Anoka, Hennepin; seen in 9 other countles. Barred Owl: nested in Wright; seen in 9 other counties as far SW as Big Stone (Marsh Lake BAH).

Long-eared Owl: nested in (Hubbard; JM).

Whip-poor-will: seen in Hubbard, Crow Wing, Sherburne, Anoka.

Common Nighthawk: nested in Ramsey. Rice; seen in 21 other counties.

Chimney Swift: nested in (Hennepin); seen in 22 other counties.

Ruby-throated Hummingbird: nesting reported in 4 counties; seen in 14 other counties.

Belted Kingfisher: breeding cards from Lake nesting reported in 5 others; seen in 23 other counties.

Yellow-shafted Flicker: breeding cards from Cottonwood and Nobles, nesting reported in 6 others; seen in 28 other counties.

Lacs, St. Pileared Woodpecker: seen in Mille Lacs, St. Louis, Lake, Cook, Clearwater, Hubbard, Hennepin, Scott, Carver. Chisago, Ramsey, Sherburne, Anoka, Rice, Isanti.

Red-bellied Woodpecker: seen in Mille Lacs (6-1 Onamia MI), Hennepin, Carver, Chisago, Ramsey, Rice, Lyon (HCK).

Red-headed Woodpecker: breeding cards from Pope and Nobles, nesting reported in 7 others; seen in 23 other countles including Duluth, Clearwater.

Yellow-bellied Sapsucker: breeding card from Houston, nesting reported in 4 others; seen in 14 other counties as far SW as Pope, Lyon.

Hairy Woodpecker: breeding card from Cotton-wood, nesting reported in 4 others; seen in 17 other counties.

Downy Woodpecker: breeding cards from Pope and Jackson, nesting reported in 4 others; seen in 21 other counties.

Black-backed Three-toed Woodpecker: nested in Clearwater (two nests near Itasca Park, RCD); seen also in N. St. Louis (Little Sioux burn).

NORTHERN THREE-TOED WOODPECKER: 6-25 Nina Moose portage, St. Louis Co. JCG; 7-12 (4) Finland, Lake Co. John Green.

Eastern Kingbird: breeding card from Sherburne, nesting reported in 7 others; seen in 31 other counties throughout state.

Western Kingbird: nested in Stearns, Hennepin, Ottertail; seen in 14 other counties as far NE as Crow Wing (TS), Morrison (Genola, EC) and SE as Crow Wi

Great-crested Flycatcher: breeding card from Ramsey, nesting reported in 3 others; seen in 20 other counties as far NE as Duluth.

Eastern Phoebe: breeding cards from Pope and Chisago, nesting reported in 5 others; seen in 17

Yellow-bellied Flycatcher: seen in Clearwater, Crow Wing (7-18 Crosby TS), St. Louis, Cook; migrants - 6-1 Hennepin, 6-3 Carver.

Traill's Flycatcher: seen in Clearwater. Hubbard, St. Louis, Cook, Hennepin (6-3 Roberts Sanctuary), Chisago, Nobles, Houston.

Least Flycatcher: nested in Clay, (Cro (Mille Lacs); seen in 17 other counties. (Crow Wing),

Eastern Wood Pewee: nested in Houston, (Crow Wing), (Mille Lacs), (Washington); seen in 23 ing), (Mille ther counties.

Olive-sided Flycatcher: seen in Clearwater, Hubbard, Cass (64 TS), St. Louis, Lake; migrants -6-1 Sherburne.

Horned Lark: nested in Hennepin, Aitkin, (Anoka); seen in 11 other counties.

Tree Swallow: breeding cards from 3 counties, nesting reported in 5 others; seen in 24 other counties.

Bank Swallow: breeding cards from Stearns and Houston, nesting reported in 5 others; seen in 18 other counties.

Rough-winged Swallow: nesting reported in 4 counties; seen in 13 other counties as far north as Duluth and Clearwater.

Barn Swallow: breeding cards from 3 counties, nesting reported in 5 others; seen in 25 other counties.

Cliff Swallow: breeding card from Sherburne, nesting reported in 7 others; seen in 12 other counties from Lyon and Houston to Cook.

Purple Martin: breeding card from Wright, nesting reported in 8 others; seen in 24 other counties. Gray Jay: seen in Clearwater (RCD), Beltrami, N. St. Louis, Lake, Cook.

Blue Jay: breeding cards from Ramsey and Nobles, nesting reported in 5 others; seen in 26 other counties.

Black-billed Magpie: June (2 birds) Meadowlands, ST. LOUIS Co., Miles Holets.

Common Raven: nested in WADENA Co. (first county record, R. Oehlenschlager); seen in N. St. Louis, Lake, Cook; late July seen in Aitkin, S.

Common Crow: nesting reported in 5 counties; seen in 34 other counties.

Black-capped Chickadee: nested in Ramsey, Hennepin, Cottonwood, (Crow Wing), (Mille Lacs), (Nobles); seen in 25 other counties.

Boreal Chickadee: 7-10 to 8-8 one at feeder, LYON Co. HCK.

Tufted Titmouse: seen in Anoka, Wright, Washing-

White-breasted Nuthatch: nested in Wright. (Crow Wing), (Millie Lacs); seen in 20 other counties including Duluth (3 locations; first recent summer records).

Red-breasted Nuthatch: seen in Clearwater, Crow Wing, Aitkin, Carlton, St. Louis, Lake, Cook; 7-21, 30 Hennepin VL.

Brown Creeper: seen in Clearwater, Lake, Cook, Cottonwood (7-15, 19 Mrs. LAF).

House Wren: breeding cards from 6 countles, nesting reported in 9 others; seen in 22 other counties.

Winter Wren: seen in S. & N. St. Louis, Lake, Cook.

Long-billed Marsh Wren: nested in Jackson, (Hennepin), (Crow Wing), (Aitkin); seen in 13 other counties as far NE as Lake (Finland).

Mockingbird: seen in Hubbard (JM; 6-28 EW), Mille Lacs (7-23 Onamia MI), Winona (7-3 two locations near Winona, D. Tessen).

Catbird: breeding card from Hennepin, nesting reported in 4 others; seen in 24 other counties as far NE as Lake (Beaver Bay).

Brown Thrasher: breeding card from S. St. Louis, nesting reported in 6 others; seen in 24 other counties as far NE as N. St. Louis (Little Long Lake), Lake (Finland; Beaver Bay).

Robin: breeding cards from 7 counties, nesting reported in 8 others; seen in 23 other counties.

Wood Thrush: nested in Nicollet, S. ST. LOUIS (Duluth; Island Lake); seen in Hennepin, Rice, Washington, Wright, Lac qui Parle (State Park, VL), Lyon (HCK), Clay (EWM), Clearwater, Crow Wing, Cook.

Hermit Thrush: seen in Clearwater, Hu Aitkin, Carlton, N. St. Louis, Lake, Cook. Hubbard.

Swainson's Thrush: seen in Clearwater, Crow Wing Deerwood), N. St. Louis, Lake, Cook; migrants - 6-1 Hennepin, 6-1 Lac qui Parle.

Veery: nested in Cook, (Crow Wing), (Clearwater), (Mille Lacs); seen in 16 other counties as far west and south as Clay, Pope, Lyon and Rice.

Eastern Bluebird: breeding cards from 5 counties, nesting reported in 7 others; seen in 16 other countles.

Blue-gray Gnatcatcher: nested in Washington (May Twp., EC), (Carver; W&KE); seen in Houston; last seen - 7-26, EC.

Kinglet: seen in Clearwater, Golden-crowned N. St. Louis, Lake, Cook.

Ruby-crowned Kinglet: seen in Clearwater (FCS), N. & S. St. Louis, Cook. Sprague's Pipit: 6-25 (2) Felton, Clay Co. RBJ.

BOHEMIAN WAXWING: 6-20 (flock) Cass Co., Mark Carlson.

(Crow Wing), (Mille Lacs), (Ramsey); seen in 16 other counties as far south and west as Clay (June and July), Pope (7-31 WH), Lyon (HCK), Rice 6-10 (OAR),

Lougerhead Shrike: nested in Lvon; seen in Clay, Mahnomen. Wadena, S. Pine, Mille Lacs (Milaca), Benton, Carver, Dakota, Pope, Douglas, Lac qui Parle.

Starling: seen in 23 counties.

Bell's Vireo: nested in Dakota (Burnsville; last seen 7-25 VL); June, collected near Luverne, ROCK Co., D. W. Warner.
Yellow-throated Vireo: nested in (Cass: Gull Lake), (Crow Wing), (Washington), (Sherburne); seen in Clearwater, Hubbard, Pope, Hennepin, Carver, Pine, Chisago, Wright.
Solitary Vireo: nested in St. Louis. Cass: seen

Solitary Vireo: nested in St. Louis, Cass; seen in Clearwater, Hubbard, Lake, Cook, Aitkin; migrants - 6-5 Pope HCK, 8-4 Wright ES.

Red-eyed Vireo: breeding card from Hennepin, nesting reported in 8 others; seen in 16 other

Warbling Vireo: nested in S. St. Louis, Nobles, Crow Wing, Mille Lacs); seen in 15 other counties as far NE as N. St. Louis (Ely).

Black and White Warbler: seen in Clearwater, Cass, Crow Wing, Aitkin, Carlton, St. Louis, Lake, Cook; migrants - 6-3 Hennepin.

Prothonotary Warbler: seen in Houston, Dakota, Chisago (Franconia Twp.).

Golden-winged Warbler: nested in (Crow Wing), (Altkin), (Mille Lacs); seen in Cass, Clearwater, Itasca (7-15 Big Fork DB), Chisago, Washington

Blue-winged Warbler: seen in WASHINGTON (June, 4 adults, May Twp., EC).

Tennessee Warbler: seen in Clearwater (RCD; EW), Aitkin (7-26 TS), S. (7-18 to 26 Duluth MMC) & N. St. Louis, Lake, Cook; migrants - 6-5 Ramsey, 6-7 Sherburne.

Nashville Warbler: nested in (Crow Wing), (Ait-kin); seen in Clearwater, Hubbard, Becker, St. Louis, Lake, Cook, Pine (St. Croix State Park), CHISAGO (6-29 Sunrise JAB); migrants - 6-6 Cot-tonwood, 7-15 Wright, 8-7 Hennepin.

Parula Warbier: nested in (Hubbard); seen in Clearwater, Crow Wing, St. Louis, Lake, Cook.

Yellow Warbler: breeding cards from Beltrami and Lincoln, nesting reported from 3 others; seen in 24 other counties.

Magnolia Warbier: seen in N. St. Louis, Lake, Cook; migrant - 6-3 Hennepin.

Cape May Warbler: seen in Clearwater (RCD), S. (6-24 Cotton DB) & N. St. Louis, Cook.

Black-throated Blue Warbler: seen in Clearwater (6-22 Bear Paw Point Trail, Itasca State Park EWM), Lake, Cook.

Myrtle Warbler: seen in Clearwater, Hubbard, Crow Wing, Aitkin, N. St. Louis, Lake, Cook.

Black-throated Green Warbler: seen in Clearwater, Hubbard, Crow Wing, N. & S. St. Louis, Lake, Cook.

Cerulean Warbler: seen in Ramsey (6-3 T. Soulen), Washington, Rice (Nerstrand Woods).

Blackburnian Warbler: nested in (Crow Wing), (Aitkin); seen in Clearwater, Hubbard, Becker, N. & S. St. Louis, Lake, Cook; migrant - 6-5 Ramsey.

Chestnut-sided Warbler: nested in (Crow Wing), (Aitkin); seen in Clearwater, Hubbard, Becker, Cass, Mille Lacs, St. Louis, Lake, Cook, Carlton, Washington (6-17 singing male, May Twp., EC). Bay-breasted Warbler: seen in N. Lake, Cook; migrant - 6-17 singing male, Camden State Park, Lyon Co. HCK.

Blackpoll Warbler: migrant - 8-4 Wright ES.

Pine Warbler: nested in (Crow Wing); seen in Clearwater, N. St. Louis, CHISAGO (6-29 Sunrise JAB); migrant - 8-4 Wright.

Palm Warbler: migrants - 6-6 Sherburne NWR staff; 7-22, 24 Duluth.

Ovenbird: nested in N. St. Louis, Cook; seen in 17 other counties as far west and south as Clay, Pope (Lake Amelia; Glacial Lakes State Park), Lac qui Parle (State Park), Rice (Nerstrand Woods), Ramsey.

Northern Waterthrush: seen in N. & S. St. Louis, Lake, Cook; migrant? - 7-15 St. Croix River, Washington Co. REH.

Connecticut Warbler: seen in N. St. Louis; migrants - 6-10 killed by flying into window, mountain Lake, COTTONWOOD Co., identified by P. K. Lago bird bander) from Ocheyedan, Iowa, 6-11 another seen in same area, fide Mrs. LAF. Mourning Warbler: nested in St. Louis; seen in Clearwater, Hubbard, Aftkin, Carlton, Lake, Cook, Hennepin (6-6 PF; 6-3 DB), Anoka, (6-18 two, Carlos Avery JAB), Washington (June and July, male, May Hwp., EC).

Yellowthroat: nested in Mille Lacs); seen in 30 other counties.

Canada Warbier: seen in Clearwater (7-8 EW), Carlton, St. Louis, Cook; migrant - 6-1 Hennepin. American Redstart: nested in St. Louis, (Crow Wing), (Aitkin), (Mille Lacs), (Washington); seen in Clearwater, Hubbard Beltrami, Cass, Cook, Sherburne, Wright, Carver, Rice (Nerstrand Woods), Houston, Winona.

House Sparrow: nesting reported from 3 countles: seen in 23 others.

Bobolink: breeding cards from Clay and Dakota, nesting reported in 4 others; seen in 19 other

Eastern Meadowlark: nested in (Crow Wing), (Aitkin), (Mille Lacs); seen in 11 other counties as far west as CLEARWATER, Wright, Rice.

Western Meadowlark: nested in (Crow Wing), (Ait-kin); seen in 17 other counties as far east as Duluth, Ramsey.

Yellow-headed Blackbird: nested in Wright, Hennepin, Houston, (Mille Lacs), (Aitkin), (Nobles), (Cottonwood); seen in 17 other counties as far NE as Pine City, Pine Co.

Red-winged Blackbird: breeding cards from Wright and Pope, nesting reported in 6 others; seen in 32 other counties.

Orchard Oriole: nested in Nobles; seen in Clay (6-11 L&CF), Pope, Lac qui Parle, Lincoln, Lyon. Baltimore Oriole: breeding cards from 4 counties, nesting reported in 5 others; seen in 23 other counties as far NE as N. St. Louis (Bass Lake, Superior National Forest).

Brewer's Blackbird: nested in Crow Wing), (Ait-kin), (Mille Lacs); seen in Clay, Clearwater, Mah-nomen, St. Louis, Ramsey, Scott, Dakota, Mc-Leod (FN), Big Stone (BAH), Lyon (HCK).

Common Grackle: breeding cards from Wright and Stearns, nesting reported in 3 others; seen in 24 other counties.

4

Brown-headed Cowbird: parasitism noted in Stearns, Pope, (Hubbard), (Mille Lacs); seen in 27 other counties.

Scarlet Tanager: nested in Wright, (Crow Wing), (Aitkin), (Washington); seen in 13 other counties. Cardinal: nested in (Hennepin); seen also in DULUTH (7-7, 8 male, B. Hojnacki), Stearns, Isanti, Wright, Sherburne, Washington, Ramsey, Carver, Rice, Houston, Blue Earth (6-10 Vernon Center

Rose-breasted Grosbeak: nested in Nobles, (Crow Wing), (Aitkin), (Mille Lacs), (Hennepin); seen in 22 other counties.

Blue Grosbeak: 6-4 Candler, Murray Co., D. W. Warner; 6-21 pair, 1 ml. N. #90, 1.3 ml. E. #23, Rock Co. KG.

Indigo Bunting: nesting reported in 5 counties; seen in 21 other counties from Cook to Nobles.

Dickcissel: seen in Clay RBJ: L&CF), Clearwater (EW), Morrison (EC), Lac qui Parle, Lyon, Nobles, Cottonwood, Watonwan, Blue Earth, Nicollet, Rice, Carver, Hennepin, Wright, Dakota.

Evening Grosbeak: nested in S. St. Louis, Aitkin, (Clearwater); seen in Itasca, Crow Wing, Hub-

C(learwater); seen in Itasca, Crow Wing, Hubbard, Becker, Plne, Lake, Cook.

Purple Finch: nested in S. St. Louis, (Crow Wing), (Mille Lacs); seen in Clearwater, Hubbard, Carlton, Lake, Cook, Sherburne (6-22 male at feeder ShNWR staff); migrants - 7-26 Ramsey, 7-30 Hengelin. nepin.

Pine Siskin: nested in S. St. Louis, HENNEPIN (VL); seen in Clearwater, Hubbard, Crow Wing, Aitkin, Lake, Cook.

American Goldfinch: nested in S. St. Louis, Wright, Lyon, (Crow Wing), (Mille Lacs); seen in 32 other counties.

Red Crossbill: North half - 6-30 Cass, 7-5 Duluth, 7-8 Clearwater, 7-11 Crow Wing, also seen in Hubbard, Cook; South half - 7-8 Anoka, 7-15 Hennepin, 7-19 Cottonwood, also seen in Chisago, Rice; birds usually seen in flocks of 4-12 which included immatures.

Rufous-sided Towhee: nested in Washington; seen in Rice, Pope, (Lake Amelia), Clearwater, Hubbard, Crow Wing, Cass, Pine, St. Louis (Duluth city; Duluth Twp.).

Savannah Sparrow: nested in Becker, (Mille Lacs); seen in 15 other counties.

Grasshopper Sparrow: seen in Marshall, Mahno-men, Clay, Clearwater, Pope, Lyon, Nobles, men, Clay, Nobles. Dakota, Rice.

Baird's Sparrow: 7-31 Felton, Clay Co. KRE. LeConte's Sparrow: seen in Marshall, Mahnomen, Clearwater, Hubbard, Aitkin, Lyon (HCK).

Vesper Sparrow: nested in Pope, Dakota, Crow Wing, (Hubbard); seen in 24 other counties including LAKE (Finland JCG), COOK (Sawbill Trail JCG).

Lark Sparrow: seen in Anoka, Sherburne, Lyon

Slate-colored Junco: seen in Clearwater, Beltrami, Crow Wing, N. & S. St. Louis (6-24 Cotton DB; 7-15 Duluth MMC), Lake.

Chipping Sparrow: breeding cards from 4 countles, nesting reported in 5 others; seen in 24 other countles.

Clay-colored Sparrow: nested in(Mille Lacs); seen in 19 other counties.

Field Sparrow: nested in Sherburne; seen in Lyon, Lac qui Parle, Pope, Hennepin, Dakota, Anoka, Isanti, Washington.
WHITE-CROWNED SPARROW: 6-22 mate at feeder Sherburne NWR staff.

White-throated Sparrow: seen in Clearwater, Hubbard, Becker, Beltrami, Cass, St. Louis, Lake. Cook, Aitkin, Crow Wing, Isanti (MRF).

Lincoln's Sparrow: 6-18 Pigeon River, Cook Co. JAH; 6-24 Cotton, St. Louis Co. DB.

Swamp Sparrow: seen in 21 counties. Song Sparrow: nesting reported in 6 counties; seen in 29 other counties.

Chestnut-collared Longspur: nested in Clay; seen there in two locations - Felton (2-3 pair, Averill (10-15 pair), RBJ; last seen 7-31 KRE.

Observers:

James A. Baumhofer Donald A. Bolduc Elizabeth Campbell Steve Carlson Marjorie M. Carr Mable Coyne Richard C. Davids Fred and Alpha Eckhardt Mardene Eide L. and C. Falk L. and C. Falk
Mrs. Loren A. Feil
Mark Roy Fuller
Pepper Fuller
Janet C. Green
Karol Gresser
Helen S. Hatlelid
John A. Hart
Wayne Hawkinson
Bruce A. Hitman
Robert E. Holtz
Charles L. Horn Jr.
M. Ivanovs M. Ivanovs
Robert B. Janssen
Oscar L. Johnson
Earl D. Kospischke
Henry C. Kyllingstad
Violet Lender Judy McIntire
E. W. Moyle
Mary H. Muehlhausen
Fran Nubel Orwin A. Rustad Terry Savaloja Evelyn Stanley
F. C. Strand
Sherburne National Wildlife Refuge staff Elsie Welter

BIOLOGY OF BARRED OWLS IN MINNESOTA

Thomas C. Dunstan and Steve D. Sample

The purpose of this paper is to provide additional information about the biology of the Barred Owl in Minnesota. To date the literature is relatively void of data about this species especially so for local populations occupying the western portion of the breeding range.

From 1966 through 1972 the senior author made occasional observations on this species and the junior author has conducted extensive study on Barred Owls in Illinois and has compared temporal and chronological relationships between populations in Minnesota and Illinois. In this paper we present information on the breeding cycle, productivity, and some ecological relationships of Barred Owls.

Study Area

Observations were made in the wooded areas of Itasca County where birds were found nesting and/or living along lakeshores, in woods, or close to fields. Reproductive success at one nest site located near the home of U.V. Toivonen by Grand Rapids, Minnesota (47°10", 93°30") was recorded from 1967 to 1972 (Table 1).

Chronology

Barred Owls are permanent residents of the state and can be heard calling during all months of the year.

Calling is most frequent during February and the first part of March prior to egg laying, and also during late summer and fall.

Table 1

Number of young successfully fledged at a cavity nest for the years 1967 to 1972.

Year	No. of fledgings	Date of fledging of first young
1972	1	6 June
1971	2	31 May
1970	3	_
1969	1	_
1968	2	
1967	1	10 June

The annual chronology of events is given in Fig. 1. Pre-breeding behavior begins in late February and eggs are laid during the month of March. Eggs hatch in late March and early April and the young remain in the nests (cavity of tree) until almost fully feathered in the juvenile plumage. About the first two weeks of June (seven to nine weeks after hatching) the young fledge. These time periods are about four or five weeks later in the year than those of Great Horned Owls which are also found in the study area.

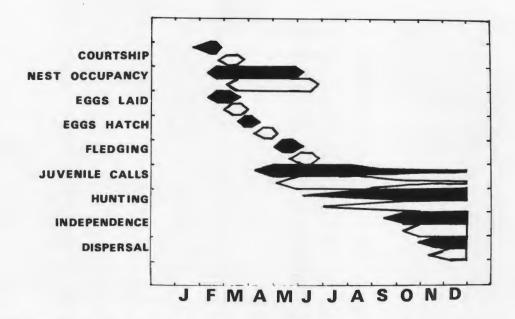


Fig 1. Chronology of the annual life cycles of Barred Owls and Great Horned Owls in Minnesota. Width of bar indicates degree of activity. Solid bars represent Great Horned Owls and open bars represent Barred Owls.

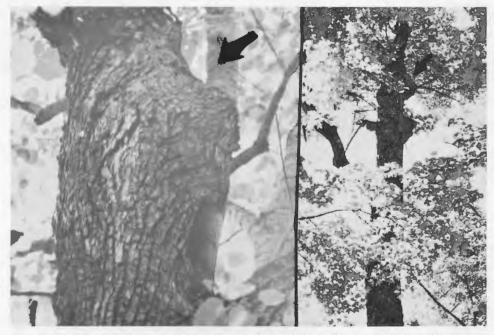


Fig. 2. Nest tree and location of entrance (arrow) to a Barred Owl nest located in a basswood tree 46 feet above the ground.

The Loon

Nest Sites

Barred Owls prefer to nest in the more inner regions of large expanses of mature woods. Fewer nest sites are found in stands of young trees or in small woodlots. A typical nest tree is one that is old, tall, and has a cavity located higher than 25 feet above the ground. The cavity is accessible via an opening to the outside and large enough for a full grown owl (Fig. 2). In contrast Great Horned Owls choose old nests of Red-tailed Hawks, Common Crows, and Fox Squirrels. Great Horned Owls select nests that are located closer to the periphery of large woods or woodlots. These spacial differences and the previously mentioned temporal differences tend to reduce interspecific competition these two species of large owls. Nest sites are difficult to locate because evidence of their presence such as "whitewash," castings, or prey remains are not commonly present at or below the nest cavities. Visual observations of hunting adults or tracking

radio-tagged prey that were captured and brought back to nests proved most efficient for locating active nest sites.

Care of the nestlings

The care of nestlings has been described by Bent (1938:187) and because of our limited observations we can add little to this portion of the life cycle. One of us (TD) did observe adults bringing Cricetid species to the nests during the crepuscular periods of the day and castings were found below several feeding perches and fledgling day roosts. The average size of castings measured 3.5 mm x 7.2 mm and they contained tails, leg bones, fur, and skulls of Cricetids and also portions of the exoskeleton of cray-fish.

Fledging and Post-fledging Period

Young fledge from the nest cavities within several days of each other and are easily identified as young birds. The first young climbs up the nesting cavity and emerges at the entrance from which it walks out on or up to a horizontal branch. One or both adult



Fig. 3. Barred Owl in day roost during the month of June. Barred Owls often roost in cavities, evergreen trees, or deciduous trees in dense woods at this time of the year.

birds are often present near the nest at this time and the female remains close to the young after they leave the area of the nest tree. At this time the adults also show their aggressive behavior. Fledglings that have fallen to the ground are often located by observing the defensive behavior of the adults. Adults give loud, long series of calls and swoop at intruders who walk close to grounded young.

Young Barred Owls as well as young (fledgling) Great Horned Owls and Screech Owls climb trees well when displaced from perches at a pre-flight stage, which for Barred Owls is within 12 days after emerging from the nest cavity. Trees with rough bark (ashes and basswood) are often selected. Oak tree species are not often climbed successfully and after numerous attempts young walk to trees with rougher barks and climb these. Six different Barred Owls were seen climbing from the ground to heights up to 47 feet. Small branches are often passed until larger horizontal branches reached. Adult birds are usually perched on these branches and do call to the climbing young. Young climb until they reach the lower portion of the canopy and/or the leaved portion of the tree.

The climbs take from 7 to 22 minutes. The bark is grasped by the beak and the feet "walk" up the tree while the wings flap simultaneously. During rest periods the bark is held between the mandibles and the bird's neck is usually stretched. The wings are held around the tree with the primaries spread to provide greater surface area and the feet are tucked up along the breast while the talons are engaged in the bark. During the next movement the wings start flapping first, the feet move, and the beak is thrust out and grasps bark. Great Horned Owls seem to have more strength than Barred Owls and Screech Owls (the latter two both cavity nesters) at this stage which is probably the result of pre-fledging flight practice that Great Horned Owls have while in platform nests. Owls nesting in cavities can

practice flight only after leaving the nest.

Barred Owls often day roost on the ground in tall grass several weeks after leaving the nest cavity and after they develop flight. Grassy areas along streams and opening in woods are commonly utilized. At other times young and adults roost in trees in low-land areas or in dense woods (Fig. 3).

Daily hunting movements may begin several hours before sunset and continue until after sunrise. Fledglings move about a restricted territory and elicit juvenile calls at irregular periods. Siblings are closely associated and are often found in the same trees. Young are fed by the parents throughout the summer. Food is brought to fledglings perched in trees and a beak to beak food exchange is usually made.

By August (about eight weeks after fledging) young can catch mice and they also catch crayfish that leave their burrows and walk about on the forest floor. Most kills are made by short flights and this species spends much time running after and pouncing on prey. One adult perched on rocks in a trout pond and caught small trout that swam into the shallow water in the evenings. This bird also flew over the middle of the pond and tried for trout that dimpled the surface in late afternoon.

In late summer adults move about a home range at night and occupy preferred day roosts during the day. The extent of hunting movements vary depending on the climatic conditions (wind direction and velocity, rain and fog). Owls hunt while watching from perches in trees along roads, in old mature woodlots, and also in lowland areas and along small streams. During this time the young often follow the parent birds and the location of the adults can be detected by listening to the feed calls of the young. One of us (SS) has monitored the activities of radio-tagged Barred Owls in Illinois and noted that family groups remain together from fledging in June until well into the fall. We made no attempt to establish home range sizes for Minnesota owls. Nicholls and Warner (1972) found that the average home range of nine radio-tagged Barred Owls in the Cedar Creek area was 565 acres and ranged from 213 acres to 912 acres. The ages and sexual maturity of the subjects were not given so therefore these large variations in home range sizes may be due to wan-derings and dispersal movements of immature individuals, a fact that Dunstan (1970) found to be true for juvenile Great Horned Owls. Nicholls and Warner further stated that habitat utilization did not vary significantly with sex, phenology, and changing weather conditions. However, their results were based on data for movements in a horizontal plane over long periods of time. We have found that use of various verticle strata for hunting and roosting varies with daily weather changes and also with changes of seasons. Additional studies should provide more detailed information on habitat utilization.

With further application of remote sensing techniques and more detailed studies on the biology of nocturnal animals we will better understand the role of nocturnal birds of prey. This, in addition to the new outlook people have about the role of owls and other birds of prey will enable us to manage these important predators more efficiently.

Acknowledgments

The authors acknowledge the assistance of Urho V. Toivonen for data on daily activities and nest occupancy of Barred Owls living on his property. The financial assistance of the Department of Biological Sciences at Western Illinois University is greatly appreciated.

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Department of Biological Sciences, Western Illinois University, Macomb, Illinois

notes of interest

Editor's Note: The following dozen notes of interest contain some of the most exciting and interesting Minnesota bird records ever published. A new species for the state, a Three-Toed Woodpecker invasion, a third Rosy Finch record, a good look at a Black Rail which is hard to do even in their normal range and this sight record, in my opinion, confirms the occurrence of this species in the state, Clark's Nutcrackers occurring in at least two areas, the sighting of a breeding plumaged Arctic Loon, a possible second Dipper record from 1969, Little Blue Herons occurring on the Iron Range (also see the summer season report), another Black-headed Grosbeak record and last but not least another nesting record for the White Pelican. 1972 certainly was a most unusual year!

A NEW MINNESOTA SPECIES — On September 26, 1971 at Cottonwood, Lyon County, Minnesota a Western Wood Pewee was observed. The bird was first heard calling a couple of times. I then saw a medium sized fly-catcher fly out catch an insect and return to a dead branch. It had a grayish

green belly, back and wings were a very dark olive, the lower mandible was lighter than the black upper mandible (although not as much a contrast in bill color as is usual in the Eastern Wood Pewee). No eye ring or wingbars were noticeable. It was quite obviously a pewee.

The thing that convinced me it was a Western Wood Pewee was the call. While I watched the bird it gave a distinctive call that was completely different than the call of an Eastern Wood Pewee. In the course of watching

this bird it called 5 or 6 times.

I was familiar with this call since in the middle of August I took a trip to the Black Hills and had read up on this bird before hand and had seen a number there and heard the call note a number of times. The call note is hard to describe but I would call it a "spurrit," quite low in tone, and a bit nasel sounding. I watched it for about 10 minutes and then left to call Henry Kyllingstad of Marshall in hopes of having a second observer verify the sighting. Henry came over about 2 hours later and we looked throughout the area but it could not be found.

A bit of favorable evidence is the fact that the field guide "Birds of North America" by Robbins et al. makes a point of the fact that the Western Wood Pewee gives its call note during fall migration quite unlike most

migrating birds.

The bird was seen in my Mothers back yard near the shore of Cotton-wood Lake. There was a heavy overcast sky and a light mist was falling. I believe this is the first hypothetical sighting of this bird in Minnesota. Paul Egeland, 12952 Nicollet Ave. So. Burnsville, Minnesota 55378.

MINNESOTA'S SECOND ARCTIC LOON — In the Summer issue of "The Loon" (Vol. 44:35) I published a letter by Mike Link entitled "Please Don't Agree." At the recent M.O.U. Hawk Count meeting in Duluth (September 16-17, 1972) I was exposed to a perfect example of this situation and to my embarrassment found myself falling into the same trap. The story developed as follows: On Sunday, September 17 on Hawk Ridge, it was reported by several observers that a Red-throated Loon had been seen on Lake Superior in the Clifton area. I did not hear of these reports but around 2:00 P.M. when I had gone out to Minnesota Point, I heard of the observation and was told where the bird was seen. One comment that I remember hearing was, "we even saw the white coming up the back of the head." Having only seen the Red-Throated Loon in Minnesota on one other occasion, I was very anxious to see the bird. I drove up the shore to the exact location where the bird had been reported, near the Duluth Trailer and Tent Park and across from Johnson's Motel. After a few minutes of observation I spotted a loon but on close inspection this bird was obviously an immature or winter plumaged Common Loon. There was no white on the head or back of the neck so I felt certain that this was not the bird reported by other observers. I was soon joined by Jan and John Green and Liz and Rex Campbell. We searched the shore for a mile or so on either side of where the bird had been reported. We saw two other obvious Common Loons, 3 Horned Grebes and several groups of Red-breasted Mergansers. I decided to give up the search and head for home. As I was returning down the shore I spotted a bird from the car which I thought might be a loon. This location was about 1-1/2 miles south of the spot where the Redthroated Loon had been reported about 2½ hours earlier. The bird was approximately 150 yards from shore, but even at this distance I could see that it was a loon-like bird, obviously smaller than a Common Loon. With the binoculars (9x35) I immediately noticed the grayish-white of the lower crown extending down the back of the neck but not all the way to the base of the neck. The tone of this gray-white color struck me as being of a hoary quality. I was immediately reminded of a slide that Dr. Parmalee had shown at the M.O.U. Winter meeting in 1970 of an Arctic Loon that he had photographed, I believe, off the coast of Alaska the previous summer. Immediately after noting the head, I was struck by the white spotting on the back. The large white spots were restricted to the scapular area and even at this distance they appeared to be in transverse rows, the larger spots being separated by darker areas. As the bird turned, a definite throat patch was very evident. This throat patch was dark. I feel it was black, but again, at that distance it would be extremely difficult to distinguish dark red from black. Below the patch it was light. The forehead, flanks and tail region were dark and appeared to me to be black. All of these characters were verified with a 20X telescope. With the use of the scope I noted that the bill was straight, in no way was it upturned. In spite of all these characters which I noted in my mind, when I returned to the car about 10 minutes later I told my son that I had seen the "Red-throated Loon"!!

I returned to the highway and headed for home. I felt a certain uneasiness about calling this bird a Red-throated Loon. As I was driving on the freeway about 45 minutes after the observation, I opened my Robbins Field Guide and it was then that I realized my mistake. This was not a Redthroated Loon but a breeding plumaged Arctic Loon. I was shocked and embarrassed at my being so conditioned. When I arrived at home about 6:30 P.M. I immediately called Jan Green in Duluth and I explained the situation to her. Much to my surprise, I learned that she had seen the same bird in the same location a few minutes after I had left. She noted the same plumage characters I had with one addition, she had seen the lines on the side of the neck. Without even looking at a bird book, she too had accepted the bird as a Red-throated Loon. After our discussion and a look at several books she readily concurred that the bird was definitely an Arctic Loon. It could possibly be stated that the bird Jan and I saw was a different bird and that the bird seen by the other observers was a Redthroated Loon. This is highly unlikely when one considers the description of the so-called Red-throated Loon, especially the fact of the white on the crown and hind-neck. This character was noted especially by Fred Lesher and leaves little doubt in my mind that we were all looking at the same bird. In summary, this sight observation firmly established the Arctic Loon on the Minnesota accidental list. Jan Green gave an excellent description of a winter plumaged bird seen on November 22, 1969 also on Lake Superior (The Loon 43:19). Because of the difficulty of identifying this species in the winter plumage, this record was added to the hypothetical list of Minnesota species. As a final note I would like to say be careful of conditioning by other observers. Base your conclusions on your observations not those of others. I have learned my lesson well from this experience. Robert B. Janssen 14321 Prince Place, Minnetonka, Minnesota 55343.

Editor's Note: The Arctic Loon was found again in the same place on Sept. 24 by John and Janet Green and subsequently seen the same day by several other observers.

the MOU winter meeting at Grand Marais, Minnesota, on January 29, 1972, our party stopped at the feeders of Mr. & Mrs. Ted Fenstad, ¼ mile west of Little Marais, Lake County. Mr. Fenstad informed us that a Gray-crowned Rosy Finch had been at the feeder for about 4 or 5 days. Mrs. Fenstad had correctly identified the bird as a Gray-crowned Rosy Finch. This lively little bird which moved about very quickly, was fairly tame. It was very easy

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for us to observe and photograph. It seemed to prefer feeding on the ground but did feed at times on the large picnic table outside the picture window. Most of the birders attending the Grand Marais meeting were able to observe this bird and many other birders saw the bird until it left on February 21, 1972. The first record for the Gray-crowned Rosy Finch was a male shot from a flock of Snow Buntings near Minneapolis on January 3, 1889. This bird was of the gray-cheeked, gray-necked Hepburn race. The second record is of two birds observed in Bagley, Minnesota, from late December 1967 until March 21, 1968. It is thought from the description of these birds that they were Gray-crowned Rosy Finches, but from a poor photograph it could not be distinguished if they were Gray-crowned or Black Rosy Finches.

A description of the Gray-crowned Rosy Finch at Grand Marais is as follows: Forehead and front of crown - black; nasal tufts - grayish white; sides of crown (from above eyes backward) and whole of back of head - light ash gray; side of ead below eyes, neck and under parts - chestnut brown; back and shoulders - edgings of lighter brown on chestnut feathers; wings and flanks - brown with dull pink markings; legs - black; bill-yellow with

dusky tip. Terry Savaloja, Box 244, Deerwood, Minnesota 56444.



A POSSIBLE SECOND DIPPER RECORD FOR MINNESOTA — I am writing you on a matter which might be of some interest. It concerns what appears to be a sighting of a Dipper in Minnesota prior to the sightings that took place in January to the early spring of 1970. The other day I chanced to be at the Woodlake Nature Center in Richfield and was talking to a gentleman whom I would describe as the "park ranger." We were discussing birding in north-

eastern Minnesota and he happened to mention that he had seen a Dipper in that area. I asked him if it was during the winter of 1970 when the reported sightings took place. He indicated that it was earlier than that and upon recollection said that it was during the first weekend of the trout fishing season in 1969. I don't have any old fishing season schedules on hand but I would assume that this was either in late April or early May. The sighting took place on the Manitou River not too far from Finland, Lake County, Minnesota. The gentleman (whose name I did not get unfortunately) said that he and others saw the Dipper for at least 15 minutes and observed it "walking under the water." I urged that he write to you and give the details as this would probably help to supplement your records about the occurrence of this bird in Minnesota. Charles L. Horn, Jr., 5100 Juanita Avenue, Minneapolis, Minnesota 55424.

Editor's Note: See **The Loon** (Vol. 42:136-137) for a complete description of the first observation of a Dipper in Minnesota. There is little reason to doubt the above record based on the information given.

THREE-TOED WOODPECKERS INVADE CROW WING COUNTY — T. S. Roberts in his Birds of Minnesota lists the Northern Three-toed Woodpecker as an uncommon permanent resident of the evergreen forests of Minnesota. In the fall and winter of 1971 and 1972 it became a common resident of Crow Wing County, located in central Minnesota. Crow Wing County is made up mainly of deciduous trees interspersed with tamarack bogs. The first sign of an invasion was on November 2, 1971, when Steve Blanich observed a female Black-backed Three-toed Woodpecker at Agate Lake near Crosby. On November 6, 1971, he observed a female Black-backed and a male Three-toed of unknown species. After several times of looking for the birds, we gave them up as migrants. On November 27, 1971, I was near the Deerwood dump looking for crossbills and noticed some tamarack trees which



Northern Three-toed Woodpecker

had been stripped of bark. Having read that Three-Toed Woodpeckers do this, I investigated further. When I entered the grove of tamaracks, I heard several woodpeckers working. The first woodpecker I identified was a female Black-backed Three-toed. A little way from this bird was a male Northern Three-toed Woodpecker. Also on November 27th, Mark Carlson of Deerwood observed a female Black-backed Woodpecker about $2\frac{1}{2}$ miles west of the Deerwood dump.

On November 28th, Lloyd Paynter, bird photographer from Aitkin, reported that he had seen one male and one female Northern Three-toed and one female Black-backed in the same bog in which I had first located

them. (See photo).

On November 30th, I went to check on this report and found 3 male

Northern Three-toed and one female Black-backed Woodpeckers.

Throughout the rest of the winter Northern Three-toed Woodpeckers were found at 8 different sites and Black-backed Three-toed Woodpeckers were found at 5 different sites.

Site 1. About ¼ mile east of the Deerwood dump on Crow Wing County Road #10 consists of about 25 tamarack trees which are dead due to flooding.

Site 2. Directly across from the dump is a small bog of tamarack and spruce.

- Site 3. 1/4 mile south of the dump is a bog made up of large tamarack trees.
- Site 4. 2 miles northeast of the dump spruce and tamarack trees.
- Site 5. 3 miles northwest of the dump Norway pines. Site 6. 3½ miles northeast of the dump - tamarack trees.
- Site 7. 3 miles northeast of the dump tamarack and spruce.
- Site 8. 2 miles northwest of dump tamarack and spruce.
- Site 9. 12 miles south of dump tamarack and spruce.
- Site 10. 2½ miles west of dump Norway pines and birch trees. The Deerwood dump is located about 1½ miles east of Deerwood on Crow Wing County Road #10.
- Site 1. Northern Three-toed Woodpeckers 15 different days from November 27, 1971 to January 25, 1972. Greatest number seen was on November 30th with 3 males and 1 female.

 Black-backed Three-toed Woodpeckers seen on 8 days from November 27, 1971 to December 12, 1971 1 female all of the time.
- Site 2. Northern Three-toed Woodpeckers 5 different days from December 22, 1971 to February 12, 1972 1 male on 4 days and 1 female one day. No Black-backed Woodpeckers seen here.
- Site 3. 1 male Northern Three-toed Woodpecker seen here on December 21, 1971.
- Site 4. 1 male Northern Three-toed seen here on December 22, 1971.
- Site 5. Northern Three-toed Woodpecker seen here 3 times from December 28, 1971, to January 9, 1972 1 male.

 Black-backed Three-toed Woodpecker seen here on November 2 & 6, 1971 1 female.

 Unidentified male Three-toed seen on November 6, 1971.
- Site 6. Northern Three-toed seen here twice, once on January 1 and once on January 9, 1972 1 female.
 Black-backed, 1 female on January 22, 1972.
- Site 7. Northern Three-toed seen here on 3 different days from January 23 to March 5, 1972 1 male and 1 female twice and 1 male once.
- Site 8. The only male Black-backed was seen here on February 13, 1972.

Site 9. A male Northern Three-toed was seen here on February 6, 1972, by Mr. & Mrs. Ed McGee.

Site 10. 1 female Black-backed was seen here on November 6, 1971, by Mark Carlson. It was working on a birch tree and the the only one seen working on a non-coniferous tree.

Terry Savaloja, Box 244, Deerwood, Monnesota 56444

BLACK RAIL IN BLOOMINGTON — On Sunday, October 1, 1972, I was walking along the path around Girard Lake in Bloomington, Hennepin County, going east from the 84th Street parking lot. On the first 100 feet of the path. I walked back and forth in the area where the cattails are close to both sides of the path, looking for rails which are often seen there. It was around 3:30 p.m. with the sun shining bright and warm; temperature 71° and west wind 6 mph. As I started to pick up the pace and continue around the lake I passed the last small opening on the left and a very small, dark bird sat right out in the open at the base of the reeds. It was about 12-14 feet away, in the sun without a shadow on it. It startled me, to say the least, and I stood still and stared about a minute as it just stayed motionless. My first thought was that it was a rail chick, but then considering the late date I doubted that. Then I concentrated on its head - short, all black bill and black head - then a rich brown coloring on the nape and upper back. These are the features I recall with great clarity. I used my binoculars (Tasco 8x40EWA) but it took a while to get them focused down, especially since I was carrying a scope on a tripod! After a minute or two the bird moved slowly and seemed to just slither into the reeds. There was a short moment of movement and rustling after it had disappeared and then I saw it no more. I estimate the size at 4 to 5 inches and believe it had to be a Black Rail. Since I was not carrying a book I had to wait until I got home about a half hour later to check it more thoroughly and then used Robbins "Birds of North America," the Peterson Field Guide and several other books. They all show the brown on the upper back or nape on the Black Rail; nowhere have I found another rail chick shown with this characteristic.

Later that evening my husband, Jerome, and I and Dick Ruhme watched along the path from about 5:30 to 7:30 p.m. and we saw two Green Herons and two Virginia Rails but nothing as small as the first bird. On Monday morning I looked again with various other birders and spent 7:00 to 7:45 and 10:00 to 12:30 at the Park. The Virginia Rail was seen again at 7:15 a.m. but no other rails were seen later. Don Bolduc played a tape recorded Black Rail voice in the area on Monday afternoon but did not get a response.

We hope to use tapes during the spring of 1973 to see if a response can be produced during that season. Karol Gresser, 8850 Goodrich Ave. So., Bloomington, Minnesota 55437.

Editor's Note: From Karol's excellent description and the late date of this record the elusive Black Rail can now be positively put on the Minnesota list.

BLACK-HEADED GROSBEAK IN DAKOTA COUNTY — The grosbeak was seen at 972 Bidwell Street, West St. Paul, in the yard of the Albert Volk home. Though there were other feeders in the area it seemed to prefer one particular feeder in the Volk yard, in which peanut hearts and sunflower seeds were placed. For about a week from April 19 through 26, 1972, it made many appearances each day — usually on this one feeder, but occasionally on the ground beneath it. If alone on the feeder it would feed until a Common Grackle or Blue Jay appeared on the scene, when the grosbeak would leave to fly into one of the trees at the rear of the property

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or nearby, but it would return soon after the coast was clear. The bird was extremely wary so two shots with a 135 mm lens were taken through a dusty window to get a record of it, and two other shots were taken with a 400 mm lens partly hidden from view. I observed it once with Mrs. Goldberg and the next day went back for a couple of more pictures, watching it come back a half dozen times. The next day it did not return and hasn't been seen since. Mrs. Volk told me that while I was outside standing perfectly still for 15 minutes waiting for the bird to come down out of a high tree near the feeder that the bird appeared to keep its eye on me and wouldn't return. So I finally went inside the house to watch. The bird came back just once more a few minutes after that but when I tried to sneak around the corner of the house to trip the shutter on the 400 mm lens it left and that was the end of its visit. There is no doubt whatever that this bird was a Black-headed Grosbeak. This bird appeared to be a young male, probably in pre-nuptial molt. Breast was a bright rusty orange and belly had the typical yellow area in the center. No sign of any breast stripes as would be found in a female. Wings had already become black and the white pattern in them was plainly visible. The head pattern still bore some resemblance to that of a female, as would be expected in a young bird, but the dark areas were very black and the head stripes had almost disappeared. When first seen by Mrs. Volk she said "his feathers looked odd, as if he had taken a bath or something had happened to him," then his appearance changed and improved every day. It seems to us that he moved on when his molt was about completed. Maury and Isabel Goldberg, 1915 Palace Avenue, St. Paul, Minnesota 55105.

Editor's Note: It is interesting to note that the first verified state record for this species was obtained in this same general area in 1967 (**The Loon** 39:130).

AN ENIGNATIC BIRD — Most notes of interest involve birds which the observer has either identified or believes he or she has identified. The following note involves a bird which I can't identify. I submit it because I learned that Mrs. Andrew Fuller of Minnetonka saw the same kind of bird at approximately the same date at a different location. My observation was made at Woodlake, Richfield, in Hennepin County on August 26, 1972. Mrs. Fuller is not sure where she made her sighting but it could have been no closer to mine than Minnetonka. The bird was about the size of a Red Crossbill or Scarlet Tanager. It had a distinctly yellow breast and stomach and an olive brown back and head. There were no wing bars or eye rings. The bird had a distinctly conical "finch bill" which was light colored. (Mrs. Fuller confirms these observations). I observed the bird from a distance of about 20 feet for about 30 seconds. It then flew where I could not follow, giving a call something like that of a Red Crossbill. Except for the absence of certain markings and the bill shape, I thought it resembled a rather large, "yellow-ish" Philadelphia Vireo or a Yellow-breasted Chat. I conclude that it was not any of the following: (1) Female or immature Red Crossbill (there was no streaking on the breast or suggestion of crossed bill. The bill was not broken). (2) Immature or female Yellow-headed Blackbird (I am familiar with this species. It was much too small). (3) Female Boblink, or male in fall plummage. (4) American Goldfinch. (Much too small and no trace of wing markings).

Since observing the bird I've diligently studied Robbins and Peterson (East and West) with no result. I even tried Davis's Birds of Mexico and Central America. Superficially it resembled the smaller female Leclancher Bunting pictured in Davis. However, this identification seems quite impossi-

ble.

It has been suggested that Mrs. Fuller and I each saw some type of escaped exotic finch. It seems unlikely to me that we would both see the same thing at such widely separated locations. I've visited several pet shops looking for the bird without any luck. Anyway, it would be a rather drab exotic.

Except for the conical bill, I'd guess either of the following: (1) A Scarlet Tanager exhibiting some degree of xanthochroism. (2) A female Summer Tanager. (Perhaps Mrs. Fuller and I both misjudged the bill). In any case I leave it to the readers to puzzle over this bird. Any suggestions would be appreciated. Charles L. Horn, Jr. 5100 Juanita Avenue, Edina, Minnesota 55424.

Editors Note: I would have to go along with Mr. Horn's final conclusion, it seems to fit best the description of a female Summer Tanager.

LITTLE BLUE HERON AT VIRGINIA — On May 27, 28 and 29, 1972 I observed a Little Blue Heron on a tailings pond about one mile south of the Virginia city limits, in St. Louis County. The pond was bordered on the west by the Canadian National Railway tracks and the Eveleth Taconite Company pit on the east. The photograph was taken with a 35 mm Pentax camera using ASA160 Ektachrome film. A 300 mm lens with a 3 power adapter was used. The bird was about 200 feet off the south edge of the pond. This slide shows all the field marks best. The bill has a blue base with a black tip, legs and feet are dark, and the body is white with back and wings mottled with blue-gray feathers which were very conspicuous in flight. Reggie V. Carlson, 401 4th St. S.E., Minneapolis, Minnesota.

Editor's Note: The record is by far the most northerly observation in the state for this species. Other records are from the southern part of the state.



FALL PEREGRINE SIGHTING — On October 17, 1972 while conducting a low-level aerial waterfowl survey over the Chippewa National Forest, a male Peregrine Falcon was observed on the ice in a bay on the north side of Pimushe Lake in Beltrami County, Minnesota (T148N R31W SESE Section

36, 5th P.M.). After completing a turn over the upper end of the lake, my pilot, Mark E. Shough, brought the plane over the falcon again at an altitude of 110 feet from the lake surface to confirm the sighting. At our approach the peregrine flew approximately 8 feet to a muskrat house. With his movements I could see that he was carrying a dead Ring-necked Duck. Observed on this end of Pimushe during the survey were 41 Mallards and one Ring-necked Duck. Whether or not the falcon captured a healthy Ring-neck, a crippled or sick bird, or merely was feeding on a carcass could not be determined since this end of Pimushe normally holds Ring-necks of varying numbers each day during the fall. Since this end of the lake is also heavily hunted on weekends, any of the three could be possible. Ronald E. Kirby, Box 124, Route 4, Bemidji, Minnesota 56601.

WHITE PELICANS NESTING AT HERON LAKE — During the summer of 1971, White Pelicans, were noted several times on North Heron Lake, Jackson County, Minnesota. From thirty to seventy adult pelicans were noted by myself on June 8 and again on August 15, 1971. Eckert (The Loon, 43(4): 114) states that three immature birds were noted on the lake on August 21, 1971. Since my observations of this species during the summer of 1971, I have suspected nesting at Heron Lake, and planned to check it during what I thought would be the peak of the breeding season of 1972. I returned to the lake on June 24 1972, and immediately went to an area on the shore where the birds had been visible during 1971. At this time there were at least ninety adults and forty young, as visible through a 20-60x "zoom" spotting scope. The pelicans were noted on North Heron Lake. Nesting took place on the shore of a large peninsula stretching approximately .25 miles into the lake, one mile southeast of the town of Heron Lake. The exact location of the nesting was Township 104 North, Range 37 West, Section 29 of Weimer Township, Jackson County, Minnesota. A check of the colony was made by canoe on June 24. The young on this date were flightless, and appeared to be about one third grown. On approaching the colony with the canoe, the adults flew off immediately, but circled the area within 25-50 feet of my head. No audible sounds of any kind were heard from the adults, and only faint, low-pitched squeals from several of the young. As the young were flightless, there is no doubt that nesting took place at Heron Lake this year. The adults were observed feeding the young, and fishing in the open portion of the lake. The fish caught by the adults and fed to the young were apparently medium sized bullheads and Carp. Water depth in the area of the colony ranged from 1-5 feet. Vegetation on the peninsula consisted chiefly of bulrushes and cattails. The area of the peninsula on which nesting took place was open, moist ground, immediately adjacent to the water. Since the 1968 nesting at the Lac Qui Parle game refuge (**The Loon** 40:100) the last definite record of this species' nesting in the state was June 25, 1878, in Grant County, (Roberts, 1932). During the period between 1878 and 1968, they were reported infrequently during summer on several of the larger lakes of western Minnesota, but these birds were thought to be non-breeding vagrants, etc. According to early journals of T.S. Roberts and others in the University of Minnesota Archives, nesting probably took place for the last time at Heron Lake sometime during the early 1870's. Roberts (1932), reports that the Grant County colony of 1878 was abandoned because of disturbance by the local residents. This general factor may be why the species was not reported as nesting in the state for ninety years. Perhaps this and the 1968 observation indicate that the White Pelican is re-extending its breeding range to again include Minnesota. James A. Baumhofer, 1884 Berkely Avenue, St. Paul, Minnesota 55105.

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CLARK'S NUTCRACKER AT ST. JOHNS COLLEGE — On November 10. 1972, I received a call from "Bud" Tordoff, Director of the Museum of Natural History at the University stating that a Clark's Nutcracker had been reported at St. John's University at Collegeville, Stearns County. I called Norman Ford at the College and found out that he had seen the bird around 2:00 P.M. and he gave me directions as to how to locate the bird. Early the next morning, November 11, Bill Pieper, Ray Glassel, Harding Huber and I were on our way to St. John's. We arrived at the entrance to the college, a place where the bird had been seen, about 7:30 A.M. It was a very gray, overcast day and visibility was poor. I asked Bill to stop the car so we could have a look around the area. I was the first one out of the car and sitting on top of the first tree that came into my view was the Clark's Nutcracker. The easiest Minnesota lifer for all of us in a long time. The bird was very tame and in a few minutes it flew down to the roadside onto a grassy area near us. We approached to within 20 feet of the bird and watched it pick up what we presumed were pieces of acorns. The bird was in beautiful adult plumage and when it flew up to a nearby post the black and white wings and tail were very evident. Robert B. Janssen, 14321 Prince Place, Minnetonka, Minnesota, 55343.

Editor's Note: There has been at least one other report of a Clark's Nutcracker in Minnesota this fall (1972). This bird was first reported during the latter part of November in the Christmas Lake area of Hennepin County. This bird is still in the area as of this writing. A photo of this bird appears on the front cover of this issue. A complete report of this sighting will appear in the next issue of **The Loon**.

BOOK REVIEWS

How to Talk to Birds: and other uncommon ways of enjoying nature the year round. Alfred A. Knopf, New York, 1972. Hard. 242 pages. Black and white photographs, 16 pages.

The title of **How to Talk to Birds** might have been Everything You Wanted to Know About the Out of Doors But No One Could Tell You. The book is rich with details about natural history and nature study accumulated by the author. Have you ever wished you could preserve the delicate beauty of a snow-flake or frost on a window pane? You can find out how from this book. Wonder how to fertilize your roses? How much water an elm tree gives off to help cool your house by evaporation? How to attract birds — and other wildlife — to your feeder? How to go on a bird walk for the first time? This book will help answer these questions.

The author writes concisely and wittily. Sometimes he is unabashedly sentimental or "anthropomorphic," but this is good. He is then most himself,

a person with understanding and affection for his subject.

There are two unusuual chapters, one of special interest to Minnesotans. Chapter 7, "The Mystery of Mima Mounds," explains the fascinating possible origin of Mima mounds on the wet prairie near Waubun, Minnesota, a locality which must be familiar to many Minnesota birders. Davids reports how John Tester of the University of Minnesota came to postulate that mounds rising from the prairie were created in part by the diggings of thousands of toads for hibernation:

One mound less than thirty feet in diameter held 3,276 toads that burrowed an average of three feet deep — moving in a single year nearly four tons of soil!

Chapter 11, "My Favorite Nature-fiction" summarizes some of Davids' reading of seed catalogs and some of his discoveries about the gardening interests of early Americans such as Washington and Jefferson. As a boy he hid his passion for seed catalogs,

where superlatives need superlatives, where candor is a sin, where the tense is always future, the number is never less than armfuls or bushels and the mood imperative.

While in college, Davids discovered that George Washington too was a pushover for seed catalogs. Every year Washington thanked a British firm for its seed catalog

which I have had much satisfaction in perusing. In publishing so useful and beneficial a work, than which nothing, in my opinion, can be more conducive to the welfare of your country . . .

Console yourself, says Mr. Davids, if your garden doesn't come up to the

catalog. You are in company with the founders of your country.

The kind of sentiment for which one cannot fault Mr. Davids may be illustrated by this paragraph in which the author refers to the wail of a wolf.

I have heard that same kind of lament: in the cold fury of John L. Lewis and again in the voice of Martin Luther King crying out against the odds of black existence. The timber wolf, too — through no other fault than that he was born — must battle for survival until he draws his last dying breath.

Chapter 2 "How to Talk to Birds" is perhaps one of the least successful chapters of the book. The information about the use of records and tapes to learn bird songs and to call birds is not new, to say the least. Strangely, the author does not even refer to the practices of "pishing" or squeaking in order to elicit a response from birds. I found several chapters more informative than this one. Frederick Z. Lesher, 509 Winona Street, La Crosse Wisconsin 54601.

Words for Birds: A Lexicon of North American Birds with Biographical Notes. Edward S. Gruson. Quadrangle Books: A New York Times Company. 306 pages. Illustrated. Hard. \$8.95.

A bird's name ought to correspond to something about it; its color, habits, or song for example. Of course, too often the correspondence is lost or obscured. Then one looks to the logic of the name itself, and is sometimes puzzled. Take the name "redstart." A certain naive logic dictates that "red" and "start" are contradictions. The compounded word should be either "redgo" or "greenstart." What's the explanation for the contradictory compound? Words for Birds will tell you. "Redstart is a corruption of the Old German 'rothstert,' or 'redtail," and refers to the patch of red on the outer sides of the tail."

Anyone who demands an explanation for either the common or scientific name of a bird will enjoy this book. There often is a correspondence between name and bird hidden by the Greek or Latin. For example, "Empidonax," the genus of confusing flycatchers, means "king of the gnats" or "of the small insects." That makes some sense, considering the habits of the members of the genus. Once you can make some sense of the Latin name, it is easier to remember and intelligently use that name. The explanation is therefore useful, and, to some, enjoyable.

An outstanding feature of this book, interesting to both the student of American history and the bird student, is the short biographies of

The Loon

------ or who named a bird for the

uesignee, or what his connection with "his" bird was, if any.

The book is well done, with bibliography, and indexes of common names, generic names, and scientific names. There is also an index of people for whom birds are named. Omitted from the book is a pronunciation guide, which would have been helpful to the layman in learning the scientific names. Frederick Z. Lesher, 509 Winona Street, LaCrosse, Wisconsin 54601.

There's a Seal in My Sleeping Bag. Lyn Hancock. Alfred A. Knopf, Inc.

292 pages. Illustrated. Hard. \$6.95.

The husband of the author of **There's a Seal in my Sleeping Bag** has studied the wildlife of coastal British Columbia probably more than anyone else. Since the author assists her husband in his studies, she is in an excellent position to learn, and to write a popular account of her observations. This she has done, of animals from sea lions to guillemots. Anyone wishing an acquaintance with the wildlife of coastal British Columbia can begin with this book.

Lyn Hancock and husband David show remarkable ingenuity and perserverance in capturing, photographing, transporting and generally caring for animals. They live in a world of animals an arm-chair naturalist often dreams of.

The reader may forgive Lyn for her obvious admiration of David's boldness. However, when David is flung into the air by a bull elephant seal, viewing "a gaping red abyss lined with teeth," one wonders at her reaction. "I grabbed my camera to record my husband's supreme moment — being regurgitated in mid-air by an annoyed bull elephant seal." It seems a foolish bit of bravado on his part, and an inappropriate response on her part. Of course, one has the idea the whole scene is "touched up" a bit for the reader's benefit. The book is flawed throughout, I think, by this basic lack of author sincerity. Frederick Z. Lesher, 509 Winona St., LaCrosse, Wisconsin 54601.

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WHICH ONE IS THE SURF SCOTER?

The answer to the above question is that neither of these birds are Surf Scoters. The photos are of the same bird, a White-winged Scoter taken in Grand Marais harbor, Cook County, on November 25, 1972 by Harding Huber. Note the lower picture which shows the white wing patch while the upper photo does not. Do not jump to conclusions till all field marks are noted.

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PURPOSE OF THE MOU

The Minnesota Omithologists Union in an organization of both professionals and amateurs interested in birds. We foster the study of birds, we aim to create and increase public interest in birds and promote the preservation of birdlife and its natural habitat.

We carry out these aims through the publishing of a magazine, The Loon; sponsoring and encouraging the preservation of natural areas; conducting field trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.



SUGGESTIONS TO AUTHORS

The editors of **The Loon** need articles, shorter "Notes of Interest" and black/white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewriten, double-spaced and on one side of the sheet with generous margins. Notes of interest should be generally less than two typewritten pages double-spaced. If reprints are desired the author should so specify indicating number

required. A price quotation on reprints will be sent upon receipt of information.

Club information and announcements of general interest should be sent to the Newsletter editor. See inside front cover. Bird-sighting reports for "The Season should be sent promptly at the end of February, May, August ana November to Mrs. Janet Green. See inside front cover.

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