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Contents

The Flicker

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The President's Page

This issue of **The Presidents Page** is devoted to the announcement of two annual meetings that should be of especial interest to M.O.U. members. Attendance at these annual conventons will give you a great chance to meet ornithologists from all over the state, and the United States if you attend the Wilson Club meeting.

The 1953 annual meeting of the **Minnesota Ornithologists' Union** will again be held at Frontenac. The hosts for this year's meeting will be the St. Paul Audubon Society. The dates will be from May 16 to 17. Notice of the costs and arrangements did not reach the editor in time for this issue, but individual notices will probably be sent to M.O.U. members sometime before the first of May. Last year we had a record attendance at this meeting, and a record list of birds. There is no reason why this can't be bettered this year.

The 1953 meeting of the **Wilson Ornithological Club** is within a days driving distance for most M.O.U. members. Its setting is in one of the best birding areas in Michigan, not many miles from Kirtland Warbler territory. The following description is quoted almost verbatim from the March issue of **The Jack-Pine Warbler.** Nicholas L. Cutbert writes, "On June 15-17, the Michigan Audubon Society and the University of Michigan Biological Station will be hosts for the Thirty-fourth Annual Meeting of the Wilson Ornithological Club. The meeting will be at the University of Michigan Biological Station on Douglas Lake and will be an event that many Audubonites will want to attend.

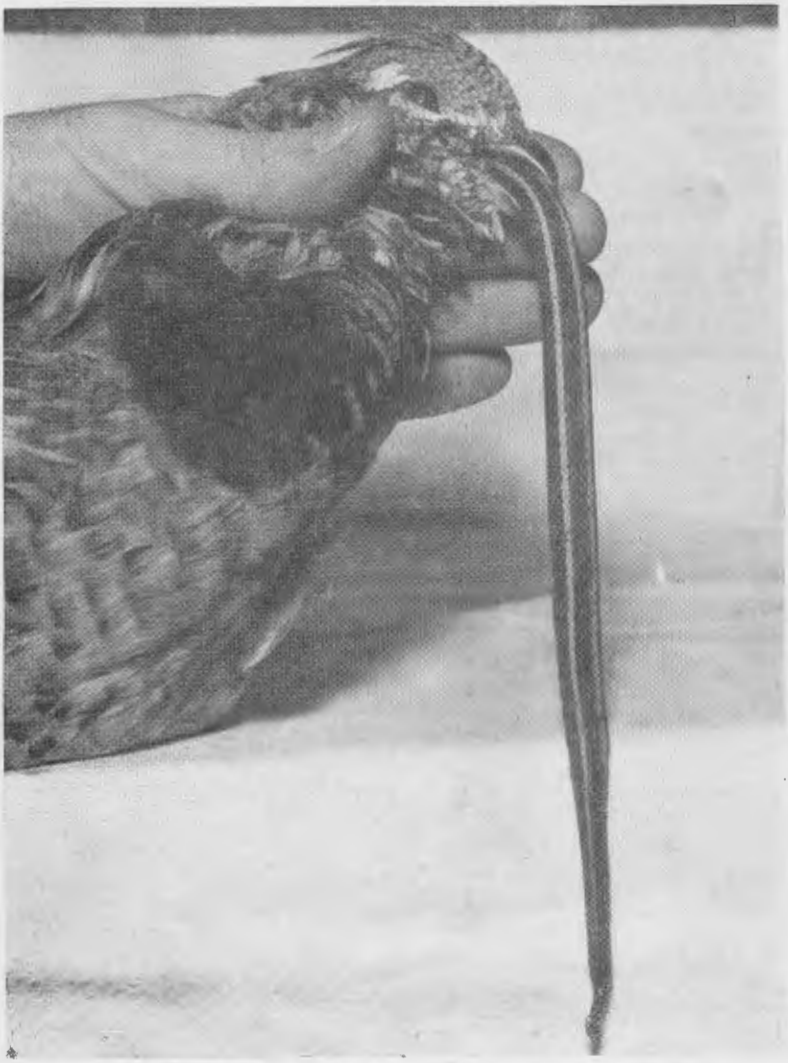
Papers will be presented by ornithologists from all over the country, and colored slides and motion pictures will frequently be used for illustrations. Papers at Wilson Club meetings usually range from rather technical subjects to fairly popular material. Of course some presentation will emphasize Michigan, such as Dr. Olin Pettingill's new film "Tip o' the Mitten" dealing with the northern counties of the Lower Peninsula.

The Annual Banquet will be in the dining hall at the station with Dr. Walter Breckenridge of the University of Minnesota Museum of Natural Historv as speaker. On one evening the Michigan Audubon Society will be hosts for an informal social hour following the papers session. Field trips will be made to Reese's Bog, Kirtland's Warbler areas, and other points of interest. The immediate vicinity of the Biological Station is rich in bird life, and the station's library and bird-skin collection will be open for inspection.

For those wishing to stay at the station, beds and meals (cafeteria style) will be available. The first meal will be Sunday supper, the last, Wednesday breakfast. Present estimates indicate that for all eight meals (including the banquet), a bed for three nights and the registration fee, the total cost will be about $15.00. Wilson Club members will receive registration material by mail. Non-members should write to Robert Whiting, 2521 Cobb Road, Jackson, Michigan. to get form for application and further information."

Any M.O.U. members interested in becoming members of the Wilson Club (annual dues $3.00 including subscription to the Wilson Bulletin) may get application blanks from Dr. Walter Breckenridge at the University of Minnesota's Museum of Natural History, or from your editor.

P. B. Hofslund, Editor



RUFFED GROUSE EATING GARTER SNAKE
(Photo by Walter H. Wettschreck)

The Ruffed Grouse As A Snake Eater

by

John L. Zorichak

In examining crops and gizzards of ruffed grouse, one is impressed first by the great variety of foods eaten, and then how food preferences vary in different portions of the birds' range. Although subsisting primarily on plants, the ruffed grouse is classed as omnivorous, because animal food, insects mostly, forms an important part of its diet, particularly during the chick stage.

An unusual item was added to the list of foods taken by grouse in Minnesota when Game Warden Lloyd Watters of Pequot Lakes submitted for study to me, an adult female ruffed grouse shot by a hunter, Ole Olsen, on October 28, 1950, in the vicinity of Pequot Lakes.

The bird was first observed sitting on the ground in a quiet attitude, but after the first shot from a 22-caliber rifle the bird ran off a short distance to stop again when a second shot killed it. The hunter then discovered that the bird had been shot while in the process of swallowing a garter snake of some length. Without further disturbing the position of the snake, he turned the specimen in to Warden Watters who gave it to me for examination and comments.

After the bird had been photographed, the digestive tract was opened through to the gizzard. The total length of the snake was 19¼ inches with a small portion of the tail, not exceeding one-half inch, missing, probably torn off by the bird's pecking. Seven inches of the snake protruded from the bird's beak (see photo); 8½ inches lay in the esophagus and glandular stomach; and 3½ inches were in the gizzard. The portion in the gizzard also contained a large amount of plant food, principally seeds of paniculed dogwood. The passage of the snake was direct to the gizzard by-passing the crop which contained a small volume of plant material, buds of aspen and fruit of false solomon's seal.

A second record of a ruffed grouse eating a snake was obtained from Lester T. Magnus in November, 1951. The following quotation is from his letter dated November 5,

"Last week while my wife was helping me clean ruffed grouse she found the trail of a garter snake protruding from the gizzard. She opened the gizzard and removed a fourteen-inch garter snake that was folded entirely within. The snake was in good condition, apparently just having entered as no grinding was evident."

The first Minnesota record of this snake-eating habit of the ruffed grouse is given in Roberts' **"The Birds of Minnesota,** where it is stated that in 1923 a ruffed grouse was found dead near Gemmell, Koochiching County, apparently choked to death by a garter snake that it had eaten. **Dept. of Conservation, St. Paul, Minnesota**

The Birds of the Nortondali Tract, Duluth, Minnesota

by

Pershing B. Hofslund

With the establishment of the Duluth Branch of the University of Minnesota a new campus became a necessity. As site for this new campus a section of land known as the Nortondale Tract was chosen. This land has been a favorite birding spot of local bird enthusiasts for many years, but with its change in charcter there will be a corresponding change in its bird population. With this in mind I have gathered what information and what impressions I could of the avian population of the area in order to better evaluate the effects of encroaching civilization on this particular territory.

The Nortondale Tract is bounded on all sides by streets of the City of Duluth. From Nortondale Avenue, an unfinished street at the edge of the Chester Park Elementary School, the land rises gently to the north becoming more abrupt as it approaches the northwest corner. About ¾ of its 160 acres are meadowlands with wooded fingers extending from the hiller north boundary. Springs and low spots give a marshy charcter to portions of the field, and along the northeastern corner a small creek lined with willow and alder provides another habitat. The wooded north boundary is made up largely of poplar, alder, birch, ash, and balsam. One hillside is thickly ocvered with hazel brush. Construction of the first building on the campus continued through the period of the study, and in the summer of 1951 excavation was started on the second.

One hundred and twenty-nine species of birds were recorded on the area between October 20, 1949 and October 20, 1951, the period that this report covers. Nests were found for only 26 species, but there was evidence that an additional 25 species also nested on the tract.

Ducks and Geese

A foggy October day during the fall of 1949 provided me with one of my greatest ornithological thrill. On the morning of October 20 I heard the unmistakeable honking of the Canada goose, and as I looked out of my office window 15 of them materialized out of the fog and disappeared across the campus. About 2:00 o'clock of the same afternoon more of the honkers and several thousand blue and snow geese appeared above the campus. For almost two hours they circled the Science Building, at times settling in the marshy area to the east of the building, and then arising almost immediately to continue their circling of the campus. Classes suffered that afternoon as students and teachers alike stopped to marvel at the beauty of these magificent birds. Just how many of the wavies circled the area that afternoon can only be guessed at, because they would appear and disappear in the heavy fog. Estimates varied between two and five thousand.

Except for an occasional migrating flock, only two ducks were ever seen on the area. A pair of mallards obviously were inspecting the area on July 1, 1951.

Herons

A single great blue heron was seen feeding in the small creek during the fall of 1950 and again in 1951. This was the only member of the **Ardeidae** recorded on the tract.

Birds of Prey

The Nortondale Tract is on the path of the main migration of the hawks that pass through Duluth. During the months of September, October, and to a lesser extent, November, there are days when an almost continous stream of hawks can be seen passing over the campus. The accipiters and the falcons come first, and then later in the fall the bigger Buteos. The American rough-legged hawk is usually the last to appear in any numbers, but although they are the last they are not the least, for their appearance excites comments from the experienced as well as the inexperienced hawk watchers. The hawks that have been recorded during the fall flights are the: turkey vultures, goshawks, sharpshins, Cooper's, red-tails, broad-wings, American rough-legs, bald eagles, marsh, ospreys, pigeon, and sparrow.

The summer hawks are fewer in numbers, but almost equal in the number of recorded species. Most of them are probably just searching for food over the area, and most likely none of them use the area as a breeding grounds. Of the species that have been recorded on the area during the summer months, the record of an American rough-leg on June 2 and July 10, 1950 (Hofslund, The Flicker 22:4 pp. 127-28) is probably the most interesting as these birds are seldom recorded in Minnesota during the summer months. Besides the rough-leg, sharpshins, red tails, broad-wings, pigeon and sparrow hawks have been seen on the area during the summer months. The marsh hawk used the area as a feeding ground almost daily during the summers of 1950 and 1951.

The short-eared owl apparently nested on the campus during the summer of 1950 as it was seen almost daily. On October 6, 1950 four immature birds were seen in the meadow east of the Science Building. The only other owl recorded on the territory was a single snowy owl seen several times during the winter of 1950-51.

Pheasants and Grouse

Nests of the ring-necked pheasants were found in both 1950 and 1951, and at least one brood was raised during each of these summers. The ruffed grouse nests in the wooded areas, broods having been found each summer.

Shorebirds and Plovers

At least three of the **Charadriiformes** may nest on the Nortondale Tract. A nest with four eggs of the killdeer was found a few feet away from the Science Building on June 7, 1950, and at least one other pair was seen with young that same year. A pair of spotted sandpipers raised three young along a drainage ditch by the Science Building during 1950, and woodcock were flushed several times during the summer months of both 1950 and 1951. No real sign of nesting woodcock were noted, however. Wilson Snipe, lesser yellow-legs, least sandpiper, and solitary sandpipers were seen during migration periods.

Doves

The mourning dove is quite rare in Duluth, but at least one pair was seen on the Nortondale Tract during each summer of the study. The nesting of these birds was probably carried out in some of the residential areas around the tract rather than on the tract itself.

The common pigeon was not considered on the list of birds recorded on the area, but one encounter I had with this bird should be mentioned. I was startled to hear a strange "win-

nowing" sound coming from the wooded section of the tract one July morning in 1951. Upon investigating this strange noise I found that it was coming from two domestic pigeons that were tumbling and twisting in the air, sometimes close to the ground, and sometimes high in the air. I assumed that it was a courtship display, although I have never seen such antics in these birds before this time, nor later.

Cuckoos

At least two pairs of black-billed cuckoos nest on the study area. Nests were found at the edge of the brushy areas.

Goatsuckers, Swifts and Hummingbirds

The nighthawk and the swifts use the area only as a feeding ground. No nests were found for the ruby-throated hummingbirds either, but there is little doubt that they do nest within the confines of the area.

Kingfishers and Woodpeckers

Nest trees were found for the hairy and downy woodpeckers and for the flicker. The pileated woodpecker was seen both in the spring and the fall, but there are no trees on the tract suitable for their nesting.

A single belted kingfisher was seen feeding in one of the pools formed by the creek during the summer of 1951. This was the only record of this species on the study area.

Flycatchers, Larks and Swallows

The only time that the horned lark is seen on the campus is early in April and again in October when the spring and fall migration is on.

The tree, barn, and possibly the cliff swallows plus the purple martin regularly use the area for feeding grounds. No nesting sites for any of these swallows were found during 1950 and 1951, but tree swallows did use houses that were placed out for them during 1952.

The flycatchers make up a large and interesting part of the bird population of the Nortondale Tract. Eight species were recorded on the area, and probably five of these eight nested on the area. The olive-sided flycatcher and the phoebe were recorded in 1951 only. The yellow-bellied flycatcher was recorded in large numbers the first week of June in 1951, but it is usually a rare transient on the tract. Nests were found for the least flycatcher, the alder flycatcher, and the eastern kingbird. The crested flycatcher and the wood peewee were recorded often enough to indicate that they were nesting birds.

A comparative nesting study of the alder flycatcher in this area with those that nest in the Ann Arbor region would provide an interesting problem. The majority of the nests of this bird that were found in a study area around Ann Arbor, Michigan were placed above three feet from the ground; were of neat construction, very similar to the nest of the goldfinch; and contained, usually, a clutch of four eggs. All of the nests found on the Nortondale Tract were less than three feet from the ground; were constructed in a rather untidy manner of grasses; and contained only three eggs to a clutch.

Crows and Jays

The raven is a winter visitant, and the crow and blue jay are nesting birds. No nests were found of either of these least two birds, but young have been found each year.

Titmice, Creepers and Kinglets

Although young of the black-capped

chickadee have been seen on occasion on the tract, there was no other indication that they might have nested within its confines. The creepers and the ruby-crowned and golden-crowned kinglets visited it only during the migration periods.

Wrens

Undoubtedly the winter wren stops in the area during its migration, but it has never been recorded on this particular area. The house wren may nest in some of the dead trees, but the broods of young that have been seen on the tract were probably from wren houses that are found in the residential area surrounding the campus. The short-billed marsh wren was seen only on August 9, 1950, but in 1951 at least three pairs nested within the confines of the study area.

Catbird and Thrashers

The catbird was found in all of the brushy areas of the tract, and a few nests were found for this species. The brown thrasher was found nesting in at least three areas. All its nests were on the ground.

Thrushes

The hermit, olive-backed, and gray-checked thrushes were seen only during migration. Four pairs of robins and one pair of bluebirds were known to have nested within the area. The veery was the most common of the nesting thrushes. At least 15 pairs were present on the area, but only three nests were found during the two summers.

Waxwings, Pipits and Shrikes

The cedar waxwing is present in large flocks during early summer, and from 10 to 15 pairs remain in the area breed. The American pipits are found on the lawn around the Science Building during the fall migration. The only shirke recorded on the area was single northern shirke present on April 20, 1950.

Starling and English Sparrow

A few pair of starlings nest on the area, and after the nesting season is over large flocks sometimes may be seen feeding near the Science Building. As yet, the English sparrow is rather a rare visitor to the area, a few individuals appearing each summer.

Vireos

The discovery of a singing male Philadelphia Vireo on the area, long after the migration period was over, lent zest to the daily search over the tract. Only one or two possible nests of this bird have been found in Minnesota, and so, as much time as could be spared was given to a search for this nest, but with no avail. The bird remained singing in the area until at least June 29, but was not recorded after that. There were no birds of this particular species seen during 1951.

Another vireo that was of particular interest was an adult yellow-throated vireo discovered along the edge of the creek on May 28, 1951. This bird is rare in the northern part of Minnesota, and that it happened to be on the tract on the particular day I was working it was indeed fortunate.

At least five pairs of red-eyed vireos and two pairs of warbling vireos nested on the area. The blue-headed vireo was seen only during the migration period.

Wood Warblers

Twenty-three species of warblers were recorded on the Nortondale Tract. Of these, spring and fall records only were obtained for the Tennessee, mag-

nolia, Cape May, black-throated blue, blacked-throated green, myrtle, bay-breasted, black-poll, pine, palm, Wilson's, Canada, ovenbird, and northern water-thrush. Summer dates were recorded for a male Blackburnian and a female golden-winged, but neither species is believed to have nested on the area. No nests were found for the yellow, black-and-white, chestnut-sided, and the Nashville, but their daily presence and the presence of newly hatched young on the area were indications that they nested here. The yellow-throat was probably the most common warbler on the tract, at least 12 pairs nesting there in 1950 and more in 1951. Fourteen nests were found for this species during the two years. Nests were also found for the American redstart and for one of two pairs of nesting mourning warblers.

Meadowlarks and Blackbirds

Both the eastern and western meadowlarks were seen on the area during 1950, but only the eastern is a breeding bird on this tract. One nest was found each year during 1950 and 1951. The area supported two pairs during each year. The bobolink, according to Dr. Olga Lakela, was a former nester on the Nortondale Tract, and a male bird did appear in 1950. However, there was no indication that there was a successful nesting during this season, and except for a single immature bird seen in the fall of 1951 this species has not been recorded again on the area.

The redwing nests a few hunderd feet away from the area, but with the exception of migration periods, only one or two records of this bird on the tract itself were made during 1950 and 1951. Both the rusty and Brewer's Blackbirds are seen in large flocks during fall and spring migration, but a single pair of the latter on July 12, 1950 was the only summer record.

The bronzed grackle probably did not nest on the area, but it used the tract as a feeding grounds, and so was seen on it almost every day during the summer. The grackle is not a particularly common bird in Duluth.

At least two pairs of Baltimore orioles nested in the wooded sections of the area, and probably other family groups fed in the area during the latter part of the summer.

The ever present cowbird was a member of the bird population of the Nortondale Tract and numbered as its victims the yellow-throat, yellow warbler, red-eyed vireo, song sparrow and clay-colored sparrow. I believe that no more than four females used the campus for its breeding grounds.

Tanagers

The **Thraupidae** were represented by the only member that commonly is found in Minnesota, the scarlet tanager. A male was seen throughout the summer of 1951 in the swampy woods near the northeast corner of the tract. Its manner indicated that it nested in these woods, but no female or young were ever seen.

Grosbeaks, Finches, Sparrows and Buntings

Twenty-one members of the **Fringillidae** were recorded on the campus. Of these, nests were found for the goldfinch, rose-breasted grosbeak, savannah sparrow, clay-colored sparrow, and the song sparrow. Probably the purple finch, chipping sparrow, swamp sparrow and LeConte's sparrow also nested here. The pine siskin was seen in large flocks during the spring and summer, but that they used the area for nesting is doubtful. Evening grosbeaks were present as late

as June 14, 1950, but they did not nest on the area. The pine grosbeak, snow bunting, red polls and the evening grosbeaks were winter visitants. The slate-colored juncos, Lapland longspurs, tree sparrows, fox sparrows, Lincoln sparrows, and with one exception, the white-throated sparrow were all seen only during the migration period. One white-throat was heard singing on the tract during the summer of 1951. The most common of the nesting Fringillidae was the clay-colored sparrow. This bird and the yellow-throat were the most abundant nesting birds on the tract, followed closely by the veery and the savannah and song sparrows.

Discussion

Any piece of land that can provide a list of almost 130 species of birds (the 130 th., 8 double-crested cormorants, was seen in 1952) is interesting from an ornithological point of view, but here we have an area that should be even more interesting, at least ecologically, in the years to come. What will be the changes that will take place in the bird population in five, ten, or 50 years from now? The meadows will presumably be replaced by buildings, the land will team with human activity, shade trees will cover the campus, shrubbery unknown to the area now will be planted, and the low marshy ground will be drained and filled in. Certain ecological niches will be destroyed, and new niches will be introduced. Already the short-eared owl, the bobolink, and probably the LeConte's sparrow have disappeared. The yellow-throat and the savannah sparrow will undoubtedly soon be reduced in numbers. The baltimore oriole and the warbling vireo should increase in numbers. It will be interesting and valuable to see what will happen to the birds of the Nortondale Tract. I hope that this paper will provide a stimulus to further observation of this area as the University of Minnesota as Duluth grows.

Biology Department, University of Minnesota, Duluth.

Minnesota Nesting Season--1952

by

Vera Sparkes

Minnesota bird watchers did extensive field work during the nesting season of 1952, and reported the nesting of 122 species of birds, the largest number reported to date. These records cover 20 of Minnesota's 87 counties, from LaCrescent in Houston County to McFarland Lake on the Canadian border, the largest number of records coming from Duluth, the Twin Cities, and Winona. Most of the records are for the eastern part of the state, the M.O.U. apparently having few members who reside, or travel, in the western part of the state. Records from this area, added to our extensive records from the east, would give us a far better picture than we now have of Minnesota's nesting bird population.

Brother Theodore, who spent the summer at St. Mary's College in Winona, gave us our most extensive (and some of our most interesting) records. Mr. & Mrs. Whitney Eastman and Robert Janssen of Minneapolis and Mr. P. B. Hofslund of Duluth were also responsible for many observations. Other reporters of nesting birds were: Mrs. George Lehrke, St Cloud; Brother Pius & David Thurston of St. Paul; Mr. & Mrs. Philip Tryon and Mrs. M. E. Herz of Christmas Lake; Dr. Olga Lakela, Miss Mary Elwell, Mr. O. A. Finseth; Mr. Joel Bronoel, Grace Schinske, H. W. Hann, Rev. Giles, Ralph Grant, Pacey Friedman, Roberta Moog, Robert Galati, and John & Helen Hale of Duluth; Mrs. Malcolm Renfrew, William H. Hale, John Jarosz, William Pieper, John Futcher, John T. Pratt, and Walter Jiracek of Minneapolis; and Robert Hanlon of Mankato. The Duluth Bird Club and the Minneapolis Bird Club contributed records noted on their group field trips.

In writing up the 1949 nesting records Dorothy Mierow called attention to 39 species, in addition to "most of the warblers," which were seldom recorded nesting in Minnesota, and bird students throughout the state were asked to watch especially for the nestings of these birds. Aside from the birds showed up in this years records. They are baldpate, hooded merganser, pigeon hawk, spruce grouse, Wilson's snipe, brown creeper, blue-gray gnatcatcher, grasshopper sparrow, Henslow's sparrow, and the migrant shrike. A 1951 record of the nesting of the Philadelphia vireo (one of the 39) came in with the 1952 records, and it is believed this is the first nesting record for this bird in Minnesota. John and Helen Hale record this nest in Lake County on the Algier-Smith railroad grade near the west branch of the Split Rock River. The nest was first observed on June 8, 1951, at which time it was nearly completed, and was located in an aspen tree about 10 feet from the ground, in a birch and aspen grove. Willow catkins were used in the nest. On June 23 and 24 the adult bird was observed sitting low on the nest; on July 5 and 7 one young bird was seen in the nest, and on July 8 the young bird was gone.

Another unusual 1951 record, just received, is of the nesting of the raven (also one of the 39 rarely recorded nesting birds) on Normanna Road, Duluth, where three immature birds were observed July 2, 1951 by

John and Helen Hale.

The record of the brown creeper, reported by John Jarosz, is also interesting, as it is the southernmost record for this bird in the state.

Among the warblers this year's two records of the nesting of the cerulean is noteworthy, as this species has not shown up before on the published nesting records in the **Flicker**, although several nestings are recorded in Robert's **Birds of Minnesota.** Also interesting among the warbler records is the number of blue-winged warblers recorded as nesting in the Winona area.

Perhaps the most interesting record of the year is that of Bell's vireo, for which six nesting observations have come in from the Winona area around St. Mary's College, recorded by Brother Theodore. This is the first record for the nesting of this bird in the state. and it is remarkable that so many records for such a rare bird should be noted.

Another unusual record is that of the American egret found nesting near Paynesville in Stearns County in the midst of a great blue heron colony. Robert Galati reported this on June 26th.

Without any details a report just came in that Leo Manthei, a game warden, had found a magpie and five young in Beltrami County also in the summer of 1951.

The records show that in 1952 the cowbird parasitized the olive-backed thrush, indigo bunting, chipping sparrow, red-winged blackbird, eastern meadowlark, northern yellow-throat, and yellow warbler.

To balance the nesting picture for 1952 it should also be noted that 11 species normally recorded as nesting in Minnesota were absent from this year's list. They are Holboell's grebe, black-crowned night heron, American bittern, least bittern, red-breasted merganser, Cooper's hawk (the **Seasonal Report** published in the Sept. 1952 issue of the **Flicker** indicates a Cooper's hawk nesting in Minneapolis, but no record of it reached the writer), red-tailed hawk sora rail, Florida gallinule, screech owl, and red-headed woodpecker.

It is impossible to state whether the larger number of species reported for the 1952 season, together with the unusual records for some species, indicates any change in the state's breeding bird population. It may be indicative merely of more competent observers, of more extensive field work being done by M.O.U. members, of merely that a more consicentious effort was made to record observations and send them in. Whatever the reason, 1952 was an interesting season, judging by the reports of indivihual nestings listed below:

LOON—**July** 5—Lake Alexander, Morrison County; 1 egg; 1 chick on July 20; Lehrke.

PIED-BILLED GREBE—**June 22**—Mother's Lake, Minneapolis, Hennepin County; female on nest; Eastman. **June 22**—Mother's Lake, Minneapolis Hennepin County; 2 pairs with 3 eggs each; Eastman. **July 14**—Mother's Lake, Minneapolis, Hennepin County; 4 young with adults; Janssen. **July 14**—Mother's Lake, Minneapolis, Hennepin County; many young birds; Janssen.

DOUBLE-CRESTED CORMORANT—**June 15**—Tom's Island, Rice Lake Refuge, Aitkin County; 28 nests; 15 examined as follows: 5-3 eggs; 4-2 young; 1-2 eggs, 1 young 3-3 young; 1-1 young; 1-1 young, 1 egg. Duluth Bird Club.

GREAT BLUE HERON—June 15—Tom's Island, Rice Lake Refuge, Aitkin County; 23 nests; 3 examined: 1 with

2 young, 2 with 1 young; Duluth Bird Club.

AMERICAN EGRET — **June 26** — Stearns County; 5 young with both adults, in midst of Great Blue Heron Colony; Galati.

GREEN HERON—(**No date given**)—Lake of the Isles, Minneapolis, Hennepin County; nest on island; 5 young seen in latter part of August; Eastman. **July 6**—Madison Lake, Blue Earth County; 5 young; Hanlon.

MALLARD—**April 29**—Madison Lake, Blue Earth County; 7 eggs; Hanlon. **May 4**—Ruby Lake, Hennepin County; 6 eggs; Futcher & Pieper. **May 22**—Mother's Lake, Minneapolis, Hennepin County; 9 eggs; Thurston. **May 23**—Minnesota Point, Duluth, St. Louis County; 11 eggs; Hofslund. **May 25**—Harbor Island, Duluth, St. Louis County; female and 9 young; Bronoel, Finseth, & Hofslund. **May 27**—Mother's Lake, Minneapolis, Hennepin County; female and 10 young; Janssen. **May 30**—Cleveland Avenue & Highway 36, Ramsey County; newly hatched young in pond; John Hale. **May 30**—Harbor Island, Duluth, St. Louis County; 6 eggs; Duluth Bird Club. **May 30**—Minnesota Point ,Duluth, St. Louis County; 8 eggs; Hofslund. **May 30**—Middle Lake, Nicollet County; 1 young with female; Hanlon. **May 31**—St. Croix State Park, Pine County; 5 young with female; Minneapolis Bird Club. **June 1**— France Avenue & 66th Street, Minneapolis, Hennepin County; 3 young; Janssen. **June 7**—Mother's Lake, Hennepin County; 6 young; Eastman. **June 21**—66th St. & France Ave., Minneapolis, Hennepin County; 6 young with female; Eastman. **June 28**—Moore Lake, Anoka County; female with 8 young; Eastman. **July 14**—France Ave. & 66th St., Minneapolis, Hennepin County; female with 10 young; Janssen.

BLACK DUCK—**May 18**—Basswood Lake, QSWRC, St. Louis County; 14 eggs; Lakela & Ahlgren. **May 20**—Minnesota Point, Duluth, St. Louis County; 10 eggs; Hofslund.

BALDPATE — **July 10** — Rice Lake Game Refuge, Aitkin County; 3 young with female; Galati.

BLUE-WINGED TEAL — **May 22** — Mother's Lake, Minneapolis Hennepin County; 10 eggs; Thurston. **May 30**—Harbor Island, St. Louis County; 11 eggs; Duluth Bird Club. **June 7**—Harbor Island, St. Louis County; 10 eggs; Duluth Bird Club. **June 20**—Winona County; 6 young, out of nest; Bro. Theodore. **July 22**—Madison Lake, Blue Earth County; hen with 10 young; Hanlon. **July 26**—Madison Lake, Blue Earth County; hen with 7 young; Hanlon. **July 27**—France Ave. & 66th St., Mpls., Hennepin County; 8 nearly full grown young; Janssen.

WOOD DUCK—**June 8**—Tom's Island, Rice Lake Game Refuge, Aitkin County; female with 8 young; Finseth. **June 20**—Stearns County; 8 young with female; Galati. **June 29**—Winona County; 10 young out of nest; Bro. Theodore. **July 4**—Minnetonka, Hennepin County; female with 5 young; Pratt. **July 4**—Lake Minnetonka, Hennepin County; female with 3 young; Pratt. **July 10**—Rice Lake Game Refuge, Aitkin County; 1 young with female; Galati.

RED HEAD—**June 21**—France Ave. & 66th St., Minneapolis. Hennepin County; female with 8 young; Eastman. **June 22**—Mother's Lake, Minneapolis, Hennepin County; 1 young; Eastman.

RUDDY DUCK—**July 14**— Mother's Lake, Hennepin County; 2 broods, one of 6 young and one of 7 young; Janssen.

HOODED MERGANSER—**May 24**—

LeCrescent, Houston County; 3 pairs and 20 young; Bro. Theodore.

AMERICAN MERGANSER—June 25—Namakan Narrows, Minnesota & Ontario Boundary, St. Louis County; female with 8 young; Lakela & Elwall.

TURKEY VULTURE—June 6—Brownsville, Houston County; adult carrying food to nest; Jirasek.

RED-SHOULDERED HAWK—April 5 Christmas Lake, Hennepin County; adults working on last year's nest; April 12—incubating; May 17—one or two very small young. June 7—1 young observed in nest; June 11—nest empty; Tryon.

BROAD-WINGED HAWK—July 4—Lester Park, Duluth, St. Louis County; 2 eggs in nest; (1 week later only 1 young); Hofslund and Galati.

PIGEON HAWK—Late June—Minnesota Point, Duluth, St. Louis County; parents feeding young; Galati.

SPARROW HAWK— date not given—Split Rock River, Lake County; young bird on ground unable to fly. John Hale.

SPRUCE GROUSE—July 5—Sawbill Trail, Tofte, Cook County; 3 broods: 1—7 chicks; 1—2 chicks; 1—1 chick; Eastman.

RUFFED GROUSE—June 30—Midway Township, St. Loius County; 8 half-grown young; Lakela. July 1—Nortondale Tract, Duluth, St. Louis County; 2 broods: 1—4 young; 1—10 young; Hofslund. July 10—Rice Lake Game Refuge, Aitkin County; 9 young with adult birds; Galati.

RING-NECKED PHEASANT—May 13—Revere, Redwood County; 5 eggs; Renfrew. June 8—Pickwick Valley, Winona County; 7 broods of approximately 10 each; Bro Theodore. June 19—Minikahda Golf Course, Minneapolis, Hennepin County; 5 young, 1 week old; Janssen. June 27—Minikahda Golf Course, Minneapolis, Hennepin County; several hens with small broods of young; Janssen. July 13—Purgatory Creek, Hennepin County; 6—7 young; Janssen. July 14—Mother's Lake, Minneapolis, Hennepin County; 3 young; Janssen. July 20—Madison Lake, Blue Earth County; 9 young; Hanlon. Summer 1952—Nortondale Tract, Duluth, St. Louis County; brood of at least 8 seen several times; Hofslund.

KING RAIL—June 10—La Cresent, Houston County; pair with 4 young; Bro. Theodore. July 4—Mankato, Blue Earth County; female with 6 young; Bro. Theodore.

COOT—May 22—Mother's Lake, Minneapolis, Hennepin County; female on nest; Thurston. June 22—Mother's Lake, Minneapolis, Hennepin County; 2 nests with female sitting; 2 females with 2 young each; 5 female with 1 young each; 1 female with 7 young; Eastman. July 13—France Ave. & 66th St., Minneapolis, Hennepin County; female with 4 young; Janssen. July 14— France Ave. & 66th. St. Minneapolis, Hennepin County; female sitting on nest; Janssen. July 14— France Ave. & 66th St., Minneapolis, Hennepin County; many young, from downy chicks to almost full grown young; Janssen.

PIPING PLOVER—June 7—Harbor Island, Duluth, St. Louis County; 4 eggs; Duluth Bird Club.

KILLDEER—June 9—Minnesota Point, Duluth, St. Louis County; 3 young; Pratt. June 13—Minnesota Point, Duluth, St. Louis County; female and 4 young; Pratt. July 17—Lake Winona, Winona County; 2 young in nest; Bro. Theodore.

SPOTTED SANDPIPER—May 27—Duluth, St. Louis County; 2 eggs; Hofslund. May 30—Harbor Island, Du-

luth, St. Louis County; 4 eggs; Duluth Bird Club. **June 6**—Pickwick Valley, Winona County; 2 young out of nest; Bro. Theodore. **July 14** — Pickwick Valley, Winona County; 2 young out of nest; Bro. Theodore. **July 17**—Lake Winona, Winona County; 2 young out of nest; Bro. Theodore. **July 22**—Reno, Houston County; 2 young out of nest; Bro. Theodore.

WILSON'S SNIPE—**April 16**—Linwood Lake, Anoka County; adult bird in courting flight; John Hale.

HERRING GULL—**June 10**—Lake Superior, near Encampment River; 7 nests; 2-1 egg; 2-2 eggs; 1-3 eggs; 1-1 young; 1-1 -egg, 2 young; Pratt. **June 14**—Knife Island, Lake Superior; 150 nests—97 empty; 34—1 egg; 6—2 eggs; 8—3 eggs; 2—1 young, 1 egg; 3—2 young 1 egg; Duluth Bird Club. **June 18**—Lake Superior near Beaver Bay, Lake County; 1 egg being incubated; Thurston. **June 19**—Namakan Lake, Minnesota & Ontario Boundary; 213 live young, 3 dead young, 37 eggs (1—3 in each nest); Lakela & Elwell.

FORSTER'S TERN—**June 22**—Mother's! Lake, Minneapolis, Hennepin County; parent feeding young in nest; Eastman.

COMMON TERN—**June 7**—Harbor Island, Duluth, St. Louis County; 33 nests: 8—1 egg; 12—2 eggs; 13—3 eggs; Duluth Bird Club.

BLACK TERN —**May 27**—Mother's Lake, Minneapolis, Hennepin County; many nests; 3 eggs seen in one; Janssen. **May 30**—Mother's Lake, Minneapolis, Hennepin County; 3 eggs; Thurston. **June 22**—Mother's Lake, Minneapolis, Hennepin County; 3 birds incubating; Eastman. **July 13**— France Ave. & 66th Street, Minneapolis, Hennepin County; several birds in immature plummage, and 2 downy chicks; Janssen.

MOURNING DOVE—**April 24**—St. Cloud, Stearns County; nest observed; May 26—2 young out of nest; Lehrke. **April 27**—Anoka County; 2 eggs; Futcher & Pieper. **May 13**—Revere, Redwood County, 2 eggs; Renfrew. **May 14**—North Mankota, Nicollet County; 2 young; Hanlon. **June 6**—Palmer's Slough, Hennepin County; 2 full grown young; Jarosz & Willis. **June 23**—St. Cloud, Stearns County; nest first observed; June 25, 2 young ona County; 1 nest, each with 2 young; same place; Lehrke. **June-July**—Winona Couny; 1 nests, each with 2 young; Bro. Theodore. **August 9**—Minikadha Golf Course, Minneapolis, Hennepin County; building nest; **August 12**—2 eggs; Jenssen.

YELLOW-BILLED CUCKOO—**June 4**—Crosby Lake, Ramsey County; incubating; Thurston. **No date**—Winona County; 2 pairs feeding 3 young; 1 pair feeding 2 young; Bro. Theodore.

BLACK-BILLED CUCKOO—**June 12**—Nortondale Tract, Duluth, St. Louis County; 2 young; Hofslund. **June 21**—Nortondale Tract, Duluth, St. Louis County; 1 young out of nest; Hofslund. **July**— St. Mary's College, Winona County; 1 pair feeding 3 young; 1 pair feeding 4 young; Bro. Theodore.

GREAT-HORNED OWL—**April 14**—West River Road, Hennepin County; adult incubating; April 27—1 young, recently hatched; nest later destroyed; Pieper & Futcher. **May 17**—Cannon River, Goodhue County; 2 young Janssen.

NIGHTHAWK—**July 18**—St. Mary's College, Winona; 2 young observed on roofs of 2 different buildings; Bro. Theodore.

CHIMNEY SWIFT **July 2**—St. Mary's College, Winona County; 3 pairs nesting in chimney; July 17— 11 young; Bro. Theodore.

RUBY-THROATED HUMMINGBIRD **June 2**—Palmer's Slough, Hennepin County; 2 eggs; young left nest June 18; Jarosz.

BELTED KINGFISHER **May 23**—Purgatory Creek; Hennepin County; incubating; June 9—still incubating; Janssen.

FLICKER **May 31**—St. Croix State Park, Pine County; parents entering nesting hole; Mpls. Bird Club. **June 25**—Minikahda Golf Course, Minneapolis Hennepin County; several young being fed; Janssen. **June 26**—Duluth, St. Louis County; adult incubating; Hofslund. **June 28**— Lake Alexander, Morrison County; 2 young nearly ready to leave nest; Lehrke.

PILEATED WOODPECKER **May 4**—Purgatory Creek, Hennepin County; female incubating; June 1—15, feeding young; June 20—young had left nest and were being fed in area; Janssen & Renfrew. **May 27**—Deephaven, Lake Minnetonka, Hennepin County; adults feeding 2 young; Pratt. **June 11**—Minnetonka township, Hennepin County; 2 young being fed; Herz.

RED-BELLIED WOODPECKER **June 8**—Cannon River Bottomlands, Goodhue County; parents feeding young; Eastman. **June 8**—Picnic Grounds north of Cannon Falls; parents carrying food; Eastman.

HAIRY WOODPECKER **June 8**— Cannon River Bottomlands, Goodhue County; parents feeding young; Eastman.

DOWNY WOODPECKER **June 8**—Cannon River Bottomlands, Goodhue County; parents feeding young; Eastman.

EASTERN KINGBIRD **June 6**—Lake Alexander, Morrison County; 2 young; nest destroyed by storm, June 12; Lehrke. **July 3**—Chub Lake, Carleton County; nest with 3 eggs; John Hale. **July 13**— near Shakopee, Scott County; parents feeding young; Janssen. **July 22**—Nortondale Tract, Duluth, St. Louis County; 2 young about ready to leave nest; Hofslund.

CRESTED FLYCATCHER **June 18**—Palmer's Slough, Hennepin County; 7 eggs; June 23—7 young about 2 days old; June 24—young killed by storm; Jarosz. **June 21**—Purgatory Creek, Minneapolis, Hennepin County; parents carrying food to young; Eastman. **June 24**—Purgatory Creek, Minneapolis, Hennepin County; parents feeding; young; still feeding on June 29; Eastman.

PHOEBE **April 29**—Palmer's Slough, Hennepin County; 3 eggs; 16 day incubation, successful; Jarosz. **May 18**—QSWRC, Basswood Lake, Lake County; 5 eggs; Ahlgren & Lakela. **May 29**—Bass Pond, Minneapolis, Hennepin County; 5 eggs; June 7—incubating; June 22— partly grown young; June 29—5 young ready to leave nest; Eastman. **May 30**—St. Croix State Park, Pine County; 4 young, plus 1 dead young hanging by foot; parents feeding Mpls. Bird Club. **May 31**—St. Croix State Park, Pine County; parents feeding 5 young; Mpls, Bird Club. **June 1**—St. Croix State Park, Pine County; nest just completed; Mpls, Bird Club. **June 8**—Cannon River Bridge, Highway 61, Goodhue County; parents carrying food to young; Eastman. **June 9**—Palmer's Slough, Hennepin County; 5 eggs; successful; Jarosz. **June 25**—Namakan Narrows, St. Louis County; 2 nests, 4 young in each; Lakela & Elwell. **July 5**—St. Mary's College, Winona, Winona County; 4 young; Bro. Theodore. **July 27**—Many-Point Boy Scout Camp, Ponsford, Becker County; 4 half-grown young; Eastman.

ALDER FLYCATCHER **July 5**—Nortondale Tract, Duluth. St. Louis County; 3 eggs; Hofslund. **July 21**—near St. Mary's College, Winona, Winona Coun-

ty; 3 young out of nest; Bro. Theodore. **July 21**—St. Mary's College, Winona, Winona County; 3 young out of nest; Bro. Theodore.

LEAST FLYCATCHER **May 13—July 16**—Palmer's Slough, Hennepin County; 14 nests, varying numbers of eggs and young; Jarosz. **June 8**—Pickwick Valley, Winona County; building nest; June 30—4 young out of nest; Bro. Theodore. **June 8**—Picnic grounds, Highway No. 19, north of Cannon Falls, Goodhue County; parents feeding young; Eastman. **July 20**—Breezy Point, Big Pelican Lake, Crow Wing County; 3 eggs; William Hale.

WOOD PEWEE **June 7**—Lake Vadnais, Ramsey County; nest with eggs; Thurston. **June 8**—Picnic Grounds, Highway 19, north of Cannon Falls, Goodhue County; incubating; Eastman. **June 21**—Purgatory Creek, near Minneapolis, Hennepin County; incubating; Eastman **July 14**—Minikahda Golf Course, Hennepin County; parents feeding young; Janssen. **July 16**—St. Mary's College, Winona, Winona County; 4 young out of nest; Bro. Theodore.

HORNED LARK.. **April 14**—Airport, Hennepin County; 4 eggs; April 20—3 young; April 24—3 young gone from nest, 1 unhatched egg remaining; Renfrew. **April 20**—Airport, Hennepin County; 3 eggs; April 24—2 young Renfrew. **April 27**—Anoka County; 2 young; Futcher & Pieper.

TREE SWALLOW **April 19**—Lake of the Isles, Minneapolis, Hennepin County; pair selected site; April 22—building; June 7—feeding young; June 19—2 young in flight, parents still feeding others in box; Eastman. **May 22 through July**—Jean Duluth, Howard Gneisen, & Rice Lake Roads, and Minnesota Point, Duluth, St. Louis County; 1 nest—2 eggs; 4 nests—3 eggs; 7 nests—4 eggs; 7 nests—5 eggs; 7 nests—6 eggs; 1 nest—7 eggs; Brononel. **May 23** — La Crescent, Houston County; nesting pairs; June 10—11 young; Bro. Theodore. **May 27**—Carson's Bay, Lake Minnetonka, Hennepin County; adult bird carrying nesting material: Pratt. **June 6**—Lighthouse Island, Carson's Bay, Lake Minnetonka, Hennepin County; parents carrying food; Pratt. **June 21**—Nortondale Tract, Duluth, St. Louis; 4 eggs; July 14— 4 young nearly ready to leave nest; Hofslund. **June 24**—Nortondale Tract, Duluth, St. Louis County; 4 eggs (5 young nearly ready to leave nest—July 14); Hofslund. **July 7**—Ramsey County; parent feeding young in bird house; Bro. Pius.

BANK SWALLOW **May 28**—Blue Earth River, Blue Earth County; 3 eggs; Hanlon. **June 8**—South end of Fort Snelling bridge, Minneapolis, Hennepin County; 50 nests in colony, birds going in and out; Eastman. June 9—Minnesota River bottoms near Shakopee, Scott County; 75—100 nest holes, some containing eggs, others young. All burrows had nests. June 29—many young seen; July 13—completely deserted; Janssen. June-July—St. Mary's College, Winona, Winona County; colony of 20 pairs; Bro. Theoore. **July 8**—Crosby Lake area, Ramsey County; 1 young in juvenile plumage; Thurston.

ROUGH-WINGED SWALLOW **May 23** Purgatory Creek, Hennepin County; nest in borrow containing 2 eggs; 3 eggs on May 24, and 4 eggs on May 31; still incubating June 9; 1 young June 13; Jassen. **May 27**—Bottom Road along Minnesota River, Nicollet County; nest with 1 egg; Hanlon. **June 6**—Pickwick Valley, Winona County 3 nesting pairs; June 18—feeding 12 young; Bro. Theodore. **July 22**—St. Mary's College, Winona, Winona County; 3 young being fed out of nest; Bro. Theodore.

BARN SWALLOW **May 24**—Carson's Bay, Lake Minnetonka, Hennepin County; colony; 1 nest—2 eggs; 1

nest—3 eggs; 2 nests—4 eggs; 1 nest—5 eggs; Pratt. **June 4**— Crosby Lake area, Ramsey County; 4 young; Thurston. **July 24**—St. Mary's College, Winona, Winona County; 4 young being fed in nest; Bro. Theodore. **August 3**—Norris Camp, Roosevelt, Roseau County; female on nest; 3 eggs still in nest Aug. 9; John Hale.

CLIFF SWALLOW **April 26**—Palo, St. Louis County; 12 pairs building on barn; Lakela & Elwell. **May 4**—Farm on Highway No. 73, near Floodwood, St. Louis County; 116 nests under eaves of barn; Lakela & Elwell. **July 18**—Whitewater State Park; Winona County; colony of about 100 pairs under bridge and on cliffs; Bro. Theodore. **July 27**—Jean Duluth, Road, Duluth, St. Louis County; 45 or 46 nests, all occupied except 2; Hofslund, Bronoel & Hann.

PURPLE MARTIN **June-July**—St. Mary's College, Winona, Winona County; 2 martin houses, 2 pairs, 60—80 young Bro. Theodore.

BLUE JAY **May 17**—Frontenac, Goodhue County; 4 eggs being incubated; Eastman. **June-July**— St. Mary's College, Winona, Winona County; 3 nestings—2 with 4 young, 1 with 3 young; Bro. Theodore.

CROW **June 3**—St. Mary's ,College, Winona, Winona County; 3 young; Bro. Theodore.

BLACK-CAPPED CHICKADEE **May 14**—Purgatory Creek, Hennepin County; incubating 5 eggs; May 20, hatched; June 9, birds had left nest; Janssen. **May 25**—Cottagewood, Lake Minnetonka, Hennepin County; adults feeding young; June 8, young had left nest; Pratt. **May 25**—Fort Snelling, Hennepin County; Thurston. **June-July**—St. Mary's College, Winona, Winona County; 3 nests—1 feeding 5 young; 1 feeding 4 young; 1 feeding 6 young; Bro. Theodore.

WHITE-BREASTED NUTHATCH **April 15**—Bass Pond, Hennepin County; nest; Thurston.

BROWN CREEPER **May 28**—Palmer's Slough, Hennepin County; 6 young about 3 days old; Jarosz.

HOUSE WREN **June 1**—St. Croix State Park, Pine County; building nest; Mpls. Bird Club. **June 19**—Minneapolis, Hennepin County; parents feeding young Janssen. **June 20**—Minikahda Golf Course, Hennepin County; 3 young in house; Janssen. **July 4**—Tofte, Cook County; parents feeding young; Eastman **July 9**—Minikahda Golf Course, Hennepin County; incubating; Janssen. **July 15**—St. Mary's College, Winona Winona County; 2 pairs feeding 4 young each, out of nest; Bro. Theodore. **July 22**—St. Mary's College, Winona, Winona County; 4 eggs Bro. Theodore. **July 31**—St. Mary's College, Winona, Winona County; 4 young out of nest; Bro. Theodore. **1952 season**—Jean Duluth, Howard Gneisen, & Rice Lake Roads, Duluth, St. Louis County; 3 nests—3 eggs; 2 nests—4 eggs; 3 nests—6 eggs; 2 nests—7 eggs Bronoel.

LONG-BILLED MARSH WREN **June 18**—Pickwick Valley, Winona County; 2 or more young out of nest; Bro. Theodore.

SHORT-BILLED MARSH WREN **June 25**—Nortondale Tract, Duluth, St. Louis County; 3 eggs; Schinske. **July 23**—St. Mary's College, Winona, Winona County; adult feeding one or more young out of nest; Bro. Theodore.

CATBIRD **May 27**—Lake Nokomis, Minneapolis, Hennepin County; Janssen. **May 31**—Shakopee, Scott County; 1 egg; 4 eggs on June 9; Janssen. **May 31**—St. Croix State Park, Pine County; parent on nest; Minneapolis Bird Club. **June 1**—Purgatory Creek, Minneapolis, Hennepin County; 4 eggs; 5 eggs on June 9; nest blown down June 13; Janssen. **June 4**—Ramsey

County; 4 eggs; Thurston. **June 7**—Bass Pond, Hennepin County; 1 egg; nest empty June 29; Eastman. **June 7**—Harbor Island, Duluth, St. Louis County; 3eggs; Duluth Bird Club. **June 21**—Nortondale Tract, Duluth, St. Louis County; 3 eggs; 2 young on July 1 Hofslund. **June 22**—Bass Pond, Hennepin County; 1 egg; nest empty, June 29; Eastman. **July 22**—St. Mary's College, Winona, Winona County; 4 eggs; 4 young on July 25; Bro. Theodore.

BROWN THRASHER **May 13**—Revere, Redwood County; building nest; Renfrew. **May 25**—McMenemy swamp, Ramsey County; 4 eggs; Thurston. **June 7**—Harbor Island, Duluth, St. Louis County; 5 nests—1 with 4 eggs, 1 with 6 eggs, 1 with 5 eggs, 1 with 1 egg; Duluth Bird Club. **June 18**—Minikahda Golf Course, Minneapolis, Hennepin County; parent feeding 2 young barely able to fly; Janssen.

ROBIN **April 29**—Lake of the Isles, Minneapolis. Hennepin County; 3 eggs; on May 11—2 eggs, 2 young; on May 13 4 young; on May 27—4 eggs in were destroyed; May 27—4 eggs in same nest; on June 7—3 newly hatched young and 1 egg; June 9—4 young; on June 11—only one young, which left the nest on June 19; Eastman. **May 1**—Coon Rapids, Anoka County; 4 eggs; Pieper and Futcher. **May 4**—Edina, Hennepin County; female incubating; young left nest 5-23; Janssen. **May 14**—North Mankota, Nicollet County; 4 eggs; Hanlon. **May 18**—QSWRC, Basswood Lake, Lake County; 2 nests, one with 4 young and one with 4 eggs; Ahlgren & Lakela. **May 31**—Edina, Hennepin County; female incubating; Janssen. **June 3**—Nortondale Tract, Duluth, St. Louis County; 3 young; Hofslund. **June 13**—Edina, Hennepin County; 2 nests 50 yards apart; Janssen. **June 14**—Edina, Hennepin County; female incubating; Jansen. **June & July**—St. Mary's College, Winona, Winona County; 3 nests—parent feeding 3 young, 2 with parent feeding 4 young; Bro. Theodore. **July 12**—Lake Alexander, Morrison County; 3 eggs; three young on 7-26; nest empty on 8-2; Lehrke. **July 25**—Minikahda Golf Course, Minneapolis, Hennepin County; nest with young; Janssen.

WOOD THRUSH **July**—St. Mary's College, Winona, Winona County; 3 nests—2 with parents feeding 4 young, and 1 feeding three young; Bro. Theodore.

OLIVE-BACKED THRUSH **June 20**—Breezy Point, Big Pelican Lake, Crow Wing County; 3 eggs, 2 cowbird eggs; William Hale.

VEERY **June 12**—Nortondale Tract, Duluth, St. Louis County; 4 eggs; Hofslund. **June 17**— Namakan Lake, St. Louis County; 4 eggs; 4 young on 6-19; Lakela and Elwell.

BLUEBIRD **May 21**—Purgatory Creek, Hennepin County; 4 young ready to leave nest; Janssen. **May 22**—Arnold Road, Duluth, St. Louis County; 3 eggs; later 5 young; Bronoel. **May 25**—Arnold Road, Duluth, St. Louis County; 3 eggs; later 5 young; laid 2 clutch of 3 eggs; Bronoel. **May 25**—Johnsonville, Anoka County; adults feeding young; Pratt. **May 27**—Deephaven, Lake Minnetonka, Hennepin County; parents feeding young; Pratt. **May 31**—St. Croix State Park, Pine County; 4 young; Minneapolis Bird Club. **June 8**—North of Cannon River Bridge, Highway No. 61; nest in bank swallow hole; Eastman. **June 14**—St. Mary's College, Winona, Winona County; 4 young; 7-5—4 eggs, second nesting; 7-21—4 young; Bro. Theodore **June 23**—Purgatory Creek, Hennepin County; second nesting of May 21st pair in same box; 6 eggs; Janssen. **June 28**—Bunker Lake; parents and 3 full-grown young; Eastman. **July 13**—Purgatory Creek, Hennepin County;

nest in newspaper box; 4 young; Janssen.

BLUE-GRAY GNATCATCHER **June 8**—Cannon Falls, Goodhue County; parents feeding young; Eastman.

CEDAR WAXWING **June 12**—Duluth, St. Louis County; nest completed, but birds driven off by robins; nest never used; Hofslund. **July 4**— Tofte, Cook County; parents feeding 4 fullgrown young; Eastman. **July 9**—Nortondale Tract, Duluth, St. Louis County; 4 eggs; nest torn out by 8/1; Hofslund. **July 10**—Minneapolis, Hennepin County; 2 adults gathering nesting material; 7/12—nest completed; 8/6 parent feeding 4 young Janssen. **July 17**—St. Mary's College, Winona, Winona County;2 nests—parents feeding 3 young in one and 4 in the other; Bro. Theodore. **July 27**—Duluth, St. Louis County; 5 young, nearly ready to leave nest; Hofslund. **July 31**— Nortondale Tract, Duluth, St. Louis County; 3 eggs; Hofslund. **August 4**—Fairview Farm, Winona, County; parent feeding 4 young; Bro. Theodore.

MIGRANT SHIKE **April 14**—Fort Snelling Cemetery, Hennepin County; building nest; Renfrew. **April 27**— Fort Snelling Cemetery, Hennepin County; 3 eggs; Futcher & Pieper. **April 29**—Palmer's Slough, Hennepin County; 6 eggs; May 15—3 young May 17—7 young; Jarosz. **June 3**—Fort Snelling Cemetery, Hennepin County; 4 young out of nest; Thurston. **June 9** —Purgatory Creek, Hennepin County; 2 young being fed out of nest; Janssen.

STARLING **June 28**—Minikahda Golf Course, Minneapolis, Hennepin County; nesting in martin house; Janssen. **July 2**—Split Rock River, Lake County; young birds in old woodpecker hole; John Hale.

BELL'S VIREO **July 3**—Schulz farm near St. Mary's College, Winona, Winona County; nest with 3 young; pair feeding at least 3 young 100 yards from nest; Bro. Theodore. **July 12**— Stockton Hill near St. Mary's College, Winona, Winona County; pair feeding young out of nest; 7-18—2 young seen out of nest; Bro. Theodore. **July 15**— Stockton Hill near St. Mary's College, Winona, Winona County; parents feeding four young out of nest; Bro. Theodore. **July 19**— Schulz Farm near St. Mary's College, Winona, Winona County; parents feeding young (farther up the valley than birds reported July 3rd); Bro. Theodore. **July 19**—Schulz Farm near St. Mary's College, Winona, Winona County; nest with 1 young ready to fly; adults feeding other young out of nest; Bro. Theodore.

YELLOW-THROATED VIREO **June 1** —St. Croix State Park, Pine County; parents feeding young; Minneapolis Bird Club.

RED-EYED VIREO **June 8**—Picnic Grounds, Highway No. 19 north of Cannon Falls, Goodhue County; parent on nest; Eastman. **July 19**—St. Mary's College, Winona, Winona County; parents feeding 4 young out of nest; Bro. Theodore. **July 29**—Twig, St. Louis County; 1 egg, 2 recently hatched young; Friedman & Hofslund.

WARBLING VIREO **May 25**— Linwood Lake, Anoka County; female singing on nest; John & Helen Hale. **July**—St. Mary's College, Winona, Winona County; 3 nests, parents feeding 3 or 4 young; Bro. Theodore.

PRONTHONOTARY WARBLER **May 26**—Palmer's Slough, Hennepin County; half-finished nest; 6-23—second nest with 5 young about 3 days old; Jarosz. **June 9** Crosby Lake, Ramsey County; 3 young; Thurston.

BLUE-WINGED WARBLER **June 7-9** —Pickwick Valley, Winona County; 5 pairs feeding young; June 18, 18 young seen; Bro. Theodore. **July 3**— Schulz Farm, St. Mary's College,

Winona County; pair feeding young out of nest; Bro. Theodore. **July 19**—Fairview Farm near St. Mary's College, Winona, Winona County; 2 young; possibly four, being fed; Bro. Theodore.

YELLOW WARBLER **May 25**—McMenemy Swamp, Ramsey County; 4 eggs; Thurston. **June 7**—Harbor Island, Duluth, St. Louis County; 2 eggs; Duluth Bird Club. **June 7**—Harbor Island , Duluth, St. Louis County; 5 eggs; Duluth Bird Club. **June 8**—Cannon River bottom lands, Goodhue County; 4 eggs; Eastman. **June 15**—Lake Alexander, Morrison County; 4 young; Lehrke. **July 23**—St. Mary's College, Winona ,Winona County; pair feeding 4 young out of nest; Bro. Theodore.

MYRTLE WARBLER **June 17**—Namakan Narrows, St. Louis County; 4 young, out of nest; Lakela & Elwell. BLACK-THROATED GREEN WARBLER **July 4**—Tofte, St. Louis County; parents carrying food to nest; Eastman.

CERULEAN WARBLER **May 27**—Minnetonka Township; Hennepin County; building nest; incubating on 6/1 to 6/9; nest adandoned 6/11; Herz & Tryon. **June 10**—River Bottom near La Cresent, Houston County; pair building; Bro. Theodore.

CHESTNUT-SIDED WARBLER **July 4**—McFarland Lake, near Canadian border, Cook County; male feeding full-grown young out of nest; Eastman.

OVENBIRD **May 31**—Floodwood Lake, St. Louis County; 5 eggs and 1 cowbird egg; Lakela. **June 22**—Pickwick Valley, Winona County; pair feeding 3 young; Bro. Theodore. **July 8**—Fairview Farm, near St. Mary's College, Winona, Winona County; pair feeding 2 young; Bro. Theodore. **July 8**—Fairview Farm, near St. Mary's College, Winona, Winona County; pair feeding 3 young; Bro. Theodore.

CONNECTICUT WARBLER **July 12**—Lester Park, Duluth, St. Louis County; female feeding young; Hofslund.

MOURNING WARBLER **June 30**—Midway Township, St. Louis County; parent carrying food; Lakela. **July 3**—Nortondale Tract, Duluth, St. Louis County; parent feeding young; Hofslund.

NORTHERN YELLOW-THROAT **June 4**—Crosby Lake, Ramsey County; 1 egg; Thurston. **July 1**—Nortondale Tract, Duluth, St. Louis County; 1 young out of nest 2 days; Hofslund. **July 8**—Fairview Farm, near St. Mary's College, Winona County; 3 pairs with 6 young; Bro. Theodore. **July 9**—St. Mary's College Farm, Winona County; 3 young out of nest; Bro. Theodore. **July 9**—Nortondale Tract, Duluth, St. Louis County; 1 young cowbird, 1 dead yellow-throat; Hofslund. **July 16**—Nortondale Tract, Duluth, St. Louis County; 3 eggs; 3 young on July 22; Moog.

CANADA WARBLER **July 4**—McFarland Lake, near Canadian border, Cook County; parents feeding young on ground; Eastman.

AMERICAN REDSTART **May 22-June 11**—Palmer's Slough, Hennepin County; 14 nests, varying numbers of eggs and young; Jarosz. **May 23**—River Bottom, LaCrescent, Houston County; 20 pairs building nests; 7/14—50 young; Bro. Theodore. **June 10**—Pickwick Valley, Winona County; 2 pairs building; 7/16—feeding 7 young out of nest; Bro. Theodore. **June 12**—Nortondale Tract, Duluth, St. Louis County; nest, no eggs; later destroyed; Hofslund. **June 26**—Chester Park, Duluth, St. Louis County; 1 young about 8 days old; Hofslund. **July 3**—Shulz Farm, near St. Mary's College,

Winona County; 4 young out of nest; Bro. Theodore.

BOBOLINK **June 15**—Rice Lake Refuge, McGregor, Aitkin County; 2 females carrying nesting material; Hofslund.

EASTERN MEADOWLARK **May 21**—Nortondale Tract, Duluth, St. Louis County; 4 eggs; 4 young on 6/3; Hofslund. **May 24**—66th & France Ave., Minneapolis, Hennepin County; 3 eggs, 2 cowbirds and 1 meadowlark; Thurston. **June 29**—Lake Riley, Highway #1, ... County; 6 eggs; Renfrew. **June-July**—St. Mary's College, Winona, Winona County; 3 nests-2 feeding 4 young, 1 feeding 3 young; Bro. Theodore.

WEASTERN MEADOWLARK **June 4**—Crosby Lake, Ramsey County; 4 young; Thurston. **June 21**—Bloomington,, Hennepin County; parent feeding 4 young; Eastman. **July**—Lewiston, Winona County; 3 nests-1 feeding 3 young; 2 feeding 4 young; Bro. Theodore.

YELLOW-HEADED BLACKBIRD **June 12**—River bottom near packing plant, Winona, Winona County; 4 young being fed out of nest; Bro. Theodore.

RED-WINGED BLACKBIRD **May 13**—Swan Lake, Nicollet County; 3 eggs; Hanlon. **May 23**—Minnesota Point, Duluth, St. Louis County; 4 eggs; Hofslund. **May 23**—Minnesota Point, Duluth, St. Louis County; 1 egg; Hofslund. May 24—Carson's Bay, Lake Minnetonka, Hennepin County; 9 nests-2 with 4 eggs, 1 with 3 eggs, 1 with 1 egg, 1with 3 eggs and young, 1 with 2 young, and 3 with 4 young; Pratt. **May 24**—66th & France Ave., Minneapolis, Hennepin County; nest with ? eggs; Thurston. **May 30**—Harbor Island, Duluth, St. Louis County; 2 eggs; Duluth Bird Club; **May 30**—Harbor Island, Duluth, St. Louis County; 3 eggs (June 7—2 young;) Duluth Bird Club. **May 30**—Harbor Island, Duluth, St. Louis County; 3 eggs; Hofslund. **June 5**—Fox Farm Road, Duluth, St. Louis County; 4 eggs; Hofslund. **June 7**—Harbor Island, Duluth, St. Louis County; 2 eggs; Hofslund. **June 7**—Harbor Island, Duluth, St. Louis County; 3 nests—1 with 1 egg, 1 with 2 young & 2 eggs, and 1 with 3 eggs, 1 cowbird egg; Duluth Bird Club. **June 7**—Harbor Island, Duluth, St. Louis County; 1 egg, 3 young; Duluth Bird Club. **June 8**—Cannon River bottomlands, Goodhue County; 4 eggs; Eastman. **June 20**—Pickwick Valley, Winona, Winona County; 3 nests—parents feeding 4 young in 2, and 3 young in another; Bro. Theodore. **June—July**—St. Mary's College, Winona, Winona County; 3 nests—parents feeding 4 young in 2, and 3 young in another; Bro. Theodore.

ORCHARD ORIOLE **July 15**—Fairview Farm, Winona County; parent feeding 4 young out of nest; Bro. Theodore.

BALTIMORE ORIOLE **May 25**—Linwood Lake, Anoka County; males quarreling over territory; Helen Hale. **May 28**—Bottom Road along Minnesota River, Nicollet County; building nest; Hanlon. **June 7**—Bass Pond, Hennepin County; feeding young; birds gone on June 22; Eastman. **June 8**—Cannon Falls, Goodhue County; parent feeding young; Eastman. **June 27**—Minikahda Golf Course, Minneapolis, Hennepin County; female and 2 young just out of nest; Janssen. **July 5**—Schulz Farm, Winona County; parent feeding 4 young out of nest; Bro. Theodore. **July 12-13**—Edina, Hennepin County; several young seen without adults; Janssen. **July 17**—St. Mary's College, Winona, Winona County; parent feeding 4 young out of nest; Bro. Theodore.

BREWER'S BLACKBIRD **May 20**—Minnesota Point, Duluth, St. Louis

County; 5 eggs; Hofslund. **May 23**—Minnesota Point, Duluth, St. Louis County; 3 eggs; Hofslund. **May 26**—Palmer's Slough, Hennepin County; 2 nests—2 eggs in one and 4 in the other; Jarosz. **June 3**—Fort Snelling National Cemetery, Hennepin County; many nests, most of them empty, but a few with young; Thurston. **June 4**—Palmer's Slough, Hennepin County; 2 nests, 5 eggs each; Jarosz. **June 10**—Sucker River, Highway #61 St. Louis County; 4 eggs; Lakela. **June 16**—Minikahda Golf Course, Hennepin County; several young being fed; Janssen. **June 27**—Minikahda Gouf Sourse, Hennepin County; 4 young in nest; Janssen.

BRONZED GRACKLE **April 17**—Lake **27**—Minikahda Golf Course, Hennepin County; nest nearly built; nearly full grown young in nest June 7; Eastman. **May 13**—Revere, Redwood County; 4 nests, 3 with 5 eggs each, 1 with 4 eggs and 1 young being hatched; Renfrew. **May 14**—North Mankato, Nicollet County; 4 eggs; Hanlon. **May 27**—Carson's Bay, Lake Minnetonka, Hennepin County; 3 nests—adult feeding several young in one, 3 young in another, and adults bringing food to a third nest; Pratt.

SCARLET TANAGER **July 21**—Fairview Farm near St. Mary's College, Winona County; 2 pairs feeding out of nest; 1 pair with 4 young and 1 with 3 young; Bro. Theodore.

CARDINAL **May 31**—Minnesota River Bottoms near Shakopee, Scott County; 3 eggs being incubated; nest abandoned and eggs cold on June 13; Janssen. **July 17**—St. Mary's College, Winona, Winona County; 3 young out of nest; Bro. Theodore.

ROSE-BRESTED GROSBEAK **May 31**—Purgatory Creek, Hennepin County; incubating; female feeding 1 young on June 9; nest destroyed and birds gone June 13; Janssen. **June 6**—Pickwick Valley, Winona County; 3 young; Bro. Theodore. **June 10**—Pickwick Valley, Winona County; 4 young; Bro. Theodore. **July 3**—Schulz Farm near St. Mary's College, Winona County; 4 young out of nest being fed; Bro. Theodore. **July 21**—St. Mary's College, Winona County; 2 pairs each feeding 4 young out of nest; Bro. Theodore.

INDIGO BUNTING **July 17**—Fairview Farm, Winona County; 2 nests—1 with 3 young, 1 with 2 young and 1 cowbird; Bro. Theodore. **July 19**—Schulz Farm, Winona County; 4 young; Bro. Theodore.

DICKCISSEL **July 13—Garvin Heights** Winona County; 3 pairs feeding 12 young out of nest; Bro. Theodore.

GOLDFINCH **July 14**—Nortondale Tract, Duluth, St. Louis County; 5 eggs; Hofslund. **July 15—Sept. 25**—Ramsey County; 30 nests, 80% successful; Bro. Theodore. **July 16**—Nortondale Tract, Duluth, St. Louis County; 6 eggs; Hofslund. **August 3**—Nortondale Tract, Duluth, St. Louis County; female on nest; Hofslund. **August 4**—St. Mary's College, Winona, Winona County; 3 nests—1 with 6 eggs, 1 with 4 eggs, and 1 with 5 eggs; Bro. Theodore. **August 5**—St. Mary's College, Winona, Winona County; 2 nests, 1 destroyed, 1 with 5 eggs; Bro. Theodore. **August 8**—St. Mary's College, Winona County; 2 nests, 4 eggs each; Bro. Theodore. **August 9**—St. Mary's College, Winona, Winona County; 2 nests with 4 eggs each; Bro. Theodore. **August 10**—St. Mary's College, Winona County; 1 nest with 6 eggs; Bro. Theodore. **August 11**— St. Mary's College, Winona County; 3 nests, 2 with 5 eggs each, 1 with 4 eggs; Bro. Theodore **August 12**— St. Mary's College, Winona, Winona County; 5 young; Bro. Theodore. **Sept. 1**—Bush Lake, Hennepin County; 4 eggs; 2 newly hatched young and 2 eggs on September 7; Janssen.

TOWHEE **July 15**—Fairview Farm, Winona County; feeding 3 young; Bro. Theodore.

SAVANNAH SPARROW **July 9**—Nortondale Tract, Duluth, St. Louis County; 4 young recently hatched; Hofslund. **July 14**—Nortondale Tract, Duluth, St. Louis County; 4 eggs; Hofslund.

GRASSHOPPER SPARROW **August 7**— St. Mary's College, Winona, Winona County; feeding 4 young out of nest; Bro. Theodore.

HENSLOW'S SPARROW **July 15**—Stockton Hill near St. Mary's College, Winona County; 2 or more young out of nest; Bro. Theodore.

VESPER SPARROW **June 20**—Pickwick Valley, Winona County; pair feeding 4 young; Bro. Theodore. **June 29**—Sand Dune State Forest, Sherburne County; 4 eggs; Pieper & Futcher. **No Date**—Schulz Farm, Winona County; 3 young out of nest; Bro. Theodore. **No Date**—Fairview Farm, Winona County; 1 young or more, out of nest; Bro. Theodore.

LARK SPARROW **June 23**—Purgatory Creek, Hennepin County; 2 young being fed; also another pair feeding 3 nearly full grown young; Janssen. **July 3**—Schulz Farm near St. Mary's College, Winona County; 3 young out of nest; **July 13**—Garvin Height's, Winona, Winona County; 4 young out of nest; Bro. Theodore.

CHIPPING SPARROW **June 28**—Lake Alexander, Morrison County; 2 eggs, 1 cowbird egg; July 14—2 young; Lehrke. **July 4**—Tofte, Lake County; full grown young off nest; Eastman. **July 13**—Shakopee, Scott County; young just left the nest; Janssen. **July** St. Mary's College, Winona, Winona County; 4 nests—1 with 4 young out of nest, 1 feeding 3 young, 1 feeding 1 young & 1 cowbird, 1 feeding 4 young; Bro. Theodore.

CLAY-COLORED SPARROW **June 3**—Nortondale Tract, Duluth, St. Louis County; 4 eggs; nest empty on June 9; Hofslund. **June 9**—Nortondale Tract, Duluth, St. Louis County; 4 eggs; Hofslund. **June 21**—Nortondale Tract, Duluth, St. Louis County; 4 eggs; 4 young on June 25; Hofslund. **July 23**—St. Louis County; 4 young; Galati.

FIELD SPARROW **May 24**—Minnesota River Bottoms near Shakopee, Scott County; 5 eggs being incubated; May 31—only 2 eggs, cold; Janssen. County; 4 nests—1 feeding 3 young, 1 feeding 4 young out of nest, 1 feeding 4 young, 1 feeding 2 young out of nest; Bro. Theodore. **July 19**—Schulz Farm, Winona County; 4 young out of nest; Bro. Theodore.

SONG SPARROW **May 20**—Minnesota Point, Duluth, St. Louis County; 5 eggs; Hofslund. **May 30**—Harbor Island, Duluth, St. Louis County; 2 eggs being incubated; Hofslund. **May 30**—Harbor Island, Duluth, St. Louis County; 1 egg, 2 young; Hofslund. **May 30**—Harbor Island, Duluth, St. Louis County; 5 eggs; 5 young on June 7; Hofslund. **June 3**—Nortondale Tract, Duluth, St. Louis County; 4 young; Hofslund. **June 7**—Harbor Island, Duluth, St. Louis County; 6 eggs; Hofslund. **July 1**—St. Marys College, Wionna, Winona County; 2 nests—1 feeding 4 young, 1 feeding 3 young; Bro. Theodore **July 4**—McFarland Lake, near Canadian Border, Cook County; full grown young being fed; Eastman. **July 9**—Nortondale Tract, Duluth, St. Louis County; 1 egg, female on nest; Hofslund.

Minneapolis Bird Club

The 1952 Christmas Count

by

Pershing B. Hofslund

If we measure our success by the number of birds seen and the number of species counted, the 1952 Christmas census was one of the most successful that the Minnesota Ornithological Union has ever held. A comparsion with some of the counts made in the last ten years will illustrate this measure of success.

1942	2046	44
1943	4557	59
	(This count was over two week period)	
1944	4668	52
1945	3227	47
1946	3549	45
1947	4838	53
1948	5100	58
1949	4319	50
1950	4780	41
1951	5963	51
1952	7788	54

The winter has been a relatively mild one, and this, at least in part, probably accounts for the relatively high count. Sixty-six observers took part in this year census.

Duluth Bird Club (Fond du Lac to Gooseberry River along St. Louis River and Lake Superior including Minnesota Point; town suburbs 20%, deciduous city parks and highways 70%, sand dunes 10%. Dec. 20, 8:00 a.m. to 5:00 p.m. Partly cloudy; temp. 30 to 35°; wind N.E., 5-15 m.p.h.; snow cover scantly, exposed areas almost bare, all fresh water frozen except Lake Superior. 18 observers in 10 parties. Total party-hours, 46½ (20 on foot, 26½ by car), total party-miles, 277 (29 by foot.

Participants: Hulda Adams; Joseph Antoni; Evelyn Boeder; John Boeder. J. K. Bronoel; Margaret Brown; Robert Cohen; Sam Cox; Mary El-Well; O. A. Finseth; Mary Fulton; P. B. Hofslund; Olga Lakela; Evelyn Putnam; Harvey Putnam; Mrs. Arthur Roberts; Joan Shoberg; Mrs. Lee Taylor.

Minneapolis Bird Club Two counts. #1. (Theodore Wirth Park and Golf Course and adjacent area 1 mile to the west; city park and golf course 50%, town suburbs 30%, open upland 15%, lakes, marshes and creeks 5%). Dec. 20; 9:30 a.m. to 4:30 p.m. Overcast, snow furries in a.m.; temp. 18° to 25°; wind W, 5-12 m.p.h.; ground covered with 5 inches of soft snow, including fresh fall of 1 inch; Bassett's Creek open in several places. Five observers in 2 parties. Total party-hours, 23 (17½ on foot, 5½ by car), total party-miles, 30 (20 on foot, 10 by car).

Participants: Jeremy Berman; Roland Cole; John Futcher; Burton Guttman; Ronald Huber.

#2. (7½-mile radius from Camden Park to Anoka on both sides of the Mississippi River; open farmland 60%, town suburbs 20%, deciduous river banks and valleys 2%, marshes and sloughs 2%, sand dunes 1%). Dec. 28; 8 a.m. to 4:30 p.m. Clear; temp 8° to 25°; wind SW, 10 m.p.h.; ground covered with 5 inches of soft snow; practically all creeks in area had some open water, Mississippi River open in spots below Coon Creek Dam. Twenty-four observers in 8 parties. Total party-hours, 60 (20 on foot, 40 by car), total party miles, 212½ (27 1/2 on foot, 185 by car).

Participants: Harry Anderson; Lewis Barrett; Jeremy Berman; Francis Clark; Roland Cole; George Fisher; John Futcher; Bernard Guttman; Mr. and Mrs. Edward Harms Elizabeth Jerabek; Henry Jerabek; Alfreda Johnson; Mr. and Mrs. Boyd Lien; Mr. and Mrs. George Ludcke; William Nelson; William Pieper; George Rickert; Vera Sparkes; Eva Vinton; Ted Warren.

Minnesota Bird Club Three counts. #1. Hastings (Dokota Co.,), Minn. (Mississippi River bottomlands; open fields 50%, decidous woods 50%, a little open water). Dec. 21; 9 a.m. to 4 p.m. Fog and overcast; about 21°; no wind; about 4 inches of snow. Two observers in 1 party. Total party hours, 7.

Participants. H. J. Paul; D. R. Struthers.

#2 Frontenac (Goodhue Co.), Minn. (Mississippi River bottomlands; Lake Pepin, frozen; mostly deciduous woods). Dec. 21. 9:00 a.m. to 2:00 p.m. Heavy overcast; temp. 21° wind 3 m.p.h.; 4 inches of snow. Two observers in one party. Total party hours 5. Participants: L. L. Barrett; John Pratt.

#3. Cedar Creek Forest (Anoka Co.) Minn. (about 4 square miles of Cedar Creek Game Refuge Area; open fields 20%, deciduous woods 25%, tamarack swamp-cedar bog 35%, white pine woods 20%). Dec 21; 8:45 a.m. to 3:30 p.m. Cloudy; temp 25°; no wind; 4 inches of snow. Twelve observers in 6 parties. Total party hours, 50 (on foot); total party miles, 25.

Participants:

Mrs. R. H. Anderson; Mrs. A. D. Corniea; J. G. Erickson; O. T. Kalin; Mrs. D. Lawrence; J. Lundgren; C. McGee; W. Parrish; I. Swanson; J. Thompson; A. C. Wangaard.

Winona Bird Club A radius of 5 miles of the city limits of Winona. (Gilmore valley road to county road 6 to State Highway 43. Woodlawn Cemetery. Prairie Island Dike to Minnesota City to Stockton on State Road 6. Stockton to Winona on U.S. 14. Winona to Homer on U.S. 61. Homer south on County Road 37 to State Aid Road 4 m. north to Winona Dec. 27; 8:00 a.m. to 4:45 p.m. Fair; temp. 8° to 16°. Miles by car 65 Miles on foot 6. Three observers in 1 party.

Participants: Tim Knopp; Allen Rick; Brother I. Vincent, F.S.C.

St. Cloud Bird Club College of St. Benedict and St. John University Grounds. St. Cloud along Mississippi River to Sartell and south of St. Cloud to Sportman Island. Dec. 26 and 28. Temp. 22°; wind NW. About an

Brown Creeper		6	4	1		1			12
American Robin	4	2							6
Golden-crowned Kinglet		13	57	21		3	18	30	142
Bohemian Waxwing	27						40		67
Cedar Waxwing							1		1
Northern Shrike	2								2
Starling	266	11	106	157	15		4	9	568
English Sparrow	421	129	350	500	125			229	1754
Red-winged Blackbird								24	24
Rusty Blackbird				1					1
Cardinal		9	1	47	2		2	9	70
Evening Grosbeak	356								356
Purple Finch	8	1							9
Pine Grosbeak	175								175
Red Poll	121	17	253	50		20	47		508
Pine Siskin	71	3					5		79
Goldfinch		5	114			5	10	62	196
Slate-colored Junco		46	61	2		15	22	34	180
Tree Sparrow			62	2	1			320	385
Song Sparrow				2					2
Snow Bunting			7	25					32
Total Numbers Observed	3052	492	1560	984	238	125	286	1049	7788
Total Species Observed	31	22	25	25	11	14	20	25	54

inch of snow.
Participants:

Mr. and Mrs. George Lehrke; Mrs. Rudolph Misho; Cecyl Bemis; Agnes Brohaugh; Monica Misho.

In addition to the reports on census days, Brother I. Vincent adds these interesting counts: Dec. 13; Whitewater valley (1 kingfisher, 1 wood duck, 2 black ducks. 50 mallards, 1 bald eagle, 9 cardinals 2 ruffed grouse). Dec. 20; Pickwick Valley (1 bald eagle, 2 tufted titmice, 1 fox sparrow, 3 red-winged blackbirds, 3 red-bellied woodpeckers). Dec. 20; Winona (5 bald eagle in one group). Dec. 21; Winona (1 robin, 19 cedar waxwings). Dec. 24; Gilmore Valley (2 redpolls, 1 flicker, 20 goldfinches, 1 robin, 1 white-breasted nuthatch, 2 blue jays 2 golden-crowned kinglets, 6 slate-colored juncos, 1 downy woodredpolls, 8 goldfinches, 2 downy woodpecker). Dec. 31; Gilmore Valley (12 6 slate-colored juncos, 1 downy woodpeckers, 3 white-breasted nuthatches, 2 red-bellied woodpeckers, 1 winter wren). Jan. 10; Prairie Island (16 Wilson's snipe, 1 female marsh hawk).

University of Minnesota, Duluth.

Species	Duluth	Mpls.	Mpls.	Minn. Minn.		St. Cloud Minn.		Winona	Total
Great Blue Heron			1						1
Common Mallards	4	17	17	9			13	200	260
Black Duck				1				6	7
American Pintail							12	1	13
Scaup Ducks	1							1	2
American Golden-eye	530		175	11			26	16	758
Bufflehead	12						43		55
American Merganser	5		21	16			22		64
Red-tailed Hawk				2				3	5
Bald Eagle	1			1					2
Ruffed Grouse	16		1			12			29
Ring-necked Pheasant	2	78	133	1				2	216
American Coot		1						6	7
Wilson's Snipe								1	1
Glaucous Gull	3								3
Herring Gull	875								875
Ring-billed Gull	3								3
Great Horned Owl	1		1			1			3
Barred Owl (?)								1	1
Belted Kingfisher				1				1	2
Flicker	1							1	2
Pileated Woodpecker	1	1			2				4
Red-bellied Woodpecker			1		1			12	14
Hairy Woodpecker	6	9	2	8	2	1	1		29
Downy Woodpecker	43	17	10	1	26	3		6	106
Horned Lark	1								1
Blue Jay	22	18	20	7	14	8	1	11	101
American Common Raven	5								5
Crow		18	20	1		1			40
Black-capped Chickadee	49	64	118	78	16	36	6	45	412
Tufted Titmouse		1	1						2
White-breasted Nuthatch		29	24	39	34	17	12	19	174
Red-breasted Nuthatch	20					2	1		23

M. O. U. Cooperative Bird Studies-1953

Many MOU members, who have advanced somewhat beyond the beginning stages in field identification of birds, have often inquired about types of observations they could make which would be a real contribution to ornithological knowledge. Last year these observers were urged to report on heron colonies throughout Minnesota, but only a few responded.

The undersigned committee wishes to suggest for these observers a number of 1953 field problems, and it is hoped that a better response will be had this year. It is proposed that the field data secured be sent to:

MOU Survey Committee
Minnesota Museum of Natural History
University of Minnesota
Minneapolis 14, Minnesota

The reports will then be assembled and reported to the M.O.U. membership in the FLICKER and perhaps also as a paper presented at the MOU annual meeting.

The following species, of special interest for varying reasons, were chosen with the idea, that, no matter where the observer lives in Minnesota, he will have at least one problem species that may occur in his area.

Recorded observations on any of the species mentioned should include (1) the observer, (2) date, (3) location giving the distance and direction from the nearest town that appears on maps, (4) number of individuals, (5) activities of the birds, especially if these relate to nesting, and (6) type of habitat.

The magpie is becoming a more common winter resident in northwestern Minnesota, and there is now an authenticated nesting record for Eland Township, Beltrami County. Any additional observations on this species will be important, and nesting activities should be carefully recorded and written up for the "Notes of Interest" section of the FLICKER.

Numerous late spring and summer observations of prairie falcons in western Minnesota arouse suspicions that this bird may nest in the state. All observations of this species are of interest, but particular note should be made of birds seen at seasons that would suggest nesting. These should be followed up with the possibility of the observer locating the first nest of this species in Minnesota.

All central and northern Minnesota observers are urged to be on the lookout for cardinals. Verify any reports from your area since this southern bird is known to be slowly but steadily extending its range northward. In order to chart accurately this progress, it is essential that we assemble first a very complete coverage of the present status of the cardinal in Minnesota.

The red-bellied woodpecker, likewise, is a southern bird whose breeding range is extending northward. It has been found nesting as far north as St. Cloud. The same observations as suggested for the cardinal would be pertinent with this species.

Particularly careful observations are requested on the status of the eastern and the western meadlowlarks in your areas. It is possible that these two species nest in recognizably different habitats. If both species occur in your area, make an effort to outline their nesting territories and determine whether the territories of the western

meadowlark occupy areas that consistently differ in some way from those occupied by the eastern meadowlark. These two species are being studied also by the Wisconsin Society for Ornithology, and in order that our data may be comparable, we are here reprinting the questions asked in their publication, THE PASSENGER PIGEON.

1. Which species appears to be the most abundant as a breeder? Has this always been the case throughout the years? Has there ever been a time when either species did not breed in your area?

2. When did you last observe fall migrants of each species this year? Were they singles or in flocks? Were they singing?

3. Have you ever observed migrants of both species in the same flock? Have you ever heard one individual sing the songs of both species?

4. Have you ever known the two species to have neighboring breeding territories? Describe territories preferred by both species.

5. Do meadowlarks in your region have more than one brood?

A second group of observations, which MOU members can make, relate to migration movements of certain species, and will tie in with similar observations by our Wisconsin neighbors. This data will be correlated with weather conditions in a two-state study of the weather's influence on bird migration. Please report the following data:

1. White-throated Sparrow.

   a) Date first birds are seen; b) date of any marked changes in population, either increases or decreases; c) if possible, give total numbers seen on regular trips through the same area; d) banders, please report sexes separately.

2. Geese.

   a) Number of flocks seen and numbers in each flock; b) species, if recognized; c) direction and approximate height at which birds were flying; d) date, hour, and location of observation.

3. Baltimore and Orchard Orioles.
   a) Date of first arrivals; b) dates of any marked changes of population; c) whether or not it nests in your area with dates on nesting activities; d) Have these become more abundant or less abundant in your area in recent years? This applies particularly to the Orchard Oriole since definite changes seem to be occurring in its abundance recently.

4. Mourning Dove.
   a) Is it present in your area? b) first arrival dates; c) dates of marked increases or decreases in numbers. Actual daily or semi-weekly counts in same area are highly desirable; d) nesting dates; e) evidence of second of third nestings.

W. J. Breckenridge
Harvey L. Gunderson
Dwain W. Warner

A Check-list of Birds from Northeastern Minnesota based on Observations made mostly in the Duluth Area.

by

Olga Lakela

This list was compiled from records of bird observations of a ten-year period, 1937-47. It includes all the species seen in the area by this obserer since 1935. The record of the ivory gull was made in 1948. From time to time the discoveries of the rare and accidental with many other observations have been published in the Flicker. Numerals for dates refer to month, day, and year in that order.

Name	Residence	Selected Dates of Observations First	Last	Nest
Common Loon	S	5-3-37	5-24-41	7-5-40
Red-throated Loon	A	6-15-40	7-8-45	
Eared Grebe	A	4-30-38		
Holboell's Grebe	S	4-12-42	8-14-43	
Horned Grebe	S	4-21-42	5-25-39	
Western Grebe	A	6-2-40		
Pied-billed Grebe	S	4-18-42	5-2-40	
White Pelican	T	11-12-44		
Double-crested Cormorant	S	4-15-45	5-22-41	
Great Blue Heron	S	4-7-46	7-24-37	
American Bittern	S	4-30-44	5-28-47	
Whistling Swan	T	4-7-46	4-16-39	
Canada Goose	S	4-1-45	5-5-40	
Lesser Canada Goose	T	10-1-39		
LesserSnow Goose	T	5-1-41		
Blue Goose	T	5-9-42	6-13-41	
Common Mallard	S	4-16-42	5-25-41	
Gadwall	S	5-9-40		
Baldpate	S	4-22-45	5-9-40	
American Pintail	S	4-29-44		
Green-winged Teal	S	4-22-45	5-3-42	
Blue-winged Teal	S	4-15-45	5-8-37	
Shoveler	S	5-9-40		
Redhead	S	4-25-39	5-6-40	
Ring-necked Duck	S	4-12-45	5-2-40	
Canvas-back	S	4-25-39	5-2-40	
Greater Scaup Duck	T	4-7-46		

Lesser Scaup Duck	S	4-5-42	4-20-47	
American Golden-eye	P	3-24-40		
Buffle-head	T	3-24-40	5-18-39	
Old-squaw	W	2-18-42	3-11-45	
White-winged Scoter	T	4-18-44	5-29-37	
American Scoter	A	4-5-42	5-18-39	
Hooded Merganser	S	3-25-45	5-2-40	
Red-breasted Merganser	S	4-16-42	7-12-42	7-2-45
American Merganser	P	3-8-42	12-30-45	
Turkey Vulture	S	4- -42	5-23-44	
Eastern Goshawk	W	5-24-47		6-3-45
Sharp-shinned Hawk	S	4-5-42	7-8-42	
Cooper's Hawk	S	4-30-44	5-12-40	
Eastern Red-tailed Hawk	S	4-5-42	5-25-41	
Broad-winged Hawk	S	4-12-45	6-24-42	
American Rough-legged Hawk	W	4-12-42	5-23-45	
Golden Eagle	W	5-4-39		
Bald Eagle	S (W)	10-1-43		7-6-40
Marsh Hawk	S	3-29-42	7-1-41	
Osprey	S	4-23-47	6-9-46	
Duck Hawk	S	6-22-47		
Pigeon Hawk	S	8-11-43	9-16-45	
Sparrow Hawk	S	4-12-39	7-12-41	
Spruce Grouse	P			7-2-39
Ruffed Grouse	P	4-14-46		
Greater Prairie Chicken	P	4-27-40	6-5-41	
Sharp-tailed Grouse	P			
European Partridge	P	3-31-41		
Chukar Partridge	P	6-7-42		
Ring-necked Pheasant	P	3-25-40		6-7-38
Virginia Rail	S	6-16-38		6-7-38
Sora	S	4-30-44		
Piping Plover	S	4-23-42		5-21-38
				6-23-38, 4 eggs
				6-23-38, 4 young
Semipalmated Plover	T	5-20-45	6-15-46	
Killdeer	S	3-23-39		5-30-44
American Golden Plover	T	10-3-43		
Black-bellied Plover	T	5-15-42	10-28-43	
Ruddy Turnstone	T	5-15-42	6-16-40	
American Woodcock	S	5-11-40		
Wilson's Snipe	S	4-12-45		
Hudsonian Curlew	T	4-23-47	7-18-37	
Upland Plover	A	10-2-38		
Spotted Sandpiper	S	5-2-42		6-11-38, 4 eggs
Greater Yellow-legs	T	4-29-41	10-22-43	
Lesser Yellow-legs	T	5-6-40		
American Knot	T	5-27-39	6-14-41	
Pectoral Sandpiper	T	6-15-46		

White-rumped Sandpiper	T	5-23-41-44	6-17-42	
Baird's Sandpiper	T	8-5-45	8-27-42	
Least Sandpiper	T	5-5-40	7-18-37	
Red-backed Sandpiper	T	5-18-39	7-18-37	
Long-billed Dowitcher	T	5-22-41-45	6-8-46	
Semipalmated Sandpiper	T	5-21-47	6-9-46	
Stilt Sandpiper	T	7-11-43		
Buff-breasted Sandpiper	T	5-27-39		
Marbled Godwit	T	5-25-46		
Hudsonian Godwit	T	6-6-41		
Sanderling	T	5-15-42	7-18-37	
Avocet	A	5-21-44		
Northern Phalarope	A	8-16-45		
Glaucous Gull	W	4-25-40	11-14-43	
Iceland Gull	W	4-16-39	4-23-45	
Ivory Gull	A	12-27-48		
Herring Gull	P			6-27-42
Ring-billed Gull	T	3-11-46		
Bonaparte's Gull	T	4-23-42	5-30-45	6-9-38
Common Tern	S	5-2-44	6-22-37	
Caspian Tern	T	5-12-39	6-22-37	
Black Tern	S	5-4-39	5-29-37	6-9-38
Mourning Dove	S	4-27-39	7-18-37	
Yellow-billed Cuckoo	A	7-6-37		
Black-billed Cuvkoo	S	5-24-42	6-14-46	
Great Horned Owl	P	3-23-39	4-25-40	
Arctic Horned Owl	R	1-7-39		
Snowy Owl	W	1-8-44	10-4-41	
American Hawk Owl	A	4-23-42	5-2-40	
Barred Owl	P			
Great Grey Owl	W (R)	1-41		
Long-eared Owl	P	11-15-37		
Short-eared Owl	S	7-30-43	9-14-46	
Richardson's Owl	W	3-14-43		
Saw-whet Owl	P	10-17-44		
Whip-poor-will	S	5-19-45		
Nighthawk	S	5-19-39		6-16-40
Chimney Swift	S	5-11-40	6-12-37	
Ruby-throated Hummingbird	S	5-19-39	6-5-41	
Belted Kingfisher	S	4-7-46	5-5-40	
Flicker	S	4-7-40	4-30-44	7-8-42
Pileated Woodpecker	P	3-23-40	12-30-44	
Red-headed Woodpecker	S	4-10-40	5-29-45	
Yellow-bellied Sapsucker	S	4-7-40	5-4-41	
Hairy Woodpecker	P	4-1-39	5-19-45	
Downy Woowpecker	P	5-3-37 (?)	5-21-45	7-11-45
Artic Three-toed Woodpecker	P			
American Three-toed Woodpecker	P	12-30-44		
Eastern Kingbird	S	5-5-40	6-16-44	7-25-45
Arkansas Kingbird	A	5-25-46		

Northern Crested Flycatcher	S	5-20-42	6-18-37
Eastern Phoebe	S	4-13-41	5-20-42 7-30-44
Yellow-billed Flycatcher	S	5-24-42	6-6-40
Least Flycatcher	S	5-9-37	5-25-46 7-29-44
Wood Pewee	S	5-25-41,42	6-13-45
Olive-sided Flycatcher	S	5-23-40	6-22-41
Prairie Horned Lark	S	3-8-42	6-20-37 5-4-38
Northern Horned Lark	T	10-10-43	10-28-43
Tree Swallow	S	4-12-45	5-11-41 7-8-42
Bank Swallow	S	4-19-42	5-24-47 7-7-40
Rough-winged Swallow	S	4-19-42	6-23-41 7-25-42
Barn Swallow	S	4-19-42	5-25-39-46
Cliff Swallow	S	5-19-45	5-30-44 6-15-44
Purple Martin	S	4-24-42	5-11-41
Canada Jay	P	5-26-40	12-25-43
Blue Jay	P	4-7-40	5-19-45 7-26-47
American Magpie	R	10-3-39	
Raven	W	5-22-45	12-25-43
Crow	S (W)	3-2-41	3-14-44 7-4-45
Black-capped Chickadee	P	5-11-37	5-30-40 7-11-45
Hudsonian Chickadee	P	12-25-43	
White-breasted Nuthatch	P	4-28-40	5-19-45
Red-breasted Nuthatch	P	3-14-37	5-30-44 6-12-40
Brown Creeper	S	4-12-40	6-22-41
Eastern House Wren	S	4-27-47	6-20-37 7-16-42
Winter Wren	S	5-19-45	
Bewick's Wren	R	9-8-45	
Prairie Marsh Wren	S	5-26-46	9-8-45
Short-billed Marsh Wren	S	5-5-40	7-29-37 7-7-41
Catbird	S	5-9-37	6-11-41 5-31-39
Brown Trasher	S	4-29-41-47	6-20-41 7-3-42
Robin	S (W)	3-23-42	40-45-all winter 5-18-45
Varied Thrush	A	4-4-41	
Wood Thrush	S	5-21-46	6-16-40
Hermit Thrush	S	4-7-40	5-1-41-42 7-4-41
Olive-backed Thrush	S	7-29-41	7-30-41
Gray-cheeked Thrush	T	5-6-44	5-27-39
Willow Thrush	S	5-3-37	6-9-46 7-8-42
Eastern Bluebird	S	4-14-46	
Mountain Bluebird	R	3-14-16-43	
Golden-crowned Kinglet	S	3-30-45	5-18-39
Ruby-crowned Kinglet	S	4-12-45	6-20-40
American Pipit	T	5-21-47	5-24-42
Bohemian Waxwing	W	4-12-42	
Cedar Waxwing	P	4-26-37	6-6-44 7-25-47
Northern Shrike	W	2-20-44	5-25-39
Migrant Shrike	S	4-19-41	
Starling	P	4-26-37	44-45, thru yr.
Blue-headed Vireo	S	5-19-45	5-25-44

Red-eyed Vireo	S	5-16-40	6-26-46	
Philadelphia Vireo	T	5-19-45		
Warbling Vireo	S	5-15-41	6-22-37	
Black-and-White Warbler	S	4-26-37	6-22-41	6-22-41
Golden-winged Warbler	S	5-18-39	5-19-45	
Tennessee Warbler	S	5-8-42	5-21-40	
Orange-crowned Warbler	T	5-9-42	5-22-41	
Nashville Warbler	S	5-9-42	5-27-39	
Northern Parula Warbler	S	5-30-44	7-21-45	
Yellow Warbler	S	5-6-39	6-24-41	7-13-44
Magnolia Warbler	S	5-9-39	6-22-41	
Cape May Warbler	T	5-7-40	5-27-39	
Black-throated Blue Warbler	S	5-22-45	6-9-46	
Myrtle Warbler	S	4-12-45		
Black-throated Green Warbler	S	5-22-45	6-21-41	
Blackburnian Warbler	S	5-15-42	6-22-41	
Chestnut-sided Warbler	S	5-5-39	6-1-41	
Bay-breasted Warbler	S	5-27-39		
Black-poll Warbler	T	5-21-40	6-1-41	
Pine Warbler	S			
Western Palm Warbler	S	4-15-45	5-27-39	
Oven-bird	S	5-7-44	7-1-41	7-6-40
Grinnell's Water Thrush	S	5-17-46		
Connecticut Warbler	S	5-6-39	5-30-42	
Mourning Warbler	S	5-12-40	7-1-41	7-7-40
Yellow-throat	S	5-5-40	7-1-41	6-11-49
Wilson's Warbler	S	5-17-39	5-29-37	
Canada Warbler	S	5-21-40	5-29-45	
American Redstart	S	5-11-47		
English Sparrow (introduced)	P			
Bobolink	S	5-18-40	6-14-41	7-8-44
Eastern Meadowlark	S	3-20-45	5-9-40	7-14-42
Western Meadowlark	S	4-3-42	4-30-44	
Yellow-headed Blackbird	S	6-1-41	6-5-40	
Red-wing Blackbird	S	3-25-45	4-23-40	7-27-45
Baltimore Oriole	S	5-11-41	5-26-42	
Rusty Blackbird	T	4-1-39		
Brewer's Blackbird	S	4-27-47-39	7-3-37	
Bronzed Grackle	S	4-19-47	5-15-42	5-29-45
Cowbird	S	4-18-42	5-29-37	
Scarlet Tanager	S	5-24-41	6-9-40	
Cardinal	A	1940		
Rose-breasted Grosbeak	S	5-11-41	6-23-37	7-29-44
Indigo Bunting	S	6-26-40		
Evening Grosbeak	P	3-23-39		
Purple Finch	P	3-11-45	5-31-41	5-24-41
Pine Grosbeak	W	4-9-40	11-5-43	
Redpoll	W	4-16-44	10-19-41	
Pine Siskin	P			
Eastern Goldfinch	P	3-17-45	5-29-37	9-3-47

Red Grossbill	P	12-30-45		6-12-48
White-winged Crossbill	P	3-11-45		
Red-eyed Towhee	S	5-27-39	7-1-41	
Savannah Sparrow	S	4-22-42	5-12-44	
Leconte's Sparrow	S	7-30-43		
Vesper Sparrow	S	4-27-47	5-15-45	5-27-40
Slate-colored Junco	S	3-25-45		6-17-48
Tree Sparrow	T	3-25-45		
Chipping Sparrow	S	4-24-42		7-8-45
Clay-colored Sparrow	S	4-29-41	5-26-47	7-8-42
Harris's Sparrow	T	4-22-40		
White-crowned Sparrow	T	5-9-37	5-15-45	
White-throated Sparrow	S	4-9-39	5-4-42	6-9-45
Fox Sparrow	T	1-4-45	5-12-40	
Lincoln's Sparrow	T	5-23-40		
Swamp Sparrow	S	5-3-37	5-24-42	
Song Sparrow	S	3-25-45	4-20-47	5-12-47
Lapland Longspur	W	4-16-41	10-12-41	
Snow Bunting	W	5-5-46	10-9-41	

Key as to residence: S summer; P permanent; W winter visitnat; T transient; R rare; A accidental.

Selected date of observation: First and Last refer the days of the months of the given years, signifying the earliest and the latest record during the ten year period.

University of Minnesota, Duluth Branch.

Drainage and the Bird Watcher

The viewpoint of a certain small group of bird watchers and the viewpoint of an equally small group of sportsmen has occasionally clashed in the past. I refer to the hunter who has no thought for tomorrow; he wants long seasons and big bags now; and to the bird lover who wants no bird killed ever. Both of them are wrong. They should cast out selfish interest and try to acquire an over all viewpoint.

Many hunters and sportsmen's club are now fighting for the life blood of their sport wildfowling and at the same time unbeknown to themselves, are fighting for the bird watcher. They are fighting to save thousands of potholes and marshes in Minnesota and the Dakotas that are threatened with drainage. Thousands have already been drained and thousands more are in danger of drainage. Soon there will be little duck hunting and soon, also, there will be many fewer rails, gallinules, grebes, herons, gulls, terns, yellow-headed blackbirds, marsh wrens, and other nongame marsh nesting species for bird watchers to see and to study.

We know to a degree how much drainage is decreasing duck populations, but what has happened to the other nongame marsh nesting birds is not known. Be sure, however, that every time a marsh disappears the numbers of marsh birds decline. There is no surer way of cutting down a population of birds than to prevent that population from breeding. Hunting is actually a mild check on population, compared with destruction of habitat.

Bird watchers should do what they can to save potholes and marshes from drainage. It is a tough fight with the present high agricultural values and federal subsidizing of certain drainage projects. But, bird watchers can help by voicing their disapproval of those drainage projects that are designated by various state and federal agencies as being of doubtful agricultural value. They can point out, too, that marshes have a monetary value of their own, in that they may produce valuable fur crops, hunting rights, and that they are important in the control of floods and the retention of ground water which is important in the overall picture of precipation.

It may be possible, too, for certain bird clubs to buy and preserve for their own use, certain marshes so that an interesting and beautiful group of birds will not vanish from an area where successive generations of bird watchers would have the opportunity to see and study them. **—Arnold B. Erickson, Excelsior, Minnesota.**

Editors note: This article was originally submitted as a note of interest, but because of its message, and the recent series of articles appearing in **The Minneapolis Sunday Tribune** I have taken the liberty to use it as a lead article. M. O. U. members should be greatly concerned with the problem. **P. B. H.**

Seasonal Report

by

Mary Lupient

Normal temperatures and moderate precipitation characterized the Minnesota weather during the winter season. There were two severe blizzards with temperatures ranging from 34 below zero at International Falls to 5 below in southern Minnesota. Icy conditions in late January and early February made driving and walking hazardous thus hampering observations.

Many bird feeders were maintained at homes and in the parks. Hundreds of birds were seen at times at some of these feeders, which compensated in part for poor traveling conditions. Again this winter over 100 evening grosbeaks fed each day at John Bero's feeders in Duluth. Mrs. William Whiteford who lives near Minneapolis maintains several feeders on her property, and this winter she was rewarded as usual by flocks of chickadees, goldfinches. juncos, purple finches, several cardinals, woodpeckers, white-breasted nuthatches, golden-crowned kinglets and brown creepers. A catbird appeared in December and came to her suet feeder each day until February when it disappeared, probably taken by a predator.

This year individuals of several species of birds were present that rarely remain in Minnesota in winter. A song sparrow and two white-throated sparrows were fed by John Hall near Prescot. Two song sparrows were seen by A. C. Rosenwinkel at the Isaac Walton Bass Ponds, January 9 and two were seen by Minnesota Bird Club members near Red Wing taking the Christmas census in that area. Mrs. P. D. Tryon near Excelsior reported a vesper sparrow in Febraury. Dr. Samuel F. Haines saw several adult and one immature Harris sparrows near Rochester, November 17, a later date than usual. This was probably due to mild weather which no doubt also influenced a golden plover and a black-crowned night heron to linger late near Mankato. This record was by Robert Hanlon on November 23. Mrs. M. E. Herz saw three coots at Christmas Lake, December 9. A long-billed marsh wren lived along Cedar Ave. near Minneapolis in a rushy area where springs kept little rills flowing. This record was made by William Pieper, but he did not see the bird after the last blizzard. Mourning doves, robins, meadowlarks, belted kingfishers and yellow-shafted flickers were present throughout the winter in various sections of the state. There were several records of tufted titmice and in most cases they daily appeared at feeders. The Carolina wren that came again last autumn to the home of Mrs. George Bantle survived the winter. Mrs. E. R. Selnes, Glenwood, Minn. wrote February 10 to state that a Carolina wren appeared at her feeder November 22 and was still there at the time of her writing. It ate suet, peanut butter, pie-dough crumbs and corn bread. She banded the bird. A female cardinal and a red-shafted flicker came to her feeder also. This winter there were several records of winter wrens. Franklin Willis, Dr. Alden Risser and Paul Engel found two feeding at the brushy base of a bluff with a southern exposure, east of Stewartville, John Jarosz checked three along the Mississippi

River near Anoka, Whitney Eastman saw one in the Minneapolis River bottoms near Minneapolis, and Brother J. Pius saw one near St. Paul. A mocking bird came to the home of Mr. and Mrs. John Curtis, St. Paul about December 1, and at date of this writing, February 22, it is still there. It appears to be a strong young bird and occasionally sings. Its hosts keep it well fed, and it keeps warm by perching on the chimney so it has been able to survive the two severe blizzards and the temperatures that once dropped to 19 below zero. A mockingbird was shot October 4, 1952 in Sitkin County by La Rue Wells and the skin was sent to the Minnesota Museum of Natural History. In the vicinity of the Twin Cities there were several reports of Oregon and pink-sided juncos. Because there are so many sub-species and varaitions of plumage it is difficult to say whether these records are authentic. Even the most competent observer could be mistaken when these birds are found outside of their range unless a specimen is taken and examined in the hand by someone qualified to do it. The flocks of red-winged blackbirds that formerly roamed about the state in winter apparently were absent this season. Near St. Paul, A. C. Rosenwinkel reported two individuals, a few bronzed grackles and two rusty blackbirds.

About 100 mallards and a few black-ducks roamed the Minnesota River bottoms from Ft. Snelling to Shakopee. Several hundred American golden-eyes and a few hooded mergansers and American mergansers lived on the Mississippi River in the vicinity of the Twin Cities. Joel Bronoel reported that old squaw ducks were first noted February 7 between Duluth and the Knife River.

Hawks were notably scarce this season. A goshawk lived in the area around Lake Vadnais, St. Paul almost all winter. Four American rough-legged hawks were observed by Dr. W. J. Breckenridge January 25 between Mankato and St. James. A red-tailed hawk was seen at Duluth January 1 by Joel Bronoel and P. B. Hofslund.

Reports of the ring-necked pheasant were not received from all sections of the state, but within a twenty-five miles radius of the Twin Cities they were fairly abundant. They fed in the fields where the earth appeared above the snow and after the last blizzard they fed on the shoulders of the highways where the State Conservation Department had scattered corn. Whenever observed there appeared to be twice as many cocks as hens. A flock of about eight prairie chickens were seen in the heights above Duluth during the second week of December 1952 by P. B. Hofslund.

Mr. Bronoel, Duluth wrote that apparently due to much open water in Lake Superior that the herring gulls remained in large numbers, and that numerous, glaucous gulls were observed, as many as six second-year birds and an adult were seen in one group.

Berries and other foods was plentiful along the North Shore of Lake Superior so pine and evening grosbeaks were abundant there, but to date few have been reported in the southern half of the state. Likewise cedar and Bohemian waxwings were numerous in the north, but few appeared elsewhere.

Great flocks of common redpolls were seen everywhere in the state, and there were two records of hoary redpolls near the Twin Cities. Purple finches were also abundant. They flocked to feeders in large numbers.

Red-breasted nuthatches were not present in the southern part of the state in the numbers of former seasons. The migration and number of snow buntings and Lapland longspurs was normal.

Horned larks arrived in the area around Albert Lea January 31 and the peak of the migration throughout the state occurred the week of February 15.

There seemed to be a paucity of tree sparrows during the season until about the middle of February when they suddenly appeared along the Minnesota bottomlands in large flocks.

No snowy owls were reported. Of interest is a report from J. C. Carlson, assistant Refuge Manager of the Mud Lake National Wildlife Refuge at Holt. He Stated as follows "For the past five or six weeks we have had a population of approximately 75 barred owls on the refuge. This is the first time we have had this many barred owls here and never before in the winter." Date of report, February 9, 1953. Lester T. Magnus, Pittman-Robertson Area Game Manager saw a great grey owl, November 21, 1952 in the Red Lake Game Refuge, Beltrami County.

Robert Hanlon reported that he and Keith Appel, George Palmer and Orwin A. Rustad took a census Christmas week within a twenty mile radius of Grand Marais resulting as follows: mallards-2, golden-eye-315, bufflehead-1, old squaw-500 plus, pigeon hawk-1, ruffed grouse-4, herring gull-1550 plus, pileatde woodpecker-1, hairy woodpecker-2 downy woodpecker-1, Canada jay-2, blue jay-2, crow-3, raven-10, black-capped chickadee-11, red-breasted nuthatch-3, robin-2, Bohemian waxing-1000 plus, starling-48, pine grosbeak-357, redpoll-100, pine siskin-75.

Orwin Rustad sent a report of the Christmas census taken in Rice County. Ring-necked pheasants-5, killdeer-2, barred owl-1, belted kingfisher-1, pileated woodpecker-10, red-bellied woodpecker-1, hairy woodpecker-1, downy woodpecker-10, horned lark-2, blue jay-7, crow-10, black-capped chickadee-10, tufted titmouse-1, white-breasted nuthatch-10, brown creeper-1, golden-crowned kinglet-12, starling-1000, English sparrow-6, rusty blackbird-2, cardinal-7, slate-colored junco-17, pileated woodpecker-1, red-bellied nesota.

The Canadian Lakehead

Edited by

A. E. Allin

WINTER SEASON

The early winter of 1952-53 was unusually mild until Christmas, by which time only 10.1" of snow had fallen. Record high temperatures of 42°, 34° and 36° were reported for December 15, 22 and 23, and navigation did not close until December 20. A low temperature of—8° on December 27 resulted in the temporary freezing of Thunder Bay, but this ice disappeared and permanent freezing did not occur until January 6, when the temperature dropped to —18°. It rained on January 10 but this was followed by severe weather. Twelve inches of snow fell on January 15 and the temperature dropped to—26° on January 16. The remainder of the month bought typica mietaoinhrdlushrdletao brought typical mid-winter conditions with sub-zero temperatures and more snow.

Several species were noted later than might be expected at this latitude. Col. Dear saw a great blue heron on November 14 and the following day Mr. Rosser reported two bluebirds. On November 15, the Allins observed a western meadow lark. The only previous November record was one seen by the compiler of these notes on November 30, 1940. A brown creeper seen on December 17 (Mrs. Rydholm) was also the second winter record for the Lakehead. K. Denis reported a tree sparrow on December 21 and C. Garton observed a purple finch on December 25. Until recently cedar waxwings were considered rare winter visitors, but they now occur regularly not only in this district but in Southern Manitoba and Saskatchewan. A flock of 60 was seen on December 31. It was anticipated that robins might winter here as they did in the winter of 1950-51, when mountain ash berries were also abundant, but until mid-January none was observed. Following a report on January 13, several have been seen in both Lakehead cities. A marsh hawk, seen on December 26 by K. Denis participating in our Christmas census, was a first winter record. Unexpected, was a white-breasted nuthatch seen by Mrs. Knowles at her feeding station on January 23 and 24. This is the fifth local record for the species.

Ordinarily we do not expect water birds after early November, but the present season was an exception. Open water in the harbours and abundant food in the form of spilled grain at the elevators resulted in a mixed flock of 80 mallards and black ducks remaining until the waters of the Bay froze in early January. American golden-eyes were present throughout December and were probably the species concerned when 1000 "ducks" were reported at Port Arthur on January 1. We saw at least that number of golden-eyes off Grand Marais on January 15. Most unusual was a report of two "wild geese" seen and heard over Port Arthur on January 23 (T. Martell). Unfortunately the species was not determined.

Winter visitors from the north have been unusually abundant. The great

flocks of snow buntings present after mid-October disappeared in late November but a flock of 500 was reported by Mrs. Addison on January 22. No northern shrikes have been seen locally since the three reported in late October but Wm. Pieper and J. Bergman included a northern shrike, seen north of Grand Marais on January 3, among the 28 species observed on a three-day return trip from Minneapolis to Fort William over the New Year's holidays. We have referred to the heavy crop of berries on the mountain ash. These provided food for flocks of Bohemian waxwings present from December 30 until mid-January. The berries were also the attraction for immense numbers of pine grosbeaks. Their numbers continued to increase from their first appearance on October 15 until early January. No less than 654 were seen on the Christmas census. On January 11, the Allins drove to Grand Marsh. The forest along the highway was red with mountain ash berries and the ground beneath the trees was covered with the fallen fruits. Pine grosbeaks were noted along the entire trip. By mid-January the trees were stripped and the heavy snow of January 15 had covered the berries on the ground. Only a few grosbeaks remained and these turned to the seeds of lilacs and black ash for food. Early in the winter a few evening grosbeaks were reported and 39 were seen on the Christmas census. Their numbers increased as the pine grosbeak decreased. As usual the principal food of this species was the fruit of the Manitoba maple, a common shade tree in the Lakehead cities. A small flock fed regularly each noon on the seeds in the dried, frozen fruit of two Cotoneaster shrubs at our door, but they do not appear to be favourite food of this or any other species. Redpolls have been moderately common and a few pine siskins have been seen. The seeds of the white birch provide food in the absence of weeds for both species. A flock of eight red crossbills was reported on December 26, (K. Eoll and K. Campbell). The only snowy owl of the season was one observed by the Allins in Fort William on December 13 and 21.

The wintering bird population is well demonstrated by the report of the 14th Annual Christmas Census of the Thunder Bay Field Naturalists' Club held on December 26. Thirty-six members in 14 parties traveled 31 miles on foot and 164 miles by car. The temperature ranged from 23° in the morning to 3° in the afternoon. Gusts of wind reached 16 miles an hour, accompanied in the morning by snowflurries. The humidity was 81 per cent. 2,688 individuals of 24 species were observed as follows: mallard 4, black duck 76, marsh hawk 1, ruffed grouse 7, Hungarian partridge 8, herring gull 47, rock dove 299, great horned owl 2, hairy woodpecker 2, downy woodpecker 5, Canada jay 8, blue jay 10, raven 24, crow 5, black-capped chickadee 188, brown-headed chickadee 5, red-breasted nuthatch 13, starling 242, house sparrow 759, evening grosbeak 39, pine grosbeak 654, common redpoll 379, pine siskin 23, red crossbill 8.

In addition to the above 24 species and those previously noted, an Arctic 3-toed woodpecker (January 1) and a snow bunting (January 3) were seen by Wm. Pieper and J. Bergman and a pileated woodpecker (January 22) by Col. Dear. The mallard, black duck, marsh hawk, red crossbill and, peculiarly, the great horned owl were new species for Audubon Christmas censuses here. Forty-seven species have now been reported on the 14 censuses taken since 1939 and five additional species

have been noted on days adjacent to census days. Two known residents, the spruce grouse and the sharp-tailed grouse, have eluded us to date. Only the pine grosbeak and the Canada jay have appeared on every list.

The annual meeting of the Thunder Bay Field Naturalists' Club was held on January 20, and a successful year was reported. In addition to evening meetings, three special field-days were held viz., a point dinner-meeting with members of the **M.O.U.** at Pigeon River on February 23, the annual spring field day on May 24 at Stanley, and an all-day fall outing to the Bat Cave at Cavern Lake on October 26. Five Audubon Screen Tour Lectures were successfully held. Members attended 3 rural school Fall Fairs and donated prizes to promote interest in nature projects. The Club participated with affiliated clubs of the Federation of Ontario Naturalists in a study of fall hawk migration. (See **The Flicker,** December, 1952). Members also co-operated locally in the autumn nocturnal migration studies sponsored by Louisiana State University. We anticipate a summary of this project will appear in a coming number of **The Flicker.** Five interesting numbers of the Club's Newsletter were issued. As usual, lists were compiled of the species observed and the species found breeding. 192 species were reported: the rough-winged swallow, buff-breasted and stilt sandpipers and grasshopper sparrow were additions to the Lakehead list. 56 species were found breeding: the brown thrasher was added to our breeding list on June 13 when a nest was found by Col. Dear. The following officers were elected for 1953: Dr. A. E. Allin, President; Keith Denis, Vice-President; Mrs. Peter Addison, Secretary; J. Murie, Treasurer. **—Regional Laboratory, Ontario Department of Health, Fort William, Ontario.**

Call Notes

Edited by
Franklin Willis

A North Shore trip was taken on February 14 and 15, by the Minneapolis and Duluth Bird Clubs. They met the Thunder Bay Naturalists Club on the fourteenth at Pigeon River, where they had dinner together and viewed some films. The next day both groups started homeward along their respective shorelines. A checklist of 28 species was compiled by the Minnesotans.

A Nature Weekend will be held at St. Croix State Park on June 6 and 7 by the Minneapolis Bird Club. This will be the third consecutive year it has been held, and it is proving to be more popular each year.

A project to decrease the heavy winter-kill of pheasants, and provide habitat for summer and insectivorous birds will be started this spring. The Fish and Wildlife Service cooperating with more than 3000 Minnesota farmers will plant an estimated 3,000,000 trees and shrubs in shelterbelts in the southern and southwestern portions of the state. Plans for this program call for plantings on more than 25,000 farms in the next five years. The severe winter-kill in more than 20 counties during the past comparatively mild winter is strong evidence that these shelters are urgently needed.

Two bird feeders maintained by the Minneapolis Bird Club in the T. S. Roberts Bird Sanctuary and Glenwood Park have attracted quite a bit of general attention this winter. A number of people have called the Minneapolis Public Library Museum inquiring how to build similar feeders, where to situate them, and what type of food to place in them. Ed Shave also mentioned the feeders in his column of the Minneapolis Sunday Tribune. Projects such as this help to build up interest in birds and to establish of more backyard feeding stations. Evidently the feeders have come to the attention of quite a few birds also, as 400 pounds of feed were consumed during the winter of 1951-52. The feeder in Glenwood Park has had a long history as prior to this winter it had been personally maintained for 20 years by Lulu Aler.

The Fish and Wildlife Service estimates that about 1/3 of Minnesota's waterfowl breeding area has been lost. The cause has been largely due to a widespread drainage movement, some of which was advisable but much of which has resulted in the tilling of sub-marginal land and a serious reduction in our duck population. A 400, Color-Sound film dealing with the problems of marshland, entitled, **Marsh Waters-Waste or Wealth?** has recently been produced by the Minnesota Museum of Natural History. Two other films on waterfuwl are also available. **Duck Hunter's Dilemma** 500 color-sound illustrates the technique of biologists studying duck population and management **Waterfowl in Action** 400 color-sound shows a prairie marsh during spring migration. All of these films may be obtained from Audio-Visual Extension Service, 230 Northrup Memorial Auditorium, University of Minnesota, Minneapolis 14, Minnesota.

A step to counteract the loss of waterfowl breeding area is the nearly completed Roseau "duck factory". The

project will affect more than 51,000 acres and consists of a series of dikes and dams on small streams. It is intended to provide nesting grounds for thousands of ducks and the higher areas will serve as habitat for ruffed and sharp-tailed grouse.

Vera Sparkes, one of our energetic M. O. U. members, was recognized in the "Town Toppers" feature in the Minneapolis Star Journal.

Senor Byron Harrell is in Mexico again.

The Minneapolis Star Journal was used as a source for some of the material in this section. ....

It would be greatly appreciated if the readers would send any information about such occurrences as M. O. U. members making news, plans and activities of various affiliates and conservation news of interest to the amateur ornithologist to the Call Notes Editor, Minnesota Musem of Natural History, University of Minnesota, Minneapolis, Minnesota.

The St. Cloud Bird Club is missing one of its outstanding members. Mr. H. H. Goehring is hiding away at the university. Oh! No! He is "not gone batty." He has merely taken a year's leave from his work at the St. Cloud State Teacher's College to complete the requirements for his doctors degree. He is however making a special study of bats for his thesis. The stories he has to tell about them are just too interesting to miss. The St. Cloud Bird Club wishes him well and is looking forward to having him back next year.

The Book Page

by

Jean DeBell

As FLICKER readers you have an interest in natural history you may want to share with your children or very young friends. For assistance you may drawn from among the many children's books being published today.

One of the abler assistants is author-illustrator Holling Clancy Holling. Two of his books, which deal with sections of the United States and Canada of which Minnesota forms a part, are MINN OF THE MISSISSIPPI and PADDLE-TO-THE-SEA. These are both published by Houghton Mifflin Company of Boston.

Minn of the Mississippi, is a turtle who first sees the light of day on the shores of Little Elk Lake in Itasca State Park. From there she begans a long journey down the Mississippi to the bayous of Louisiana. The story is a lively account of the people and places along the river of yesterday and today; the history of the river herself from its beginnings in glacical Lake Agassiz; the intermingling of the lives of mammals, birds, reptiles, Indians, Frenchmen, Spaniards and Americans with the Mississippi.

The illustrations, which are ably executed, are of two types. The more striking are the full-page full-color plates events described in the narrative; the more interesting are the marginal black-and-whites which are minute lessons in natural history, geography and anthropology.

PADDLE-TO-THE-SEA is deserving of the same praise. Its locale is the Great Lakes region combined with the St. Lawrence River. With the same accuracy and livliness evident in MINN OF THE MISSISSIPPI Holling depicts the adventures of a little wooden Indian in his canoe from the beginning of his journey in the Nipigon Country north of Lake Superior to its end in far-off France. The illustrations are as interesting and informative as one could wish.

STARLINGS. By author-illustrator Wilfrid S. Bronson and published by Harcourt, Brace and Company, New York. Although primarily intended for young city-dwellers STARLINGS contains sufficient information on birds as a whole to make it worthwhile for all children. The various aspects of bird-life dealt with here are too many to bear discussion beyond saying that each aspect, whether nest-building, flight or food, is treated understandingly and engagingly illustrated.

LET'S GO OUTDOORS. By Harriett E. Huntington. Illustrated by Preston Duncan. **Junior Books** Doubleday, Doran and Company, Inc. New York. One of a series of LET'S GO —books, this covers a variety of small animals generally met with in summer weather outdoors. Each page is faced with a photograph of the animal under discussion. The text is intended for very young children but probably ten-year-olds will find it interesting.

TRACKS AND TRAILCRAFT. By author-illustrator Ellsworth Jaeger. Published by the MacMillan Company, New York. For the remainder of the winter and that part of spring before the birds wing their way north bird-walks may occasionally need some en-

livening. In the winter snow and early spring mud the signs of animals are evident even when the animals themselves are not. Birds and mammals often leave clear patterns of their activities for us to see. Those of you who are investigating this phase of bird-walks for the first time will find Jaeger's TRACKS AND TRAILCRAFT of considerable help. The arrangement of the contents is particularly advantageous since the animals (and their tracks) are grouped according to their habitats. Every chapter is illustrated clearly and simply with brief notes on the natural history of each species discussed.

Notes of Interest

ANOTHER MOCKINGBIRD FOR MINNESOTA—On December 30, 1952 and again on January 27, 1953 a mockingbird was observed coming to the feeder of Mrs. Jennings, 1672 Watson, St. Paul. Whether or not it will survive the rest of the winter is questionable. However, the bird appeared healthy and active when seen on January 27.—**Bill Pieper and John Futcher, Minneapolis Bird Club.**

LECONTE'S SPARROW IN ANOKA COUNTY—A colony of LeConte's sparrows was found on June 22, 1952 in a grass marsh located 1½ miles west of the junction of Elwell Grade and East Main Street (Highway 242) in northeast Anoka County. Several birds including one immature were observed in the same location on July 20, 1952. **Bill Pieper and John Futcher, Minneapolis Bird Club.**

WINTER RECORD FOR THE BROWN THRASHER—On January 4, 1953 we saw a brown thrasher at the feeding of Mrs. S. S. Graham of Minnetonka Mills, a suburb of Minneapolis. Roberts **(Birds of Minnesota, 1936)** lists only one winter record for this species.—**Bill Pieper and John Futcher, Minneapolis Bird Club.**

WINTER RECORD FOR THE LONG-BILLED MARSH WREN—On January 27, 1953 a long-billed marsh wren was sighted in a small patch of rushes through which ran a stream of open spring water. The bird was viewed at close range in good light just south of the Cedar Avenue bridge which crosses the Minnesota River bottoms. Roberts **(Birds of Minnesota, 1936)** made no mention of this species in the winter. As we have found no evidence of other winter records of this bird, we believe this to be the first winter record for this state.—**Bill Pieper and John Futcher, Minneapolis Bird Club.**

RUFFED GROUSE EATS GARTER SNAKE—A male ruffed grouse that I shot on the northeast shore of the Thompson Lake Reservior near Carlton, Minnesota contained a 12 inch garter snake in its crop. The snake was greatly discolored with green, this coloration porbably being due to the other crop contents, which consisted of clover and aspen leaves. I have questioned many other hunters in this area, but have been unable to find any other instance of snakes being part of the ruffed grouse's diet. **Ray Dolan. Cloquet High-school, Cloquet, Minnesota. Editors Note:** The above report plus Mr. Zorichak's article elsewhere in this issue are interesting beyond the fact that they tell of unusual food items of the ruffed grouse. They present another interesting problem. If snakes are regular food items of the ruffed grouse are they eaten only in the fall? All reports that are immediately available to the editor are from fall observations. Mr. Zorichak's record is from October, another report that he lists is from November. Dr. Robert's record that Mr. Zorichak mentions was one in September, and Mr. Dolan's was from October 21, 1952. Is it because the snakes are more sluggish during the fall, or is it merely because the hunting season is during that time and there are more observers in the field? M.O.U. members should be on the lookout for comparable records. **P. B. H.**

SIGHT RECORD OF BLACK PHOEBE IN MINNESOTA — On September 13, 1952 a black and white flycatcher perched outside my kitchen window in the mountain ash tree—distance 8 feet. I froze in my tracks for a moment you

may know, for I could not readily identify it. From there I had a side view only, so hastened to get my binoculars and observe through the breakfast room window where I had an excellent view of his back.

Description: Head black, neck black, eyes black, throat black, back black, bill black, feet black, belly pure white; lighter edging on some wing feathers (primaries), otherwise black. The sides more white, but it had tiny black dots scattered rather regularly over the white surface. This area followed the outline of the wing perfectly. Length about 6½ inches. The bird did not flick its tail or utter any notes.

Hoffman's **Birds of the Pacific States,** page 203, states: "The plain black of the head, neck and upper parts, contrasting with the pure white area of the belly, easily distinguishes the Black Phoebe from any other flycatcher." **Mrs. C. E. Peterson, Madison, Minnesota.**

Editors Note. Such a close observation of such a distinctly marked bird by such a careful observer would seem to constitute a perfectly good addition to our state list. However, it is generally accepted now that authentic state records must be substantiated by specimens in collections. This record, then, must join the other such observations as "probable" additions to the state list on the basis of sight observations only. **WJB**

NOTES ON WATERFOWL IN THE CANOE COUNTRY—During the period May 25 to October 12, 1950 the author was in the field almost continously observing loons on a 60-square-mile area north and east of Ely, Minnesota. Notes were also kept on waterfowl seen. The following may be of interest:

Knife Lake—Dorothy Molter discovered a nest of the black duck with seven eggs about May 20 on Berglunds' Island. The nest was a deep cup with a great deal of down situated in the sphagnum moss at the base of a large spruce tree growing on a steep timbered hillside some fifty yards from the water. Six of the seven eggs hatched on June 14 or 15 and a brood of five was seen at the edge of the island a week later. I saw a brood of five three weeks later at the same location.

A nest of nine eggs was found on Hawk Island the first week in June some sixty feet from the shore in a cedar thicket at the base of a forty foot red pine. The nest itself was similar to that on Berglunds' Island. On June 27 seven young hatched, two eggs having been removed during incubation by an unkown predator. The brood was seen several times during the ensuing week. By July 14, when the last observation was made, only four young remained.

A brood of four small ducklings was noted in the vicinity of Half-mile Island in the south arm on July 3.

Kekekabic Lake—A destroyed nest of seven eggs was found on a small island in the northwest bay of this lake on June 12.

Skoota Lake—During the first week in July a female with five small young was seen at the south end of this lake.

Little Knife Lake—A pair of black ducks was seen in the vicinity of the island in the center of the lake during early June.

Dix Lake—One black duck flushed from the south-west corner on May 28.

Spoon Lake—Four black ducks flushed in the south corner of this lake in the middle of July.

In addition to the black ducks noted above several mallards were seen and some red-breasted mergansers. A nest of one of the latter birds containing twenty-three eggs was found in the chimney of a cabin on Knife Lake late in May.—**Sigurd T. Olson, Box 443, Ketchekan, Alaska.**

BIRD OBSERVATIONS FROM THE 1952 AERIAL WATERFOWL BREEDING GROUND SURVEY — Several interesting bird observations were made by Gerald Bue, John Zorichak and Forrest Lee on the 1952 aerial Waterfowl Breeding Ground Survey of the Minnesota Department of Conservation. This annual survey comprise 3.108 transect miles beginning on the Iowa line and ending at the Canadian border. Speed and altitude vary with the demands of field conditions, with extremes of approzimately 80 and 120 miles per hour of speed, and 20 to 200 feet of altitude.

On May 9, six American egrets and one great blue heron were noted at Fox Lake, Kandiyohi Co. An avocet was seen on the South Dakota side of Mud Lake, Traverse Co. on May 13. On May 15, a bald eagle in the adult plumage was observed near Richwood, Becker Co. A magpie was noted on May 15, in Section 31 of Brandt Township, Polk Co. Sandhill cranes were found in Roseau Co. again this year. Twelve of these birds were counted near Carlson's Pothole in the Roseau River Game Refuge and Public Shooting Grounds.

Sandhill cranes were noted also later in the summer by observers on the grounds. A lone crane was seen flying over Twin Lakes, Kittson Co. on July 31 by Forrest Lee. David Vesall and Donald Burcalow were at the Roseau River Refuge on August 8 and counted fourteen cranes flying over the bog. They also report that engineers working on the project claim to have counted as many as thirty-four Cranes in the air at one time. —**Forrest B. Lee, Minnesota Department of Conservation, St. Paul.**

MALLARDS FROM HEAVEN—About 8:00 a.m., May 24, 1952, Mr. Charles A. Yelick noted a tiny downy duckling alone on Cedar Lake in Minneapolis, just off the northerly Point that extends out from the west shore. It was behaving in an erratic, confused manner as if lost it would snuggle up to one of the posts that mark off the littel bathing beach, then dash off to another post as if searching for its mother. Where had it come from? And why was it alone? We had seen no ducks on this lake since April, although we had often scanned it with binoculars.

About an hour later, Mr. Yelick returned to the lake with me, eager to figure out some way to help the little waif if it were still in the same difficult plight. As we approached the Point, we were surprised to see a female mallard hurrying a brood of little ones down the sloping beach toward the lone duckling. Another

of the young lay motionless at the top of the slope. Mr. Yelick picked it up and found it was dead. Just then a live duckling dropped at his feet, alighting on its back. He carried it down to the water and it joined the others milling around. He had just walked back up the slope when down came another duckling, also upside down. This one waddled down to the lake as soon as he had righted it. as also did a third that dropped an instant later. Then the mother led her brood of eleven, single file, across the lake to a marsh on the opposite shore. Not one of the ducklings faltered nor deviated in the least from that straight line across a quarter of a mile of open water—an amazing performance that held us spell bound.

This all happened so quickly that not until they disappeared in the marsh did we look up to see where they had come from. We saw, directly above us a large nest of twigs—like an old crow's nest 16 feet from the ground in the crotch of a willow formed by its trunk and its lowest branches . It was the outermost tree on the Point, exactly 20 feet from the water. The mallard must have started her clutch of eggs there about April 27, before the ice went out of the lake (this we later deduced from the nesting data in Dr. Roberts' **Birds of Minnesota,** which quotes the incubation period as "about 26 days").

Our finding a tree-nesting mallard was not entirely unprecedented, for Dr. Roberts wrote, "The mallard has been known to make use of an abandoned nest of a crow or a hawk," He cited two instances—the first, a nest 20 feet from the ground in a tree near Tracy, Minn., reported in 1885; and the second, 18 feet up in a willow in Nobles County, Minn., in 1929. He did not mention observers seeing the ducklings leave their lofty homes. Whether or not our experience was unique in that respect, it was certainly a thrill.—**Lulu May Aler, Minneapolis Audubon Society.**

BIRDS OBSERVED ON SEPTEMBER TRIP TO LAKE OF THE WOODS—On the week end of September 19-20-21, two of my students from Mankato and I left after school on Friday for a thousand mile jaunt to Lake of the Woods. We drove to Itasca park where we camped on Friday night, and on Saturday we continued to Lower and Upper Red Lake, Baudette and north to the shores of Lake of the Woods. Our return to Mankato was made on Sunday.

We kept record of all the species of birds we encountered from the time we left Mankato until our return. First I shall list the 29 species seen and then add additional information on certain of these.

Species observed on the trip to Lake of the Woods—cormorant, great blue heron, mallard, blue-winged teal, turkey vulture, marsh hawk, osprey, ruffed grouse, semipalmated plover, killdeed, golden plover, greater yellow-legs lesser yellow-legs, pectoral sandpiper, herring gull, belted kingfisher, flicker, red-headed woodpecker, N.horned lark, blue jay, raven, crow, catbird, brown thrasher, robin, bluebird, starling, meadow-lark and english sparrow.

Cormorant—several were sighted on Upper Red Lake.
Turkey Vulture—four were on the shore of Upper Red Lake
Osprey—sighted on Upper Red Lake and Lake of the Woods.
Ruffed Grouse—in the brush at our camping place on Lake of the Woods.
Golden Plover—in autumn plumage on Lower Red Lake.

Yellow-legs—greater and lesser were together in a pond near Gaylord.
N. Horned lark—definitely identified near Lake of the Woods, No. of Baudette.—**Robert W. Hanlon, Mankato, Minn.**

STRAGGLERS AT MIDDLE LAKE, NICOLLET COUNTY—On November 23, 1952, a field trip to Middle Lake in Sections 35 and 36 of Granby Twp., Nicollet County, by Dave Kolling and myself revealed some interesting stragglers taking advantage of our mild fall season. An immature black-crowned night heron standing beside a drainage ditch flowing from Middle Lake and three muskrats foraging a few feet beyond were our first observations. Although not a single duck was to be found, a raft of 50 coots were huddled together on the lake. Five killdeer were running about adjacent mud flats calling frequently and a golden plover was in their company. We watched this bird, in its complete fall plumage, for about fifteen minutes wondering at its presence so late in the year and so far from its normal migration route. The plover was in good health and able to fly (at least for observed short distances), but had a crippled right leg. Just off shore 43 herring gulls were counted sitting or walking in the shallow water. A thicket on the edge of the marsh adjoining Middle Lake in Section 30 held 27 black-capped chickadees, 5 wood pewees, 1 downy woodpecker and 5 white-breasted nuthatches. A flock of 35 starlings lined the telephone wires just out of the town of Nicollet and 5 cowbirds were gathering gravel along the roadside. In addition to these species english sparrows, cardinals and pheasants were oberved.

Our trip, from 2 o'clock until 4:30 P.M. this Sunday afternoon netted us 15 species and a total of 193 individuals.— **Robert W. Hanlon, Mankota, Minn.**

RAVEN OBSERVATIONS, SUMMERS 1950-1952—According to Dr. Thomas S. Roberts (1936) "the raven was once a common—winter visitant in northern Minnesota as far south at least as Ottertail and Wadena counties." At the time of his writing he considered the ravens as approaching extinction in Minnesota.

At the present time the raven is common in winter check lists of northern Minnesota birds; however, this bird has rarely appeared in summer bird lists.

There are no positive records of the raven breeding in Minnesota, but it is reported to nest along the boundary waters of this state.

Our observations of the raven were made in two states, Minnesota and Wisconsin, and in three Minnesota counties. The observations were made over a three-year period from 1950 to 1952. The following list gives the date, location and number of birds seen on each occasion:

DATE	LOCATION	NUMBER
	Minnesota	
	Cook County	
July 26, 1950	Plouff Creek near Sawmill road	not recorded
	*Lake County	
June 11, 1951	Skunk Creek beaver pond (tributary to Gooseberry River)	2 soaring
June 24, 1951	Skunk Creek	1

	Clearing on old North Shore road near Bud Creek fire tower	1
July 4, 1951	Clearing on old North Shore road near Bud Creek fire tower	1 at 2 times during the day
	On old North Shore road near Gooseberry River	3
July 6, 1951	Clearing on old North Shore road near Bud Creek fire tower	4 seen often during the day
July 7, 1952	Clearing on old North Shore road near Bud Creek fire tower	not recorded
July 16, 1952	On old North Shore road near Gooseberry River	not recorded
	St. Louis County	
August 1, 1950	South of Ely	1
Sept. 14, 1950	McQuade Road near Sucker River	not recorded
July 2, 1951	Normana Road above French River	5 sitting in a tree
	Wisconsin	
July 30, 1951	On Bark Point near Herbster	2 on the road together
July 31, 1951	Madeline Island, Lake Superior	Heard ravens
	West of Ino on U.S. No. 2	1
August 10, 1952	Madeline Island, Lake Superior	Numerous—as many as 7 in a group

*Ravens were seen frequently, but not recorded after early July during 1951 and 1952 in the vicinity of: Skunk Creek; clearing on old North Shore road near Bud Creek fire tower; and on old North Shore road near Gooseberry River.

No ravens were recorded in May over the three-year period from 1950 to 1952; however, few field trips were made during that month. The dates upon which some of these birds were seen have led us to believe that ravens may be nesting in the areas of northeastern Minnesota where observations were made. **—John and Helen Hale, Duluth, Minnesota.**

REQUEST FOR ANNUAL MEETING PAPERS

May I call your attention to the fact that our program for the annual MOU meeting dosen't just grow like Topsy. It ssuccess depends on finding people who have interesting things to report and convincing them to prepare papers telling about them. If you have any such material, please volunteer for a place on the program. Many people hesitate to do this without some prodding and encouragement from co-workers who recognize the interest value of their work.

Won't each of you assume the responsibility of trying to locate some interesting material? Then apply some salesmanship in persuading such individuals to prepare their accounts for presentation at the MOU meeting at Frontenac on May 16-17, 1953. Papers that can suitably be illustrated with slides, movies, or specimens are particularly invited.

Please report all possibilities for papers to: **W. J. Breckenridge, Museum of Natural History University of Minnesota Minneapolis, 14, Minnesota.**

Minnesota Ornithologist's Union

Affiliated Societies

Albert Lea Bird Club

Officers: President, Charles F. Flugum; Vice-president, Iva M. Loy; Recording Secretary, Loes Scott; Corresponding Secretary, Olive Johnson; Treasurer, Maybelle S. Thompson.

Duluth Bird Club

Officers: President, O. A. Finseth; Vice-president, Evelyn Palmer; Secretary, Catherine Lieske; Treasurer, Harvey Putnam; Field Chairman, Joel K. Bronoel; M.O.U. Representative, O. A. Finseth.

Meetings are held the second Thursday at the University of Minnesota, Duluth.

H. J. Jager Audubon Society

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Officers: President, Mrs. Whitney Eastman; Vice-president, Mrs. George O. Ludeke; Treasurer, Florence Messer; Recording Secretary, Mrs. Edgar Bedford; Corresponding Secretary, Mrs. E. W. Joul; Field Secretary, Mrs. J. A. Thompson; Auditor, Mrs. E. D. Swedenberg; M.O.U. Representative, Mrs. I. S. Lindquist.

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TABLE 1

SPECIES COMPOSITION

	1946		1947		1948		1949		1950		1952	
SPECIES	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Mallard	115	11.7	257	28.5	126	35.1	70	22.2	134	39.0	83	30.2
Pintail	11	1.1	40	4.4	10	2.8	6	1.9	4	1.2	12	4.4
Shoveller	44	4.5	19	2.1	3	.8	11	3.5	12	3.5	8	2.9
Baldpate	26	2.6	34	3.8	3	.8	16	5.1	12	3.5	11	4.0
Gadwall	10	1.0	7	.8	3	.8	0		0		6	2.2
Black Duck	0		5	.6	0		2	.6	3	.9	1	.4
Blue-winged Teal	102	10.4	142	15.8	28	7.8	64	20.2	32	9.3	8	2.9
Green-winged Teal	27	2.7	82	3.6	7	1.9	7	2.2	13	3.8	8	2.9
Wood Duck	1	.1	10	1.1	5	1.4	8	2.5	15	4.4	4	1.5
Ring-necked Duck	91	9.2	93	10.3	89	24.8	39	12.3	53	15.4	29	10.6
Redhead	147	14.9	147	16.3	52	14.5	41	13.0	27	7.9	39	14.3
Canvas-back	280	28.4	82	9.1	16	4.5	35	11.1	32	9.3	30	11.0
Lesser Scaup	93	9.4	26	2.9	16	4.5	8	2.5	3	.9	25	9.2
Greater Scaup	1	.1	1	.1	0		0		0		0	
Golden-eye	4	.4	0		0		3	.9	0		5	1.8
Buffle-head	12	1.2	3	.3	0		3	.9	0		1	.4
Ruddy Duck	12	1.2	0		0		2	.6	3	.9	2	.7
W.-W. Scoter	4	.4	0		0		0		0		0	
Hooded Merganser	4	.4	2	.2	1	.3	1	.3	0		1	.4
R-b merganser	1	.1	0		0		0		0		0	
TOTAL	985	99.8	900	99.9	359	100.0	316	99.8	343	100.0	273	99.8

usually welcomed the group, expressed considerable interest in the reasons for getting the data, and began discussing changes from the previous year. The impression was that the men were genuinely appreciative of the fact that students were seeking training on these points and that facts were being obtained on their hunting activities.

During the six years that the field trips have been conducted, 20 species of ducks were identified (table 1). In general, although some species such as the redhead were quite consistently represented in the bag from year to year on a percentage basis, most species exhibited a considerable variation in this respect. The majority of the bag each year consisted of five species. Thus, the mallard, ring-necked duck, redhead, blue-winged teal, and canvas-back usually accounted for over three-fourths of the kill. The lesser scaup occupied fifth place in 1946 (replacing the ring-necked duck), 1948 (the same as the canvas-back), and 1952 (replacing the blue-winged teal). The mallard was the leader in all years except 1946 when the canvas-back and the redhead were first and second respectively and the mallard was third.

The species composition varied somewhat between the Tamarack Refuge Area and the Lake Christina Area. The Tamarack Refuge is an important production area for mallard, blue-winged teal and ring-necked ducks, while the Lake Christina area has long been noted for its diving duck concentrations, especially canvas-backs and redheads (Smith 1946). In the Tamarack Area, the bulk of the kill consisted of mallards, ring-necked ducks, blue-winged teal, and redheads. In the Lake Christina Area, four species were important each year with the canvas-back and redhead leading consistently and the remaining two species shifting from year to year between the mallard, blue-winged teal, lesser scaup, ring-necked duck, and shoveller.

The striking contrast that was noted each year in the relative numbers of ring-necks, canvas-backs, and redheads bagged in the Tamarack Refuge Area as opposed to the Lake Christina Area is shown below:

	Ring-neck		Redhead		Canvas-back	
	Tamarack	L. Christina	Tamarack	L. Christina	Tamarack	L. Christina
1946	62	29	73	74	2	278
1947	76	17	33	114	3	79
1948	73	7	18	11	1	14
1949	19	18	6	34	0	35
1950	42	9	6	18	3	29
1952	21	3	6	32	0	30
Total	293	83	142	283	9	465

By far, the greatest number of canvas-backs and, to a lesser extent, redheads, were bagged in the Lake Christina area while ring-necked ducks predominated in the Tamarack Refuge Area. These data reflect the kill differentials that can occur on lakes which are concentration areas for certain species and bring to mind the possibilities of overshooting a species such as the canvas-back which tends to concentrate from large breeding areas into small local resting areas during migration. Such concentration areas should be kept under the closest surveillance by game men during the hunting season.

Sex and age data were obtained each year on nearly all birds handled. However, only data totalling over 25 birds for one species in one year are presented, (Table 2).

TABLE 2

AGE AND SEX RATIO

SPECIES	YEAR	AGE RATIO		ADULT SEX RATIO		JUVENILE SEX RATIO	
		No. Juveniles:	Ratio Adults	No. Males:	Ratio Females	No. Males:	Ratio Females
Mallard	1946	(80)	228:100 (35)	(15)	75:100 (20)	(50)	167:100 (30)
	1947	(222)	634:100 (35)	(14)	67:100 (21)	(126)	131:100 (96)
	1948	(112)	934:100 (12)	(3)	33:100 (9)	(62)	124:100 (50)
	1949	(31)	80:100 (39)	(15)	63:100 (24)	(10)	48:100 (21)
	1950	(108)	900:100 (12)	(5)	71:100 (7)	(53)	96:100 (55)
	1952	(69)	494:100 (14)	(2)	17:100 (12)	(43)	165:100 (26)
Blue-winged Teal	1946	(79)	344:100 (23)	(4)	23:100 (19)	(33)	72:100 (46)
	1947	(115)	426:100 (27)	(3)	13:100 (24)	(44)	62:100 (71)
	1949	(39)	156:100 (25)	(6)	32:100 (19)	(20)	105:100 (19)
	1950	(26)	434:100 (6)	(3)	100:100 (3)	(8)	44:100 (18)
Ring-necked Duck	1946	(67)	279:100 (24)	(12)	100:100 (12)	(40)	148:100 (27)
	1947	(83)	830:100 (10)	(4)	75:100 (6)	(35)	73:100 (48)
	1948	(68)	453:100 (15)	(9)	150:100 (6)	(34)	100:100 (34)
	1949	(27)	225:100 (12)	(5)	71:100 (7)	(10)	59:100 (17)
	1950	(49)	2450:100 (2)	(2)	(0)	(26)	113:100 (23)
	1952	(24)	480:100 (5)	(2)	67:100 (3)	(14)	140:100 (10)
Redhead	1946	(99)	203:100 (48)	(33)	220:100 (15)	(45)	83:100 (54)
	1947	(122)	487:100 (25)	(13)	108:100 (12)	(69)	130:100 (53)
	1948	(30)	300:100 (10)	(5)	100:100 (5)	(21)	234:100 (9)
	1949	(26)	173:100 (15)	(1)	7:100 (14)	(8)	44:100 (18)
	1950	(17)	170:100 (10)	(7)	234:100 (3)	(7)	70:100 (10)
	1952	(29)	290:100 (10)	(4)	67:100 (6)	(12)	71:100 (17)
Cansas-back	1946	(241)	617:100 (39)	(17)	77:100 (22)	(124)	106:100(117)
	1947	(62)	310:100 (20)	(10)	100:100 (10)	(26)	72:100 (36)
	1949	(24)	218:100 (11)	(4)	55:100 (7)	(10)	71:100 (14)
	1950	(28)	700:100 (4)	(4)	(0)	(14)	100:100 (14)
	1952	(24)	400:100 (6)	(4)	200:100 (2)	(14)	140:100 (10)
Lesser Scaup	1946	(36)	63:100 (57)	(32)	128:100 (25)	(16)	80:100 (20)
	1947	(6)	30:100 (20)	(11)	122:100 (9)	(2)	50:100 (4)
	1952	(5)	25:100 (20)	(10)	100:100 (10)	(3)	150:100 (2)

All birds were sexed and aged by one or more of the following methods: (1) Plumage differences, (2) Presence or absence of notched tail feathers as described by Kortright (1943) and (3) Examination of the cloaca for sex and age characters as descibed by Hochbaum (1942). Actually, in most cases, all three methods were employed because the workers were anxious to obtain training in the use and recognition of each character.

The two major possible sources of error in these data are: (1) Incorrect determinations: Each year, except for the senior author, a different group of workers was involved. However, as indicated before, the senior author demonstrated techniques on all new species and continuously spot-checked the determinations of each student. (2) Selectivity of males by hunters: This would apply chiefly to the mallard, but since the mallard is a prefferred species in this area, it is felt that selectivity was practiced but little by the hunters.

The expected variables in these data are as follows:

Age ratios: Three species may be considered common breeding birds of the area-mallard, blue-winged teal, and ring-necked duck. In these species the juvenile-adult ratio was high except in the mallard and blue-winged teal in 1949. The redhead, canvas-back, and lesser-scaup are not important nesters in this region. The first two species exhibited variable but generally high ratios-while the ratio of the lesser scaup was very low in 1946, 1947 and 1952. Smith (1946) reported a high (555:100) age ratio for 405 canvas-backs on Lake Christina in 1942. There is no way of determining whether these data indicate annual changes in hatching success or a differential migration by age groups.

Sex ratios: Amongst the adults the ratio of males per 100 females was consistently low in the mallard, and blue-winged teal. In the four diving ducks, the adult sex ratios were more variable (probably reflecting small samples), but were even or with more males than females with the larger samples of the redhead and lesser scaup, and less than even in the canvas-back.

The juvenile sex ratios were variable in the mallard, ring-neck, redhead and canvas-back, but usually were low in the blue-wing and lesser-scaup.

It is interesting to note that Smith (1946) reported a similar low sex ratio of adult canvas-backs (82:100) and a nearly even ratio of juvenile canvas-backs (98:100) for larger samples in 1942.

Differential vulnerability to hunting: Because total populations of ducks in the area were not studied, these data cannot be analysed from this standpoint.

A summary of the weights of 760 waterfowl as recorded in 1949, 1950, and 1952 are presented in Table 3. All data were obtained on portable platform scales which were read at the nearest ounce. Most of the birds were weighed either on the day of shooting or one day after. No attempt was made to correct the weights for amount of blood lost, differences in wetness or dirtiness of the plumage, or crop and gizzard contents. Only entire birds were weighed.

Examination of the weights of the different species by years indicated little variation except that mallards, ring-necks, and redheads were slightly heavier in 1950 than in 1949 or 1952.

Of the species of ducks weighed, for which there are more than 25 representatives, the average mallard and canvas-back approached three pounds rather consistently. The redhead average was usually near two and one-half pounds in weight. The ringneck, baldpate, and lesser scaup ranged up to two pounds. The blue-wing and green-wing teal averaged at or below one pound in weight. Other species were so poorly represented that generalizations could not be made.

Considering weights by sexes in the mallard, baldpate and canvas-back, the males were usually heavier, although there were considerable overlaps in the weight ranges. The weights of the different sexes in the blue-wing teal, green-wing teal, ring-neck, redhead and lesser scaup showed little differentiation.

TABLE 3

MINNESOTA DUCK WEIGHTS

SPECIES	SEX-AGE CLASS	NO.	AVE. WT.	RANGE
Mallard	Ad. M	14	3-0	2-7 to 3-9
	Ad. F	37	2-8	2-3 to 3-6
	Juv. M	105	2-13	1-13 to 3-8
	Juv. F	94	2-8	1-11 to 3-3
Pintail	Ad. M	9	2-1	1-10 to 2-6
	Ad. F	2	1-14	1-11 to 2-2
	Juv. M	7	1-15	1-11 to 2-3
	Juv. F	3	1-15	1-8 to 2-4
Shoveller	Ad. M	1	1-13	
	Ad. F	2	1-4	1-4 to 1-5
	Juv. M	9	1-8	1-2 to 1-12
	Juv. F	7	1-6	1-1 to 1-9
Baldpate	Ad. M	9	1-15	1-11 to 2-4
	Ad. F	2	1-9	1-9 to 1-10
	Juv. M	10	1-14	1-12 to 2-2
	Juv. F	11	1-10	1-6 to 1-15
Gadwall	Juv. M	4	2-2	2-0 to 2-5
	Juv. F	2	1-12	1-10 to 1-14
Black Duck	Ad. M	1	3-12	
	Ad. F	1	2-14	
	Juv. M	2	3-4	3-2 to 3-6
	Juv. F	1	2-13	

SPECIES	SEX-AGE CLASS	NO.	AVE. WT.	RANGE
Blue-winged Teal	Ad. M	8	1-2	0-14 to 1-4
	Ad. F	13	1-1	0-11 to 1-5
	Juv. M	18	1-1	0-13 to 1-4
	Juv. F	40	1-0	0-10 to 1-9
Green-winged Teal	Ad. M	2	0-14	Both 0-14
	Ad. F	2	0-11	0-10 to 0-11
	Juv. M	11	0-13	0-12 to 0-15
	Juv. F	12	0-12	0-10 to 1-1
Wood Duck	Ad. M	3	1-8	1-7 to 1-9
	Ad. F	3	1-7	1-5 to 1-9
	Juv. M	6	1-11	1-8 to 1-12
	Juv. F	12	1-7	1-4 to 1-10
Ring-necked Duck	Ad. M	7	1-14	1-7 to 2-3
	Ad. F	4	1-11	1-10 to 1-13
	Juv. M	46	1-12	1-2 to 2-5
	Juv. F	47	1-12	1-5 to 2-2
Redhead	Ad. M	12	2-8	2-3 to 2-13
	Ad. F	14	2-7	2-2 to 2-10
	Juv. M	22	2-5	2-1 to 3-1
	Juv. F	32	2-4	1-7 to 2-13
Canvas-back	Ad. M	8	3-0	2-12 to 3-4
	Ad. F	5	2-12	2-7 to 3-2
	Juv. M	28	2-13	2-0 to 3-6
	Juv. F	26	2-10	2-5 to 2-15
Lesser Scaup	Ad. M	14	1-12	1-8 to 2-1
	Ad. F	11	1-12	1-9 to 1-13
	Juv. M	3	1-9	1-8 to 1-11
	Juv. F	4	1-10	1-7 to 1-13
Golden-eye	Ad. F	1	1-13	
	Juv. M	1	2-6	
	Juv. F	6	1-10	1-8 to 2-0
Buffle-head	Juv. F	2	0-14	0-11 to 1-2
Ruddy Duck	Juv. M	6	1-5	0-15 to 1-9
Hooded Merganser	Juv. F	2	1-4	Both 1-4
TOTAL		760		

As to age classes by sex, the adult males averaged heavier than the juvenile males but the females of both age classes were often similar in weights. Here, again, there was considerable over-lap in the weight ranges.

Comparison of weights reported here with other published data are of interest. There is a close similarity in all cases with data published by Marshall and Erickson (1945) for waterfowl taken in Minnesota during October. The mallards averaged heavier than those reported by Bellrose and Hawkins (1947) for birds shot in Illinois during 1938, 1939, and 1940. In addition, the baldpate, ring-neck, and canvas-back all averaged heavier in three of the four age-sex classes. Adult males of the ring-neck and canvas-back averaged nearly the same as the Illinois data, while the adult female baldpate sample was too small to be compared. The weights reported here for the pintail, green-wing teal, blue-wing teal, wood duck, redhead, and lesser caup are very similar to those reported by Bellrose and Hawkins (1947).

The extremes of weights by species often excite the interest of sportsmen. The heaviest duck handled was an adult male black duck at three pounds, twelve ounces, while the lightest weight—ten ounces, was recorded three times—for a juvenile female blue-wing teal, and for both an adult and a juveniel female green-wing teal.

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Suggestions For Revisions in Systematic Nomenclature

by

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During the past several decades we have made tremendous advances in systematics, with new knowledge of genetics, and the introduction of modern ideas and methods, such as those embodied in the New Systematics (Huxley 1940). Modern workers—Rensch, Mayr, Huxley, Kleinschmidt and countless others, have immeasurably increased our knowledge of the processes of speciation, so that, like the phoenix rising out of its own ashes, modern systematics has risen from the old, dead, descriptive natural history and taxonomy of the past centuries, and has become a necessary, dynamic part of the biological sciences.

That is, systematics in general has advanced. But in our search for knowledge we have neglected a very important phase of our work: systematic nomenclature. While we have begun to understand the processes of speciation and have introduced new terms for the various stages of this evolution, we have developed no satisfactory means of designating them. Having developed modern criteria for classifications we may find it difficult to apply them efficiently because of difficulties in nomenclature.

Obviously it is necessary to improve our systems of nomenclature to facilitate greater advances in systematics, and proper applications of it. It is my purpose here to attempt to do just that. I shall be pleasantly surprised if many of the following suggestions are adopted officially by the International Code of Zoological Nomenclature, but I shall be greatly disappointed if this paper does not stimulate further thought and more suggestions along the same lines.

The Neutral Terms. — The terms form, group and complex have been reserved as neutral terms to be used for groups of uncertain or mixed rank. To these I suggest adding the term "category," to mean any of the steps of the systematic hierarchy.

The Higher Categories. — Linnaeus used six categories: empire, kingdom, class, order, genus and species. Two others have been added—the phylum, below the kingdom, and family, below the order, while the empire has been eliminated as unnecessary. Also a number of others, such as division, grade, clan, series, etc., have been added by various workers. Each of these may be modified by grouping into super-categories, and division into sub- and infra-categories. Taxonomists have found it necessary to make full use of these categories to illustrate many detailed classifications, but except for these seven categories there is no special, standard order in which these are used. This random system cannot exist in modern systematics, and it would be desirable to add more terms to our hierarchy.

We may call the set of categories we have at present the primary categories, and then introduce a set of secondary categories to fill the gaps between the primaries. We then have the following hierarchy:

Kingdom
Branch
Phylum
Cohort
Class
Section
Order
Division
Family
Tribe

Supergenera may be included among the higher categories, thus making, with prefixes, a total of 40 categories. This should be enough for even the most detailed classifications.

At present only two categories have official standard ending—the family (-idae) and subfamily (-inae). The American Association for the Advancement of Science, Section F, under the direction of A. S. Pearse, has suggested the following endings: phylum and subphylum, -a; class, -ea; subclass, -ia; order, -ida; suborder, -ina (see Pearse 1948). The American Association of Herpetologists and Ichthyologists has adopted the same system, except that subclasses end in -ii, and have added -ica for a superorder. Entomologists, for instance Klots (1951), have used the endings -ini and idi for tribes.

From these various sources I have been able to piece together a system which has actually been slowly, almost imperceptibly, evolving, but which no one has yet recognized. I therefore recommend the adoption of the following system:

Phylum and subphylum, and any other categories above a cohort, **-a** superclass, **-ae**; class, **-ea**, subclass, **-ia**; infraclass, **-ii**; superorder, **-ica**; order, **-ida**; suborder, **ina**; superfamily, **-icae**; family, **-idae**, snuperfamily, **-ici**; tribe, **-idi**; subtribe, **ini.**

This system has several advantages. First, the majority endings are standardized by prefix—super-categories use "c", ordinary categories use "d", subcategories use "n". All categories derived from the same root have the same form, e. g., all words ending in "family" are **-i(x)ae.** This system is very useful for note taking, etc., and is a lot faster since less writing is required—Avea is just as good as Class Aves, and a lot shorter.

In time we may find it desirable to devise standard endings for many of the secondary categories besides the tribe. For the record I would like to mention that the following have been used at various times and could be adapted to a standard system: **-dea, -des, ites, -ata, -zoa (for animals), -phyta** (for plants); the botanical endings **-ales, -acea, -aceae,** etc can also be used.

I would suggest that workers be careful about using these new categories; it might be advisable to exhaust all the primary categories before going into the secondaries.

The Lower Categories.—The categories below the supergenus, and especially the infraspecific categories, are of special interest to the modern student of evolution. Because speciation is best studied at this level the majority of research has been carried on here—this means new terms, and a need for improved systems of nomenclature.

We are now using seven categories

in a regular order below the supergenus: genus, subgenus, superspecies, species group, species, subspecies group, and subspecies. Mayr (1942) has objected to the use of the subgenus on the grounds that it produces a quadrinomial nomenclature—for the same reason infragenera and infraspecies are not used. Also a superspecies is sometimes rather different (see below). The remaining categories are efficiently covered by the Zoological "code". While this should be familiar to most people the chief rules may be reviewed here. The name of a species is binomial: the first name is that of the genus, and is always capitalized; the second name is that of the species, and is never capitalized. The name of the author, the first person to describe the form, is written after the species name with no intervening punctuation. If the species is polytypic (divided into subspecies) the subspecies name is written after the species without punctuation of captialization.

The species subspecies groups are best treated as the higher categories, as, "species group A".

Mayr has pointed out (1942) that if our (Neo-Darwinian) hypothesis is correct—that subspecies are incipient species, which may be isolated by some geographic barrier for a period of time, and during this period diverge genetically and morphologically and acquire genetic isolating mechanisms, so that when the barrier is removed and the two separated forms can come into contact again, they will no longer interbreed, or will produce hybrid offspring that are less viable and are eliminated, so that the two forms now behave like good species—then we should be able to find forms which are intermediate between species and subspecies, i. e., are at some intermediate stage of this process. Thee forms (semispecies) are much more common than might be supposed—12.5% of the North American bird population have reached this stage (Mayr 1940). Some of these are the Ipswich, Savannah, Belding's and Large-billed Sparrows, King and Clapper Rails, Yellow- and Red-shafted Flickers, and several others. Though a great many systematists recognize the existence of these forms, our best checklists, such as the **AOU Checklist of North American Birds,** still insist upon forcing them into a false, unnatural, manmade system of classification, and calling them subspecies or full species. To my mind this practice is not only false, but it masks to a large extent their true identity. The sooner we can start naming these forms in some special manner to distinguish them from normal species and subspecies the better it will be. A trinomial name would do this very effectively. The generic name would come first. The first trivial name should be the uncapitalized trivial name of the "parental species"; the second trivial name should be that of the specific semispecies. The first trivial should be in parentheses. Thus the Savannah Sparrow would be **Passerculus sandwichensis**; the Ipswich Sparrow **P. (sandwichensis) princeps.**

Speciation may occur when the races of a species spread out in such a way that a series or geographically exclusive **(allopatric)** populations are formed. Being allopatric it is impossible to determine whether these forms would interbreed, and, therefore, no definite statement can be made about their status. It is convenient to combine all such forms which are in the process of speciation into **superspecies.** The forms in a superspecies may be monotypic or polytypic; they should probably all be spoken of as semispecies. The important aspect of the

superspecies is that it should represent a polytypic species in which the subspecies have diverged to the extent that reproductive isolation between them may be suspected. Again in North America we have several superspecies, in the genera **Colaptes, Dendroica, Otus, Larus, Junco, Leucosticte, Branta,** and a few others. Miller's monographs (1931, 1941) are important works on North American superspecies.

Superspecies, being in a way merely collections of semispecies, are not recognized as good categories. It seems to me that the adoption of superspecies as real categories would greatly improve modern systematics. We could designate them by a binomial, the genus name of course coming first, followed by the capitalized trivial name of the type form of the group. For instance, the name of the gull superspecies would be **Larus Argentatus;** of the American flicker group, **Colaptes Auratus.**

Byron Harrell and Dwain Warner, of the Minnesota Museum of Natural History, have pointed out that it is possible to carry this making of new categories to extremes, so that we have a different category for every single situation. This is, of course, true, but it is also highly unlikely that this would happen. All the situations we know of at present fall nicely into some existing category. Thus super- and semispecies are very convenient catch-alls for many troublesome situations, and their use implies a great deal about the nature of the form in question that is hidden by the use of conventional terms. I would therefore wholeheartedly endorse removing these terms from the discussion table, and employing them in regular taxonomic work.

The Genus Problem.—Mayr has defined the genus as a group of species of presumably common phylogenetic orgin, separated by a decided gap from all other such groups, adding that "it is to be postulated for practical reasons that the size of the gap shall be in inverse ratio to the size of the group." (Mayr 1942). That a genus is a group of species is generally understood; what is not understood by many workers is that the genus must be a collective unit, and that new genera must not be created on the basis of minor structural differences. We are just emerging from a supersplitting period, during which an enormous number of monotypic genera were created. Modern workers are now attempting to remedy the situation and once again make genera collective units. Mayr (loc. cit) listed several unnecessary genera from the AOU Checklist, several of which were removed by later supplements, but the following still remain, and should be removed as soon as possible:

Moris (-Sula), Leucophoyx, or Casmerodius (-Egretta, Nyctanassa (-Oidemia, Lophodytes (-Mergus), Parabuteo and Buteogallus (-Buteo), Porphyrula (-Gallinula), Eupoda (-Charadrius), Squatarola (-Pluvialis), Totanus (-Tringa), Lobipes and Steganopus (-Phalaropus), Callichelidon and Tachycineta (-Iridoprocne), Cistothorus (-Telmatodytes), Helmitheros (-Limnothlypis), Compsothlypis (-Dendroica), Chamaethlypis (-Icteria), Tangavius (-Molothrus), Passerherbulus (-Ammodramus), Melospiza (-Passerella) and Rhynchophanes (-Calcarius).

There are undoubtedly others, which should be investigated by specialists in various groups. Of course, some monotypic genera must remain, since many species are the remnants of evolutionary lines that are all but extinct.

Our genera definition contains a

statement about the size of genera in proportion to the size of the gaps between genera, designed to keep them from becoming too small. Mayr mentions over-large genera, and suggests that they be broken up into smaller units. These large genera exist chiefly in very large phyla and classes, such as insects (Hexapodea) and spiders and their allies (Arachnidea). I can understand asking for genera of about five species, on the average, where only about 8500 species are concerned, but would the same size genus be handy in insect classifications, where at least 850,000 species must be handled? I believe our genus definition will be much more complete if we add a statement such as: "it is also to be postulated that the size of the genera in a class of phylum shall be in direct proportion to the size of that category." Thus genera of 75 or even a few hundred species of insects would not be too large. In some of the more obscure groups of invertebrates the application of such a definition would mean cutting down to two or three species genera that are now even larger than bird genera.

The differences between genera and the other high categories are quantitative, not qualitative. Thus our genus definition should really be made to apply to them, too. Unfortunately it does not. A classification of some invertebrate groups reads: monotypic phylum, class, order, family, . . . genus with several dozen species. Is it more desirable to have monotypic families and orders than monotypic genera? I do not think so. These groups would probably show phylogenetic relationships much better if they were revised, using polytypic categories throughout. However, genera must be our starting point in making such revisions, and our chief concern.

We may say, then, that a great deal of work in necessary if we are to have satisfactory methods in systematics. I can only hope that these suggestions will be considered, and more made in the future.

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The Avifaunal Club,

Minneapolis, Minnesota

Birding From A Tractor Seat

by

Charles Flugum

As a vantage point, from which to see field birds and their activities at close range, a tractor seat is ideal. Lured by the insects and rodents which are exposed by tillage implements in operation, some birds develop remarkable confidence and actually follow machinery across the field. Thus they work not only for the farmer, but with him. Species even differ as to the particular implement they choose to follow.

A pair of red-tailed hawks nested and successfully reared a family in the ten acre woods on my farm in Freeborn County, Minnesota, for fourteen consecutive years—from 1930 to, and through 1943. A pair of red-shouldered hawks nested there in 1945 and a pair of Swainson's in 1951. The behavior pattern of these three Buteos was very similar. All three species showed a decided preference for the disc harrow, which takes a wide swath and penetrates deeply enough to dislodge mice from their hideouts. During these years it was almost certain that my appearance in the field with the disc would be greeted by one of the hawks perched on a dead limb at the edge of the woods or atop a fence post beside the field, watching my work intently. As soon as a mouse was routed, the hawk left his perch. Gliding low and gracefully to where the mouse was busily hunting a new hiding place, he would drop one foot and grasp the victim in his talons, then proceed to another post to devour his morsel. All three species habitually came within five or six rods of the tractor to catch mice. For sport I sometimes pointed at the mice I saw and the hawk came after them so faithfully that one might have thought he was acting under my direction.

The red-tailed holds the record for booty with 32 mice, one rat and three young jack-rabbits, all taken on one day during six or seven hours, while I disced a 30-acre field of cornstalks. He broke the record for proximity also on the day he plummeted from the sky to snatch a mouse scarcely two rods ahead of my tractor. Perhaps he miscalculated his distance, but he carried out his undertaking with poise and dignity. In fact, I got the impression from the look in his eye that he owned the place and I was merely being tolerated.

One day when the hunting was not so good, my vigilant friend perched on a dead limb for hours, then took wing when a mouse was disturbed near the opposite end of the field, having seen his prey from a distance of over 80 rods.

Another characteristic of all three species was that when my wife brought my dinner to the field in our pickup truck, they departed for parts unknown—and stayed away as long as she remained in the field! That's partiality for you, but perhaps we cannot blame them since the vehicle could conceal a weapon.

Brewer's blackbirds will follow any moving implement, but are particularly attracted by the plow . . . and what industrious workers they are! Searching for insect larvae, they walk on

the loose, freshly-turned furrows with long, hurried, purposeful strides; their wings in readiness, should a rolling lump underfoot throw them off balance. So absorbed are they in their work that often they seem in danger of being crushed by the wheels or being plowed under. They frequently take flight to catch up as if fearful that some of their quarry will have time to get back into hiding. When there are young to feed, both parent birds work incessantly through the heat of the day, holding their wings out from their bodies to keep cool.

Farmers are painfully aware of what wire-worms and white grubs do to the tender roots of infant corn plants. The ravages of cutworms are familiar to every gardner as well. I have seen countless number of these, and other insect pests, clamped crosswise in the beaks of Brewer's blackbirds.

By spring plowing time, these birds have already paired. Even though a dozen or more birds are following the plow, one can easily tell which birds are mates. When one flies to get closer to the plow, the other immediately follows. When the female gathers rootlets for nesting material, the male tags along for company! When one has found a beakful of worms, a half-dozen or more, and flies nestward, the other takes wing also, whether it has found any worms or not.

In observing these confiding field birds, one sees both tragedy and comedy. On May 3, 1952, I saw a female with only one foot. She used the stump leg for walking, but had a very awkward gait. Surprisingly, she looked as thrifty as any of the others and was gathering nesting material. A male bird stopped his worm hunting to watch the capers of a kangeroo mouse. On May 23rd also, with the thermometer over 90 degrees, another male Brewer's blackbird was resting and cooling off in the shade of a fence post.

Ornithologists may think of the black tern as a species of waterbird, but farmers think of them as the graceful, tireless, larvae-hungry birds flying about their corn cultivators all day. With beaks pointing downward, and eyes alert for any insect larvae uncovered by the implement, these terns often come within arms-length. One was momentarily flustered when it flew low over the exhaust pipe of my tractor. When a worm is sighted, there is a scramble to see which bird gets it. Often a Brewer's blackbird is left to stare in annoyance as a black tern swoops down and deftly snatches a worm ahead of it, without alighting or even missing a wingbeat.

Besides watching the freshly stirred soil for insect larvae, black terns keep an envious eye on the activity of their kind, following the neighbors cultivator. If the picking is better there, they quickly leave you to help out your neighbor and visa versa. When black terns are abundant, one can readily see who has the wormiest field, by observing the number and activity of the birds around the cultivator. They show a fondness for spring-plowed sod. Being marsh nesters, they are not as numerous as they were when there was a slough on every forty, but every cornbelt farmer knows them, whether he knows their right name or not.

Many birds besides the faithful few mentioned, can be seen in the fields. If there are dull moments at times, in birding from a tractor seat, they are compensated by such thrills as seeing a bald eagle alight less then 80 rods away—and migrating Sprague's pipits cooling their feet on the fresh plowing, no more than twenty feet away!

—Albert Lea, Minnesota.

Farm Implements As A Hazard To Field-nesting Birds.

Charles Flugum

As a farmer goes about his seasonal field work, most of the implements he uses constitute a hazard for field-nesting birds. With the execption of the pasture ,all fields are thoroughly gone over by at least one and usually several farm machines. If these field operations come at a time when ground-nesting birds are hatching eggs or rearing helpless young, the nest and contents and sometimes the parent bird are usually unavoidably destroyed. Any attempt by the farmer to spare the nest usually results in merely making its location conspicious so that it quickly falls prey to any predator that happens along.

The mower takes a heavy toll of field-nesting birds because it must be used during the hatching season. The rapidly moving sickle travels close to the ground and under dense hay growth where it cannot be seen. It covers every square inch of the field so it is hard to imagine any bird nest escaping destruction.

Several species of birds nest in a tall grass habitat. In my experience, grasshopper sparrows, dickcissels, bobolinks, mallard ducks, ring-necked pheasants and marsh hawks. Of these the ring-necked pheasant is perhaps the most frequent victim, and certainly the most publicized one. Hen pheasants often make their nests in alfalfa and clover fields which are ready to cut for hay before the pheasant eggs hatch. To make matters worse, the setting bird will not flush until the sickle actually strikes her, with the result that she is either killed on the spot or flies away minus one. or more often, both legs. Hence, not only the nest but also the bird is lost. Fortunately, pheasants nest in many other locations, such as fence rows, roadsides, woods, and even within a few rods of my house, where the mower does not harm them.

Less well known is the fate of young bobolinks. Leaving their nest before they are able to fly, they flutter about and cling to the standing hay where the parent birds feed them, and where they learn to find food for themselves. Since they shun cut hay like a fish does dry land, they move inward in the field as the mowing progresses and concentrate in the last swaths of hay to be cut.. With no more standing hay to escape into they seek refuge on the ground where they are right in the path of the sickle.

If I have destroyed any nests of dickcissels or grasshopper sparrows, it has gone unnoticed. Apparently the young are mature enough by mowing time to escape destruction.

One mallard duck nest was ruined, but the duck flew long before the mower sickle destroyed the nest.

In 1948 a pair of marsh hawks nested in my alfalfa field and, of all places, on the highest hill. Because I was very busy with building a new house that summer I hired my neighbor to cut my hay with his tractor mower. The mother hawk flushed in time to escape the sickle which was quickly

lifted to leave about 8" of stubble where the nest was, thus sparing the lives of the four young hawks. Here, I thought, would be an interesting study. Would the parent hawks succeed in rearing their brood in the changed habitat? When I raked hay two days later I found the nest empty and thought some predator had taken the young hawks. The parent birds flew over the area several times a day at first and continued returning for about two weeks. Then one day when it was too late, I learned that my neighbor's hired man, upon hearing about the young hawks, had kidnapped them and put them in a rabbit hutch where they were fed bacon rinds and pieces of pork and beef trimmings. They all died. At this late hour I was asked what food young hawks must have to survive. With indignation I replied, "Do what the parent hawks would have done. Feed them their own weight in freshly killed mice every day." Perhaps I upped their ration some but I hope the lesson sank in. Man is indeed the greatest predator.

Very fortunately, most plowing is done either in the fall, when no birds are nesting, or early in the spring before nesting has started. Quite often, however, some field or portion of a field is left to plow late in spring either because it is too wet to plow early or because other work has been more pressing. Many birds are lost by late spring plowing. Meadow larks, killdeer, vesper sparrows, brewer's blackbirds, pheasants, bluewinged teal and upland plovers have all been in the path of my plow. With considerable effort I spared the nest of a bluewinged teal only to find the next morning that some predator had devoured not only the eleven eggs but the duck as well. All meadow lark nests I have spared have met a similar fate.

The upland plovers nesting in my rye field in 1948 fared better. The eggs hatched five days after I plowed the field all about the nest, and the young left before I was ready to plant the field to soybeans. We have several still pictures and about 50 feet of film to record this event.

The grain binder finds birds in its path also. Occasionally a red-winged blackbird will fasten its nest to a tall strong weed in a grain field, or a gold finch will nest in a thistle patch. Hen pheasants with little chicks are found along the edge of standing grain, where they can chose between ducking into the grain out of the sight or coming into the stubble where they can see better. Very small chicks seem confused by the noise, and are endangered by the wheels of the binder and the tractor. A little care will give them a chance to get out of the way. They are not hard to see as stubble is not much cover when viewed from overhead. One chick was making satisfactory progress toward the grain when, in a flash, it darted under the oncoming tractor tire which mashed it before I could pull the clutch.

The corn cultivator finds the killdeer and its neighbor, the vesper sparrow, nesting in its path. If the corn has emerged before nesting time, however, both of these birds will build their nest close to a hill of corn so that in sparing the corn hill the bird nest will also be spared. In late planted corn the killdeer gets into trouble for then the disc, the spike toothharrow, the corn planter and again the harrow must go over the field before there is a respite. Fortunately the killdeer's behavior makes the location of its nest easy. Its screams of distress are loud enough to be heard above the noise of the tractor. Its plaintive pleading is enough to arouse sympathy

in all but the most calloused. I once moved a killdeer's eggs out of the path of the harrow. When I returned I found the bird sitting not on the eggs but on the spot where the eggs had been. I then moved them back to the original location and all was well. It is good farm practice to delay the harrowing a few days after the corn is planted to give the weed seeds a chance to sprout. The harrowing then serves as a thorough cultivation. The killdeer often builds a nest in the field during this weed sprouting intermission. Last year my wife was harrowing a cornfield while I was preparing a nearby field for soybeans. When she stopped the tractor and went back to the harrow, I hurried over to see what the trouble was. She was trying to get past a killdeer's nest without breaking the eggs. The killdeer is a valuable farm bird. Sparing its nest is often a successful venture and well worth the time and trouble it may involve.

One wouldn't expect the corn picker to endanger any nesting birds but I have seen this happen too. The heavy snow on the first of December in 1950 caught me with twenty acres of corn yet unhusked. This corn was not picked until late May the following spring. By this time there was considerable weed growth and pheasants, killdeer, brewer's blackbirds and red-winged blackbirds were all nesting there. The wide wheels of the corn picker, the tractor, and the wagons did a thorough job of mashing the nests, and since the field was later plowed the destruction was complete. Once I stopped to fix a broken chain and almost put my knee in the nest of a brewer's blackbirds. I wonder if there is a nastier looking egg in all the bird world than that of the brewer's blackbird? A colony of red-winged blackbirds nested in another part of the field. They fastened their nests to the corn stalks where the corn ear was attached. This is the only time I have ever seen red-winged blackbird nests still containing the blue eggs, going up the snapped corn elevator of a corn picker.

Husking corn with a machine in May is pleasant but for the sake of the birds, I wouldn't recommend it.

Albert Lea, Minn.

Seasonal Report

by

Mary Lupient

The weather in March promised an early spring. Temperatures were above normal and rivers opened the earliest on record. Plowing and seeding was well under way by April 1, and at this time the season was two weeks early. However, on April 3 winter returned and a blizzard swept diagonally across the state from the southwest to the northeast leaving 8 in. of snow in its wake. Again April 15 another blizzard brought snow to the entire state.Temperatures dropped to below freezing, 13° was recorded at International Falls. A severe dust storm from Canada swirled down through the Red River Valley, April 16, bringing the coldest April weather on record. All shallow water was frozen solid. After a few warm days snow and rain again covered the entire state, April, 26. Duluth had 6 in. of snow. The weather in May was intermittently hot and cold. In less than a week the temperature at International Falls dropped from 90° to 24°. To date of this writing the weather for May has been marked by tornadoes with consequent high property loss. Frost and snow occurred as late as May 12 followed by a spell of storms and heavy rains. This variable weather affected the migration of nearly all species to some extent.

Whistling Swans appeared at several points along the Minnesota, March 25. After the ice went out, March 31, they gathered in increasing numbers in the lowlands adjacent to the Isaac Walton Bass Ponds where approximately 250 were there during the second week in April. A few lingered until May 5, six weeks after their first appearance. At Lake Traverse at the peak of the migration, April 15 to 20, there was a concentration of approximately 1500. Joel Bronoel reported that they were seen on Spirit Lake near Duluth, April 19, and J. C. Carlsen, Assistant Manager of Mud Lake National Wildlife Refuge wrote that they arrived there April 20.

An exceptionally large number of Horned Grebes was observed in some areas. On Lake Harriet, Minneapolis, 90 were counted by R. E. Cole, April 29, and Joel Bronoel reported there were 75 on the bay off Minnesota Point, Duluth. April 26. At Mud Lake Refuge 175 Hoelbell's Grebes were seen, April 30.

An early northern movement of American Egrets occurred this spring. Four were seen at Colby Lake, Washington County, May 10, by Paul Murphy. Four more were seen at points in the vicinity of Frontenac by several members attending the M.O.U. meeting, May 16 and 17. For several years a colony of Great Blue Herons has nested at Rice Lake near New Brighton, Black-crowned Night Herons are nesting with them this year. Three American egrets were seen in the vicinity by Dr. Dwain Warner, May 21, and a few days later he observed two flying out of the heron colony which suggests a possible nesting. A report presented at the M.O.U. meeting by members of the St. Paul Audubon Society stated that Black-crowned Night Herons and other fish eating birds

were being shot at the State Fish Hatcheries in St. Paul. This unfortunately was being done with the permission of state authorities. A resolution was passed at the meeting condemning this practice and suggesting that the problem be solved in some other manner.

Canada Geese were migrating through eastern Minnesota as early as March 21. The largest concentrations of geese at Lake Traverse and at Sand Lake, South Dakota occurred about the middle of April. The peak of the migration at Mud Lake Refuge was the last week in April, about 1,000 arrived. On May 7 a hot strong wind blew from the south and this writer saw flocks of geese, Blues, Snows and Canadas, flying north over Whitefish Lake. During a short period in the evening they numbered about 1,000, but residents in the area said the migration took place all day, and that about 100,000 passed over. An abundance of early warblers, flycatchers, vireos, rose-breasted grosbeaks and other migrants also took advantage of the wind and arrived at Whitefish Lake during the night. They appeared exhausted.

In most parts of the state the usual number of ducks appeared. At Duluth, Joel Bronoel reported that more than the usual number of Canvas-backs was seen. J. C. Carlsen reported the following from Mud Lake Refuge; Mallard, 9,500; Gadwall, 2,350; Baldpate, 2,300; pintail, 1,650; Green-winged Teal, 1,825; Blue-winged Teal 2,900; Shoveler, 325; Redhead, 175; Ring-necked duck, 950; Lesser Scaup, 3,250; American Golden-eye, 900; Buffle-head, 700. This count was made during the peak, April 27 to 30.

An Old Squaw duck was collected by Robert Hanlon, April 22, at Eagle Lake near Mankato, an account of which appears elsewhere in this issue. A duck, identified by Paul Murphy and others as a Barrow's Golden-eye was seen at Otter's Lake April 23.

A large hawk migration was observed by this writer, March 20. The observation point was on Cedar Avenue, south of Minneapolis. The sky was peppered with hawks for hours, most of them unidentifiable because they flew at great height. The visibility was poor for although the sun was shining there was a light mist in the atmosphere into which they often disappeared. The velocity of the south wind was very high and they sped across the sky on set wings at a terrific clip. Hawks flying near the earth circled and soared and were easily identified. About ninety percent of those closely observed were American Rough-legged Hawks and Red-tailed Hawks. There were individuals of some of the other species, among them were Broad-winged Hawks and Marsh Hawks, immature and adult Bald Eagles and one Prairie Falcon. Hundreds of hawks must have migrated during the five hours of my observation. At no time in any direction was the sky clear of the birds, half of them so high they were invisible to the naked eye. Even through the glasses they were mere specks. The hours of observation were between nine and two, migration slackening at noon.

Pigeon Hawks are again nesting on Minnesota Point according to P. B. Hofslund, who reported also that there were unusally large concentrations of Bonaparte's and Ring-billed Gulls on the Point. Four hundred Herring Gulls were observed at French River, March 8.

The peak of the migration of the shore birds in eastern Minnesota was the second week in May. The migration was not heavy but all species usually seen in this area were present.

A Hudsonian Godwit was seen by M. Evanoff at Woman Lake, Minneapolis, a Willet by P. B. Hofslund at Duluth, an unusual record, an Avocet at Mud Lake Refuge by J. C. Carlson, another unusal record. A very heavy migration of Golden Plovers was recorded at Worthington, May 19, by Carl Johnson. He saw at least 700 in one day and within a few days 1000 migrated. This report was sent to the Museum of National History. Two Golden Plovers was seen by this writer in the vicinity of Minneapolis, May 10. Joel Bronoel wrote that the Duluth Club is continuing the study of the Woodcock and Wilson's Snipe again this spring, and that the Wilson's Snipe has increased.

A saw-whet owl perched in a tree for one day, March 22, beside the dwelling belonging to William Cummings, St. Paul. It left at dusk.

Flycatchers, swallows and thrushes migrated on the usual dates. The peak of the migration of the Olive-peak of the migration of the Oilve-backed Thrush and the Gray-Cheeked thrush was the week beginning May 20. It was a heavy migration.

Vireos and early warblers also migrated as usual. The earliest date for the Myrtle Warbler in the Twin City area was April 11, and they were seen throughout the month of May to date of this writing. No large warbler wave was reported. Moderate waves occured May 8, May 12, May 19. So far only single individuals of bright colored late warblers were reported. At Duluth the migration was much later than usual, at Whitefish Lake there was a large wave of early warblers, May 8. The Prothonotary Warbler was seen on Long Lake, Frontenac, May 16 and May 17. It usually nests in this vicinity.

The Blue-grey Gnatcatcher is again nesting in the old cemetery at Old Frontenac. Its beautiful nest was plainly visible May 16 and May 17 to M. O. U. members.

Red-winged Blackbirds and Rusty Blackbirds were very abundant this season. Clouds of them migrated March 25. A Yellow-headed Blackbird was seen on Minnesota Point by P. B. Hofslund May 19. He expressed the opinion that there are only two or three records of this bird at Duluth.

Sparrows arrived on schedule. At Duluth there were more White-crowned and Harris' Sparrows than usual according to P. B. Hofslund, he observed Lapland Longspurs and Snow Buntings as late as May 14, a very late date. Slate-colored Juncos and Fox Sparrows were very abundant in Eastern Minnesota the week beginning April 8. Partly due to weather conditions, Fox Sparrows lingered longer than usual.

The Mocking bird that wintered at the John Curtis and Jennings homes in St. Paul, left May 2. It sang for several weeks imitating cardinals and other birds. It was in good condition when it left.

Minneapolis, Minn.

The Canadian Lakehead

Edited by

A. E. Allen

Weather conditions during the late winter continued to be moderate although low temperatures of -27° and -26° were experienced on February 1 and March 7, respectively. The weather during March and early April remained mild, but it became cold and stormy on April 10 and continued so until May 2, when we experienced the onset of a very warm period. At this time lakes were still frozen and snow was present in sheltered areas.

Pine grosbeaks were abundant through February, but by the end of the month, both in the cities and the surrounding country, they had consumthe rowan berries, and their numbers then rapidly decreased, none being seen after March 22. Evening grosbeaks remained throughout the winter season, and flocks of common redpolls and snow buntings were reported. Bohemian waxwings were more abundant than for several years. Eight red crossbills were seen on December 26, and we observed a male and two females in Fort William on March 27. These were so tame the pink linings of their mouth cavities were clearly noted as they fed on the ground and practically ran between our feet. A snowy owl was seen on March 8 and 27, and another on April 11 (Mrs. P. Addison). Belted kingfishers occasionally winter about open springs at the Dorion Fish Hatchery. Mr. Atkinson reported two present during the past winter.

The occasional crow, robin and cedar waxwing also successfully wintered at the Lakehead.

The outstanding event of the season for Lakehead naturalists was the joint meeting held with members of the M. O. U. from Duluth, Minneapolis and Virginia at Pigeon River, on February 14. A Canadian account of this meeting is reprinted herewith:

THUNDER BAY FIELD NATURALISTS HOLD WINTER MEETING WITH MINNESOTA BIRD CLUBS.—*

Due to distance, members of the Thunder Bay Field Naturalists Club, Fort William and Port Arthur, are unable to participate in the activities of other clubs federated with the F. O. N. The Lakehead cities, however, are only 200 and 350 miles from Duluth and Minneapolis, respectively. Both of these cities have Clubs affiliated with the Minnesota Ornithologists Union, and in recent years we have been participating in their activities. Canadians have attended the spring field-days of the Duluth Bird Club and Duluthians have joined us in our May outings, We have also attended the annual meetings of the M. O. U,; the writer was privileged in being guest speaker at the annual meeting in Duluth in 1949 and presently edits a section "The Canadian Lakehead," in The Flicker, official organ of the M.O.U. More and more ornithologists from Minnesota are visiting Thunder Bay each year to study our local birds.

For several years members of the Minneapolis Bird Club have travelled

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to Duluth joining members of the Duluth Bird Club in a mid-February trip along the north shore of Lake Superior to Pigeon River at the Ontario-Minnesota boundary. Members of the Thunder Bay Field Naturists' Club joined their American friends at succesful dinner meetings in the Pigeon River Hotel in 1951 and 1952. The get-together this year was held on February 13, 14 and 15. Forty-two members of the Minneapolis Bird Club chartered a bus on February 13 and travelled to Duluth in time for a regular meeting of the Duluth Club. Saturday morning, joined by two enthusiasts from Virginia in the Misabi Iron Range, and 10 members from Duluth, the group left for Pigeon River 150 miles to the north-east studying the winter birds along the route. Twenty-three Canadians joined them in a dinner meeting presided over by the President of the Thunder Bay Field Naturalists' Club who introduced Mr. O. A. Finseth and Mrs. Boyd Lien, Presidents of the Duluth and Minneapolis Clubs, respectively, and Mr. W. Eastman, Past-President of the M.O.U. John Futcher showed two films of colour motion pictures, prepared by Dr. W. J. Breckenridge of the University of Minnesota entitled "Birds about the Garden" and "The Seasons with the Water Birds." These films were of excellent quality and highly educational. The pictures of day-old wood ducks jumping from nesting cavities to the ground below, collecting in a little flock, and accompanied by the female, swimming the wide and rapidly-running waters of the Mississippi River were particularly instructive. At the end of the meeting the majority of the group drove to Grand Marais for the night. Sunday, a breakfast meeting was held at the East Bay Hotel and the remainder of the morning was spent in visiting feeding-stations and observing birds between Grand Marais and Lutsen. Here the Minneapolis group reluctantly left for home but the others enjoyed dinner at Lutsen Resort, one of the finest winter resorts in northern Minnesota. This still left time for the Lakehead and Duluth groups to study the bird-life along the 100-mile drives to their respective homes.

Weather conditions were favorable throughout the week-end. The temperature at Grand Marais, Sunday morning, was zero and a brisk off-shore wind was blowing. Two feet of snow covered the ground; Lake Superior was free of ice except in Thunder Bay where ice, measuring up to 2 feet in thickness, extended eight miles from shore. Twenty-four species of birds were observed between Duluth and the Canadian Lakehead. This is a small list when compared with the number which would be seen during a comparable period in Southern Ontario, but many species were of unusual interest to our American friends, some of whom saw Ravens, Canada Jays, Red-breasted Nuthatches, Bohemian Waxwings, Pine and Evening Grosbeaks for the first time. The occasional Crow, Robin, Slate-coloured Junco and Blue Jay was seen. Redpolls were very common and resident Black-capped Chickadees, Downy and Hairy Woodpeckers were also noted. A wintering flock of Snow Buntings was unexpected. A Bald Eagle was scavenging along the lake shore. Commercial fishermen were still plying their trade, and the refuse from the fisheries were an attraction for hundreds of Herring Gulls and 3 Glaucous Gulls. Towards Duluth, the occasional American Merganser, Lesser Scaup and Bufflehead was reported and American Golden-eyes were abundant along the entire Lake Superior shore, but the usually common Coweens were conspicuous by their absence. A few Starlings and House

Sparrows were seen in Grand Marais.

It is appropriate that International meetings should be held by Naturalists' Clubs from Thunder Bay District and Minnesota. The conservation problems of Northwestern Ontario are similar to those of Northeastern Minnesota. Quetico Park, in Ontario faces Superior National Forest south of the boundary. Together they form an unrivalled wilderness area, but one which can only be saved for future generations through the concerted efforts of naturalists and all others efterested in conservation in both countries. The mid-February gathering is one means of acquainting citizens of both Minnesota and Ontario of these allied problems. It is trusted that it will continue as an annual event.—**A. E. Allin, Regional Laboratory, Fort William, Ontario.**

The mild weather of March and early April was reflected in the arrival dates of the early migrants. Crows and herring gulls as usual heralded the approach of spring, both species appearing in numbers on March 16. Vast flocks of common redpolls appeared on March 22 and were present in decreasing numbers until mid-April when few remained. On April 17, another great wave of these birds arrived, but remained for only a few days. (It was interesting to observe their absence on April 24, driving north from Fort Frances, 150 miles to Kenora. About the latter town, and eastward 90 miles to Dryden, they were found in numbers on April 25, asociating with slate-colored juncos and snow buntings). Several hoary redpolls were observed at the Lakehead during the latter part of March, the first being observed on March 26 by David Allin.

Practically all the first migrants appeared earlier than usual. By April 17, no less than eight species had been reported at an earlier date than previously recorded. These included slate-colored junco (March 21), Canada goose (March 31), red-breasted merganser (April 19), hooded merganser (April 12) and hermit thrush (April 17). The effects of the inclement weather of late April resulted in a slowing down of migration, and the birds expected during that period arrived late or had not made their appearance by the end of the month. A rubby Duck seen on Lake Superior (A. E. Allin) on April 26 is the first spring record for this species at the Canadian Lakehead. Over a fourteen-year period the everage arrival date of the killdeer has been April 18 with extremes of March 25, 1945 and May 6, 1944 and 1950. This year, C. E. Garton reported the first killdeer on March 29. That this was not an isolated early arrival is evident from "Chickadee Notes" a weekly nature column edited by A. G. Lawrence and appearing in The Winnipeg Free Press. Eleven observers at nine stations between Port Arthur, Ontario, and Tilley, Alberta, 1,100 miles west of the Lakehead, reported killdeers arriving between March 28 and April 3. This species must migrate northward in a great cross-country wave.

The Winnipeg Free Press is but one of the great Canadian daily newspapers in which weekly nature columns now appear. This surely reflects a widening awareness of nature among the reading public. Five large city dailies are regularly read at the Canadian Lakehead, vis: the The Winnipeg Free Press, Winnipeg Tribune, Toronto Evening Telegram, Toronto Daily Star and Toronto Globe and Mail. The combined circulation of thee papers exceeds 1,000,000 copies daily. Each has published a weekly nature column

for many years. The articles in the Globe and Mail and the Toronto Daily Star are illustrated with nature photographs taken by outstanding men in their field of work. A few of the smaller daily newspapers realize the increasing interest shown in nature by their readers and publish similar nature columns. One of these is the Port Arthur News Chronicle. Keith Denis, Vice-President, Thunder Bay Field Naturalists' Club edits a weekly column which differs from others in as much as he combines in his articles items of interest to both the naturalist and the sportsman. As examples of these columns we have chosen the week-end papers of March 28-29. **Winnipeg Free Press.**—"Chickadee Notes No. 1662. A. G. Lawrence discussed the status of the house finch in the Eastern United States and reported on an evening grosbeak which had been banded on March 22, 1950 at West Hartford, Conn. and picked up dead April 14, 1952, 1,500 miles northwest at The Pas, Manitoba. A list of migrants reported during the previous week from the Lakehead to Saskatchewan conclude dthe column.

Winnipeg Tribune.—"Wild Wings." B. W. Cartwright reviewed the early history of the A.O.U. and referred to the increasing interest in Ornithology. He listed recent bird arrivals in Canada's Prairie Provinces.

Toronto Evening Telegram.—"In Birdland." Jim Baillie described his first bird hike on March 28, 1920. He carried a three dollar pair of binoculars and a bird guide which had cost him seventy-five cents!

Toronto Globe and Mail.—"Wings in the Wind." Anne Merrill reviewed a recent Audubon Screen Tour "Oddities in Nature" and listed recent bird arrivals at Toronto. (Incidentally, each Audubon Screen Tour will run four successive nights at Toronto during the 1953-54 season).

Toronto Daily Star.—"Bird Life in Ontario". Hugh M. Halliday described the annual spring migration of the whistling swan from Chesapeake Bay, via the Finger Lakes of New York State to Long Point Bay, Lake Erie. There, about 5000 swans arrive towards the end of March and remain into the second week of April.

Port Arthur News Chronicle.—"Outdoors". Keith Denis reviewed the effect of selective trophy hunting of moose in Findland. It has resulted in a replacement of the much-sought palmate type to a cervina-type of horn in the moose population of that coun ry. A note on hibernating poor-wills in Colorado and a list of recent bird arrivals completed his article.

It is to be hoped more and more newspapers will follow the lead of those mentioned. It cannot help but be of benefit to our counties as it causes more and more people to realize there must be a wise use of our natural resources—true Conservation.—**Regional Laboratory, Ontario Department of Health, Fort William, Ontario.**

Notes of Interest

AN UNUSUAL NUMBER OF UNUSUAL BIRD RECORDS—Bird watching in the Twin Cities area has thrilled observers with an unusual number of surprises. Following is a record of interesting observations made during the winter of 1952-1953. On December 27, Brother Pius found a winter wren near the Sewage Disposal Plant. A number of observers have seen the flock of some 15 to 18 bronzed grackles remaining about a dump at Ft. Snelling at an open water spot in the river. Here, too, several observers saw a green-winged teal, a gadwall, and a kingfisher. Another kingfisher is evidently finding food and protection from icy winds at the Isaac Walton Bass Ponds. A Carolina wren had been observed by several people along the brushy, protected river bluffs some distance off West 7th Street. St. Paul Audubonites have found several robins in St. Paul this winter. At Mr. Whiteford's place at Long Meadow slough they saw a catbird, which was seen by Jimmie Cummings at a later date (about mid-January). Tufted titmice have been visiting John Hall's famous feeding station at Highwood, St. Paul, coming in several times daily to feed. Here, too, a lone song sparrow is a fairly regular "boarder" as well as a considerable flock of purple finches. The latter are feeding here so continuously and so voraciously, and with an air of "possessiveness" that Mr. Hall is beginning to consider them something close to a nuisance. Several white-throated sparrows made their daily appearence here during November and most of December. Several times a fw pine siskins hovered about the shrubbery and trees near the feeder. Then there is our renowned mockingbird spending the northern winter in the back yard of Mr. and Mrs. Jennings here in St. Paul. Its main fare during the cold weather seems to be peanut hearts—dieting with common sense according to existing weather conditions. On January 11, John Hall saw a hoary redpoll near his home. It was in company of several common redpolls. A few days later the writer found a "hoary" with several common redpolls at the State Fish Hatchery bog. It was evidently the same flock, seen about a mile from Mr. Hall's home. No doubt, other observers could extend this list considerably, proving that this winter's bird study provided more than the ordinary number of "surprises" that help to make bird study a fascinating sport and a fine medium of relaxation.—**A. C. Rosenwinkel, St. Paul, Minnesota**

BIRDING IN THE BACK-COUNTRY OF THE SUPERIOR NORTH SHORE—On July 22, 1953, I made a little birding jount into the back-country of the North Shore area traveling along the Old North Shore Road from a point directly west of Castle Danger to Gooseberry River. About two miles south of the Gooseberry, somewhere near the Bud Creek fire tower, I saw a black bird slowly soaring across the road, above the tree-tops, and alighting on a branch of a fairly tall aspen. I approached cautiously to within about 200 feet and studied the bird with my 7x50 binoculars. Fluffy "hackle" feathers showed clearly on the lower throat, and the beak of huge dimensions, identified the bird as a raven. After a minute or so the raven took flight and the rounded tail and characteristic flight of alternating wing-beats and periods of soaring on perfectly straightened wings gave me further proof of its identify.

Some time later, after having been surprised by the presence of three starlings at the clearing on the Gooseberry (instead of seeing eagerly expected ravens), and having discovered a long-eared owl perched silently in a dark spruce thicket, and having lost the correct road several times in an un-posted wilderness where only natives find their way easily and having watched the sharp-shinned and the Cooper's hawks hunting their prey in brushy cut-over and burnt over bush country, and hunted out a few species of northern warblers in interesting spruce balsam bogs, and after having relished the beautiful, varied minor cadences of the white-throated sparrow singing in the concealment of dense evergreens, in places wet and inaccesible, and after having had the "gooseflesh" crawl up and down my back as I stood alone at a lonely dump in a little clearing surrounded by towering pines, aspens, birches, and dense alder thickets to read in the somewhat discomforting semi-darkness on the big sign posted on a grizzled old spruce the disquieting warning, "Don't shoot the bears". I decided suddenly that I had had enough of northwoods adventure for one day, and that it might be expedient to get back to my car to re-enter areas of good roads, well-marked highways, more sunlight and of birding under conditions of greater ease and comfort.—**A. C. Rosenwinkel, St. Paul, Minnesota.**

TWO EARLY SHOREBIRD RECORDS—On March 22, 1953, Burton Guttman and I saw a greater yellow-legs on the 24th Avenue slough near south Minneapolis. This observation was made eight days earlier than the earliest date recorded in Robert's **Birds of Minnesota, 1936.** The following day, March 23, I returned with John Futcher and saw the greater yellow-legs again. In addition we saw three pectoral sandpipers. This observation of the pectoral sandpipers was made nine days earlier than the earliest record, April 1, in "Birds of Minnesota." John and I returned on the 27, with Mrs. Lupient from the Minnesota Bird Club, but we could not locate the birds. However, Mrs. Lupient did see a greater yellow-legs on the same slough on March 30.—**William Pieper, Avifaunal Club, Minneapolis, Minnesota.**

AN OBSERVATION OF PHEASANTS—On a sunny, quiet Sunday morning during the 1952 pheasant hunting season, I idly contemplated the 8 or 10 acre weed and grass field from the picture window in the back of our home. In about the center of this abandoned pasture there is a large brush pile, and 100 yards to the east a set of weed grown and(except for the home), abandoned farm buildings. From the brush pile with a mild degree of caution there emerged a hen pheasant who slowly began to move toward the weed patches near the farm buildings. As she slowly proceeeded, she fed along the route in an unconcerned manner as indeed there was nothing visible in the neighborhood that might be construed as threatening. When hen No. 1 had moved about 20 yards along the way, hen No. 2 came from the brush pile to follow No. 1. Then hen No. 3, about the same distance back of No. 2. Finally there was an irregular string of 13 hen pheasants visible, some just entering the weed patch, and No. 13 just coming out of the brush pile. When this last hen had traversed two-thirds of the distance I saw through my binoculars an irridescent head thrust through the branches and study the surroundings for a full half-minute. The neck disappeared, and shortly in the path of the now distant hens, out stepped his cautious majesty. Again, he studied the terrain. Then with somewhat

hurried steps he set out after his harem. When he was over half-way to them, rooster. No. 2 came out and went through the same behavior. It seemed obviously that the ungallant males certainly gave the hens the opportunity to invite danger before they risked themselves.—**Vernon L. Whipple, D.D.S., St. Paul, Minnesota.**

OLD SQAW TAKEN ON EAGLE LAKE—While on a field trip the morning of April 22, group of students ond I observed an unusual Duck near the shore of Eagle Lake which is 6 miles N.E. of Mankato. This duck, swimming with two pied-billed grebes, had somewhat the appearance of a female wood Duck though smaller. When it dove, I decided to take the specimen for further identification. It proved to be a female Old Squaw duck, now on display in the biology room of Mankato Senior High School. It has a body length of 14¼ inches, a wing spread of 23½ inches and weighed one pound, two ounces.—**Bob Hanlon, Mankato, Minnesota.**

GREAT BLUE HERONS ON LONG LAKE—During the mid-summer of 1952 I was anchored in 15 feet of water catching small sunfish on Long Lake No. 2 ten miles east of Backus, Minnesota. I noted as I had many other times the direct, easy flight of great blue herons that passed in the neighborhood of my boat, and reflected that there must be a rookery somewhere in the area. Fish were biting slowly, and among them some that were too small to keep. In my efforts to release these a few were unavoidably injured, and moved by the gentle breeze, there were a half dozen or so strung out and fluttering on the surface moving toward the distant shore. This surface splattering evidently attracted the attention of a great blue heron about 100 yards up who was headed over my boat. He set his wings air-scoop fashion and made a slow decent with a wide 180 degree turn to land in deep water alongside a dying fish. With a single thrust he picked up his prize, and as though he had had solid footing, took off in his original direction.—**Vernon L. Whipple, D.D.S. St. Paul Minnesota.**

STATUS OF AMERICAN EGRETS IN RICE COUNTY—The July-August, 1952 issue of the AUDUON MAGAZINE stated: "Many of our readers will remember 1948 as the 'great year' for southern herons. In Minnesota, American egrets nested for the first record in history for the state. . ."

During the last two weeks of August, 1948, three American egrets were observed at various times feeding at the following lakes in Rice County: General Shield's Lake and in a swamp located near the airport west of Faribault. These birds were first observed on August 20, of that year.

In 1949 the number of birds seen in Rice County increased to thirteen or more. According to my field notes, August 11 was the first date on which the birds were observed that year. They were found again at General Shield's Lake (near the great blue heron colony) also at Lake Mazaska, and Mud Lake (located near General Shield's Lake).

In the October, 1949 issue of the AUDUBON FIELD NOTES, Vol. 3, No. 5, p. 236 the following reference is made: "Mrs. C. MacKenzie, Jr. writes that American egrets have definitely nested on Heron Island on General Shield's Lake, 10 miles northwest of Faribault, Rice County, Minnesota, and is sure of one nest, although there must have been more, because 12 and 14 birds were seen feeding at various times for about two weeks."

On August 15, 1950, 16 of these birds were seen feeding at Lake Mazaska, and were seen at various times for about two weeks.

In 1951 the earliest date for these birds to appear in the county was August 20 and the latest date was September 24.

On April 23, 1952, three American egrets were seen feeding near the great blue heron island at General Shield's Lake. This is the earliest known date of arrival in this county. Again on May 1, while checking the nesting of the great blue herons on the island, I observed three American egrets flying with the frightened great blue herons. On June 29 the number of American egrets increased to six, and they were observed feeding a short distance from the heron colony. Eleven were counted on the island on July 9.

The island was again visited on August 14, but the heronry was entirely deserted with but two great blue herons seen flying over the lake. No American egrets were observed on this date.

Even though no nest was found, it is believed that the American egrets did nest during that year on the island because of the increase in number during the summer and also the early date of arrival in the spring.

On May 19, 1953 two American egrets were seen feeding near the great blue heron island at General Shield's Lake. The area was again visited on May 21 and one American egret was seen to fly above the island and land on one of the trees. No nest has been found to date.

Orwin A. Rusted
Department of Biology,
St. Olaf College
Northfield, Minnesota

Call Notes

by

Franklin Willis

The 1953 annual meeting of the M.O.U. was held May 15th and 16th at Old Frontenac. The St. Paul Audubon Society acted as host club. Pepers were presented by Robert Hanlon, Walter Jiracek, A. C. Rosenwinkel, Lewis Barrett and Charles Flugum. Officers elected for the coming year were: Pres., O. A. Finseth; Vice Pres., Lewis Barrett; Treas., Mrs. Lupient; and Sec., Mr. J. K. Bronoel. ***

The 71st annual meeting of the A.O.U. will be held at the Los Angeles County Museum from Oct. 21st through Oct. 25th. ***

The 34th annual meeting of the Wilson Ornithological Club was held at the University of Michigan Biological Station at Douglas Lake on June 14th through June 17th. Dr. W. J. Breckenridge was re-elected President. Among those attending from Minnesota were Mrs. Northrop of Owatonna, the Putnams from Duluth, and Amy Chambers, Glenn Dowing, Al Grewe, Dr. Warner, and Mr. and Mrs. Barrett from Minneapolis. ***

Strange doings in the bird world. Two cock pheasants were observed perching on telephone wires in Wisconsin. The birds seemed to have no difficulty balancing but the practice will probably never become very common as their large feet adapted for walking on the ground were never meant for grasping slender wires. ***

The members who attended the M.O.U. meeting at Frantenac thought that they really had a find on their hands for a while. A black necked stilt was observed in a roadside pond where it remained quite motionless and afforded everyone a good look. However, several ardent amateur ornithologists wanted to get a closer look with the result that the bird was discovered to be a mounted specimen! This enlightening discovery, of course, had a dampening effect on the spirits of those who had just added a new species to their life list. Be on the alert at the next meeting—who knows what will turn up then? ***

The Audubon Bird Call is a simple divice that will be of use to those of you who have difficulty calling and attracting birds. It produces sounds resembling bird notes when a small pewter piece inside a birch wood holder is twisted. The June 13th issue of the **Saturday Evening Post** contained a very interesting article about the man who makes these bird callers. The calls may be obtained from the Minneapolis Public Library Museum. ***

The Science Museum of the Minneapolis Public Library is continuing a popular field trip series this summer for school children from the 6th through the 12th grades. The emphasis is on broad natural history observation and appreciation. Last years' series indicated that many of the students followed up this introduction to nature with further study and observation on their own of the particular phases that interested them. The values and benefits accruing from a summer activity such as this are evident to all, and it is a program that might well be undertaken by oth-

er organizations. The only expense involved, transportation, is covered by a nominal registration fee; of course, someone has to donate the time to lead the group. This is a crucial factor. Miss Maxine Begin, of the Science Museum, would be glad to furnish information to anyone who is interested in establishing a similar program. ***

Les Kouba, wildlife artist, presented a very interesting film at the May meeting of the Minnesota Bird Club. It illustrated the production of a painting of geese from the painting's inception and planning through the filming of geese and the actual work on the canvas to its shipment to the publisher. Mr. Kouba feels that the motion picture camera is a great aid to the artist who is striving for greater accuracy. ***

Dr. O. S. Pettingill of Carleton College has accepted a contract with Walt Disney Productions to film penguins and other wildlife on the Falkland Islands in the South Atlantic. The Falklands have an avifauna that is impressive both in variety of species and number of individuals. Over 100 species have been recorded on the archipelago. About 70 species breed; of these, more than half are shore, freshwater, and land birds. Some of the colonies of sea birds are among the largest in the world. The penguin colonies of the Islands have attracted univeeral attention. Today the big King Penguin occurs only sparingly, but the Johnny, Rockhopper, and Jackass Penguins flourish in enormous colonies on the isolated headlands and smaller islands. Dr. and Mrs. Pettingill will fly to Montevideo, Uruguay in October, and there board the SS Fitzroy on its monthly trip to Stanley, capital of the Falklands. With Stanley as their base they will make trips by chartered boat or plane to some of the outlying islands which support the larger penguin colonies. ***

A description of all the True Life Adventure Series has been put up in booklet form and can be obtained by writing Walt Disney Studios, 2400 West Alameda Avenue, Burbank, California. ***

Messrs. Breckenridge, Gunderson, and Jarosz of the Minn. Museum of Natural History staff spent June and July in the Back River area of northern Canada just west of upper Hudson's Bay. The objectives of the trip were photography and study of the wildlife of the area and the banding of breeding migratory waterfowl. ***

Of interest to teachers:

Bob Hanlon, biology instructor at Mankato Senior High School, has prepared a survey of techniques for teaching conservation in high schools. Two major sections have been developed in his study. They are general procedures for study of migratory game birds and for study of upland game birds. The report is a publication of the Advanced Teaching of Science #287 of the Dept. of Education, University of Minnesota. ***

Mrs. Ralph Boeder, an active member of the Duluth Bird Club, and well known to many of the M.O.U. membership, died at Duluth on July 20.

The Book Page

The Biology of Birds—by Harry W. Hann. Edwards Brothers, Inc. (Obtainable at Ulrich's Book Store, 549 East University Avenue, Ann Arbor, Michigan). 1953. 153 pp. 10 illustrations. $2.50.

Here are 150 pages jam-packed with information, surprisingly complete for such as small volume dealing with such an extensive subject. There are 12 major subject headings:

Morphology and Physiology
Bird Flight
Migration—Homing
The Breeding Cycle
Anting
Longevity of Birds
Bird Banding
Distribution of Birds
Conservation
Wildlife Refuges
Economic Importance of Birds
Attracting Birds

There are eight excellent drawings by William Brudon, and three photographs of the Cowbird at the nest taken by Dr. Hann. The illustrations are well produced and the print is easy to read. This book should be of considerable usefulness to the professional ornithologist, especially as a quick and ready reference. Amateurs with more than a casual interest in birds will find it a mine of information and an exceeding valuable reference to have around. **P. B. Hofslund.**

Birds of the Everglades and Birds of Massachusetts by Henry H. Collins, Jr. Blue Heron Press, Box 236, Bronxville, N.Y. (also obtainable through the Massachusetts Audubon Society, 155 Newbury St., Boston, Massachetts). 15 pp., illustrated. 25¢ (minimum order, $1.00).

These two well-illustrated (by Roger Tory Peterson) non-technical pamphlets should be of interest to amateur ornithologists visiting Florida and Massachusetts. Of special help will be the check-lists of the common birds of these two areas, and a list of the best birding spots in these two localities. They are printed so that they make their own mailing folder, and they would serve admirably as greeting cards.—**P. B. Hofslund.**

Editorial Policy

Certain questions have been raised in the past few weeks that need clarification. In addition, there is a need for reminders to members of the **M.O.U.** in regard to preparation of manuscripts for **The Flicker.** The following list of pojnts are offered with the hope that some of these questions will be cleared up, and that future contributors will take a little more time in preparation of their material so that the editorial board will have less trouble in trying to prepare an issue. **P. B. Hofslund, Editor.**

1. The type as it is set up for the affiliate club list is kept that way from issue to issue. Any change that must be made requires a complete retyping of copy and resetting of type. This means additional work and additional expense. Our clubs apparently hold their elections at different times during the year, and so it is necessary to arbitrarily select one issue for changing the club officer list. As the activity of the clubs seems to be greatest during the school year, the September issue is the one selected for this change.

2. All changes in club officers, meeting places, etc. should be sent directly to the editor.

3. If through resignation, death, or other reasons a change must be made during the year, this change will be published by **The Flicker** as a correction separate from the listing.

4. Please examine past issues to see what information is desired for the listing. Invariably the club listings as we get them fail to indicate the M.O.U. representative. This officer has a great responsibility in the organization, and he or she should be properly designated.

5. Material sent in for publication, including officer listings, should be typed. It should be double-spaced and on one side of the paper only. If it is not possible to have it typed use wide spaces between lines to allow for editors notations.

6. If you expect your observations to be published don't send them as scattered bits of information in a letter to the editor. We are always happy to hear from members, but in most cases it is too much of a time-consuming procedure to sort out enough material for publication.

7. . Even if you have only short notes, please put only one per sheet. If more than one note is included on the same sheet we have to retype it.

8. A line saying that you have seen a bird rare to the state or season is not enough for publication. A complete description of the marks you used in identifying the bird is necessary, and even then it must be left up to the eritor's discretion whether this slight record is acceptable.

9. Perhaps you are uncertain whether your observation is of enough interest to warrant publication. Write it up and send it to the editors. Let them decide.

10. If you are uncertain about style, copy some of the articles used in the past. Your old **Flickers** can be useful references.

Minnesota Ornithologist's Union

Affiliated Societies

Albert Lea Bird Club

Officers: President, Charles F. Flugum; Vice-president, Iva M. Loy; Recording Secretary, Loes Scott; Corresponding Secretary, Olive Johnson; Treasurer, Maybelle S. Thompson.

Duluth Bird Club

Officers: President, O. A. Finseth; Vice-president, Evelyn Palmer; Secretary, Catherine Lieske; Treasurer, Harvey Putnam; Field Chairman, Joel K. Bronoel; M.O.U. Representative, O. A. Finseth.

Meetings are held the second Thursday at the University of Minnesota, Duluth.

H. J. Jagar Audubon Society

Officers: President, Mrs. George Peterson; Vice-president, Robert Kual; Secretary, Mrs. H. A. Northrop; Treasurer, Mrs. John P. Zimmerman; M.O.U. Representative, Mrs. H. A. Northrop.

Meetings are held the fourth Monday at the Owatonna Public Library.

Minneapolis Audubon Society

Officers: President, Mrs Whitney Eastman; Vice-president, Mrs. George O. Ludeke; Treasurer, Florence Messer; Recording Secretary, Mrs. Edgar Bedford; Corresponding Secretary, Mrs. E. W. Joul; Field Secretary, Mrs. J. A. Thompson; Auditor, Mrs. E. D. Swedenberg; M.O.U. Representative, Mrs. I. S. Lindquist.

Meetings are held at the Walker Branch Library.

Minneapolis Bird Club

Officers: President, Mrs. Boyd Lien; Vice-president, W. S. Quam; Secretary, Florence Messer; Treasurer, Amy Chambers; Membership Chairman, Mrs. Whitney Eastman; Program Chairman, Vera Sparks; Field Trip Chairman, John Futcher; M.O.U. Representative, Amy Chambers.

Meetings are held at the Minneapolis Public Library.

Minnesota Bird Club

Officers: President, Forrest Lee; Vice-president, Dwain Warner; Secretary, Jesse Richardson; Treasurer, Lucille Hunter; M.O.U. Representative, W. J. Breckenridge.

Meetings are held at the Minnesota Museum of Natural History.

St. Paul Audubon Society

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The Presidents Page

We have it on good authority, no less than that of Ernest Mayr, that among professional ornithologists there are very few who can devote more than a fraction of their time to field observation work.

This presents an unique opportunity, but at the same time rests a large responsibility for this type of work on amateur observers.

That there is much field work yet to be done is very apparent. Take note of the fact that we are just now discovering that the north shore of Lake Superior has for untold centuries been a "highway of the hawks" coming down from Canada.

First noted by Dr. Lakela and now being more fully investigated by Hofslund of the University of Minnesota, this interesting phenomenon is already attracting state-wide, and in the future, national attention.

How did this discovery come about?

Because a frail little woman with an unbounded zeal for research spent countless hours in the woods and fields wooing the secrets or birds and plants.

While this is a more breath-taking discovery than most of us can hope to make, it is perhaps well to remember that it isn't always the spectacular that teaches us most of nature lore, Oftentimes the seemingly commonplace is important. Many day-to-day observations when added together can some times prove an important fact.

Reading the pages of Dr. Robert's "Birds of Minnesota" we note that he acknowledges the names of innumerable observers that he was in contact with, directly or by correspondence, during preparation of the work. With this help he was able to draw on experiences even beyond his own, and give us two large volumes of treasured information for our use and enjoyment.

We are fortunate even now to have in our state university and its Duluth branch, in other schools throughout the State, and also many in public and private life who are well versed in bird lore, all well qualified, and what is more important, willing to help the rest of us to a wider knowledge of this fascinating subject.

In order to encourage our members to avail themselves of the benefits of association with more skilled observers, and to meet and learn from each other, we are planning field days on a state-wide basis.

To help carry out these plans, I have lately appointed Lewis Barrett state field trip chairman. He will in due time present the plan both through The Flicker and possibly by circulars directed to the various clubs. **O. A. Finseth**

Bandits Of The Pine Barrens

by

Herman J. Brown

My farm was situated on the Wisconsin side of the St. Croix, fronting on the river bank and reaching back into what is known locally as the Jack Pine Barrens. The surprisingly wild Barrens comprise two or three hundred square miles lying in a great bend of the river. From Never's dam northward they are dominated by a forest of jack pine and scrub oak, while a belt of decidous forest covers the river lowlands. This bit of country has been intermittently settled, as the old clearings and decayed buildings show, but the soil is sandy and not well suited to dirt farming. While I was there, the Barrens had no more than one inhabitant to two square miles, and there are even fewer settlers now. There was a full quota of wild life, however, and the predatory birds were well represented. I lived in this area, not far from Grantsburg, for 14 years, raising sheep, turkeys and chickens, and in that time the relationship between domestic poultry and various predatory birds was quite clearly expressed.

The events of this account may be more clearly pictured with some explanation of the way the domestic birds were handled. All the buildings were grouped above the long slope to the river, just on the margin between the pines and the deciduous trees. The laying flock of turkeys, from December to May, was penned nearby. The brooder, chicken houses and run were adjusted to the dwelling for convenience in tending them. Turkey eggs were collected from March through May, and the brooding season extended from April to July. When the young poults were from six to eight weeks old they were transferred to portable roosts, roofed but open on three sides and ranged in the clearings that lay beyond a belt of woods, a quarter to half a mile from the buildings. These clearings comprised about sixty acres, irregularly divided and bounded on all sides by the pine woodland. The turkeys were moved about on these ranges until late November or early December, when the unmarked birds and the next breeding flock were moved once more to pens and roosts near the buildings.

One can see that this routine exposed at least some of the birds to predation throughout the year.

Hawks were a daily sight throughout the summers, and the area was seemingly an owl's paradise, as will appear. The turkeys themselves, with far sharper eyes than mine, had an informative vocabulary in these matters, and called my attention to many birds. Even when the flock was ranged at some distance I could get a fair notion of what was going on from the sounds they made or the sounds they stopped making. If alarms persisted, I'd have to drop what I was doing and investigate. Scarcely a day passed during the range season without a disturbance of some kind, most of them of no consequence, but serving to indicate the number of possibly dangerous birds present.

Reprinted by permission from The Minnesota Naturalist 3:3 pp. 33-38.

I saw and positively indentified during my stay, the following: goshawk, sharp-shinned hawk, Cooper's hawk, red-tailed hawk, broad-winged hawk, marsh hawk, and bald eagle, Present also were the screech owl, saw-whet owl ,short eared owl, northern barred owl, snowy owl and great horned owl. The crow was seen more often in the area than the raven.

I did not indentify the barn owl, the long-eared owl, or the hawk owl in the area under consideration. Rough-legged hawks were rare and not certainly recognized. Of the falcons, I saw the sparrow hawk.

Considering the species that were present, some of them can be quickly covered. Ravens were uncommon visitors, and I never saw them near the buildings or the domestic birds. Crows were fairly plentiful, nesting and roosting in the neighborhood. They did not attack the young birds, but they did steal eggs and join the turkeys at the feeders. The turkeys nests were usually in barrels, open at one end and laid upon the side. Some years the crows raided the nests persistently and cleverly . Two or three would come early in the morning and wait quietly, watching the nests with one eye and watching for trouble with the other. When the hen left the nest, the egg was immediately snatched. In those seasons when they became a serious nuisance. I was forced to liquidate the thieves as turkey eggs were worth up to forty cents a piece. Losses from crows amounted to perhaps five or six dollars a year.

During the later part of my stay, bald eagles were not an uncommon sight. Usually they were seen sailing up or down the river, probably looking for dead fish. Over a period of three or four years, a mature eagle made fairly regular and almost daily appearances through spring and early summer, and there may have been a nest farther upstream, The eagles would occasionally swing inland and pass over the turkey flocks, causing some alarm, but never trying to take a bird. The turkeys seemed of no interest whatever to them. In the same category as to its effect on poultry was the osprey, which was seen frequently near the river and which, of course, displayed no concern with anything but fish.

Marsh hawks were regular visitors to the clearings. I hesitate to say that turkeys can tell one hawk from another, but the marsh hawks, though watched closely by the turkeys, never were the cause of much disturbance. They never came near the brooder houses and in the clearings seemed to have their attention fixed on mice, snakes and other grass-root animals.

The red-tailed hawk was a somewhat less intimate visitor, though there was at least one nest within two miles of the farm. These hawks would sail over the clearings and occasionally stop in a tree nearby and look at the turkeys, but they were entirely negative in their attitude even toward the young birds.

For nearly five years a pair of broad-winged hawks nested in the lowland, along the river bank ond less frequently in the pine eara. The aerial evolutions of the male, high in the air above the river, were part of the daily picture during the spring months. They seemed to be more vocal than the other

hawks, and this often called attention to them. Always good neighbors, they never interfered with the poultry in any way.

As one might expect, the accipiters displayed a different attitude, all the members of this bold group showing an interest in the poultry. The sharp-shinned hawk was either present in fewer numbers or was less conspicous than the Cooper's or even than the goshawk when the latter was moving through our territory. I never lost a bird to a sharp-shinned, though on a number of occasions I saw one hovering above the screen porches on which the young turks were running. The adverse effect of the sharp-shinned, as far as I know, was zero.

Cooper's hawks might be observed in the neighborhood two or three times a week during the spring and summer. They stayed pretty well in the brush, popping out of the trees to cross the clearings, or perching near the edge of the woods for a moment or two, I could only guess at the number of individuals present, and I think it likely that the same birds were seen again and again. At any rate, the Cooper's hawk was never absent from the bird population in season, and I had always expected trouble from him, knowing his reputation. One day, late in June of one of the first years I kept turkeys, I walked back to the clearings to check on the flock of seven or eight week old birds. As I approached, a mature Cooper's hawk left the ground near the roosts and flew to a tree a few feet away. It remained there until I drew near and then flew into the woods. I found that it had killed and partially eaten one of the young turks, a bird that would weigh about three pounds. Two or three days later he repeated the attack and killed another bird. On his next visit I shot him (or her)—an easy hunt as he went boldly through the same tactics each time. Once more, some years later, there was a similar sequence of events. I had expected more trouble, but that was the sum of 14 years contact with this hawk. Five dead turkeys, two dead hawks, financial loss about ten dollars. Never, apparently, did this notorious "hen-hawk" take one of my chickens.

The relation of the formidable goshawk to the turkeys was limited by the fact that it occurred in the neighborhood only from late fall to early spring. During this period the turkeys present were well grown and weighed from 12 to 13 pounds, and the goshawks' valor probably gave way to discretion. Large as the turkeys were, however, these hawks were still interested in them. I was with the flock more than once while a goshawk dived out of nowhere, swept the roosts, down among the very heads of the turkeys like a blue streak, and then up to some perch from where he could enjoy the confusion he had caused. But goshawks never attacked.

In the chicken pen, things were different, The hens' runway extended into the brush a bit, so that they could have shade and shelter. If I neglected to house the pullets early in the fall, this arrangement was very agreeable to the goshawks. I would hear an alarm among the hens, and if I was near enough, see them dive for the bushes or the henhouse. I was seldom prompt enough to take effective action. In fact I was usually absent during the

attack and would become aware of it only when I stumbled on the carefully deplumed and partially eaten corpse of a hen. The hawks made their kill and their meal upon the spot, and they were not readily driven from it. The arrogance of the goshawk is fabulous, and those that were surprised in the act showed little fear and no hurry, only a grudging acknowledgment that I was big enough to drive them from a victim that was rightfully theirs. This insolence was of course fatal at times. I reluctantly killed three of these magnificent birds as they were attacking or eating hens. Altogether the goshawks took about a dozen adult chickens during the six years that I kept a henhouse. Some year they took none, while in others I believe one individual returned to the henyard repeatedly. The total known loss was about twenty-five dollars.

Appraisal of the goshawk from these results must be qualified. He was present for only a few months of the year and the chickens were housed for much of that time, so that there was just a short period of exposure each year. With greater opportunity he could certainly do a lot of damage to poultry.

Summing up my losses from six species of hawks, plus the bald eagle, the crow and the raven, over a period of fourteen years we have:

From the crow's egg stealing	$60.00
From the Cooper's hawk	10.00
From the goshawk	25,00
From all others	0.00
Total	$95.00

It ought to be satisfactory to a conservationist to compare this figure with losses from animals over which these birds exercise some control. Mice in the granary did about twenty dollars damage a year, squirrels carted off bushels of corn from crib and field, and pocket gophers were a plague in the hay meadows. Losses from these sources must have added up to three or four times the amount charged to the hawks. To be fair, it must be added that had the very young turkeys and chickens been exposed, losses would certainly have been greater. It is probable also that there were attacks upon the flocks that I knew nothing of, and probably some birds were taken and not missed.

In this part of the St. Croix valley there is more entertainment for the ears at night than in the daytime. The darkness there is full of sounds—insects, frogs, toads and birds all contributing in their proper season, and mostly the chorus is dominated by the voices of the owls. I heard the owls many more times than I saw them, and it is characteristic of these adventures that the sounds they caused, either directly or indirectly, formed the usual contact with them.

I can say at once that the smaller owls, short-eared, screech and saw-whet caused no trouble. The first, I saw and recognized only three or four times as they were hawking over the clearings much in the fashion of marsh hawks.

One of these was caught, through my own carelessness, in a pole trap. The screech owl was usually present, but was not as common as might be expected. In my experiences they seem to be more abundant in less wild places. The saw-whet owl I did not recognize as a resident until the last four or five years of my stay on the Barrens. During that time a pair nested on the slope before the cabin and were a source of considerable entertainment. One of this pair was killed, apparently by a larger owl. These three owls had no effect whatever on the poultry.

The snowy owl did not appear in the vicinity as often as I had expected. I remember seeing only two, and I've seen more within the city limits of St. Paul. Were they less diurnal in habit, some of the disturbances that accurred during winter nights might be attributed to them, but I had no reason to suspect them of molesting the poultry, even though they appear capable of such activity.

The barred owl was probably as abundant in the neighborhood as it is possible for a predatory species of its size to be. It was encountered frequently in daytime, it was very noisy at night, and I found two nests— one within 200 yards of the buildings. In my experience, they confined themselves largely to the deciduous area of the river banks and to the lowland with small streams and beaver ponds near the farm. They were the first of the owls to be convicted of taking turkeys.

It was sometimes necessary for me to remove a batch of young turkeys from the brooder house a bit prematurely in order to make room for another lot of newly hatched poults. Under these circumstances the birds were placed temporarily in roosts near the buildings, in small open areas among the trees. When this arrangement was set up, the barred owls would sometimes take a bird or two. In the morning the carcass would be lying on the ground within the pen, partially eaten. The first turkey lost to predators was found in this way, and traps set about the victim captured a barred owl the next night. I don't recall any instance of damage traceable to these owls once the young turks had been removed to the customary range a quarter of a mile or more from the river. The number of poults taken by them may be estimated roughly at fifteen, all young, and the financial loss did not exceed thirty dollars.

The great horned owl is the villain of this piece. In size and armament he does not greatly exceed other birds of prey that have been considered, but my acqueintance with him he showed a malign spirit. His persistent ferocity in action enabled him to inflict damage far beyond that due to all other predaceous creatures combined,

The horned owl was prompt in turning from his native prey to the turkeys, and I well remember the initial raid. My first flock, a small one of 350 birds had been out in the clearings for a few weeks without incident. The July night was fine and still, the full moon rising, and the owls in full voice up and down the valley. Like the wolves, they seem to have a ceremonial howl before the hunt begins. An hour or so after nightfall, while I was in the cabin reading,

there came a loud rushing roar that lifted me right out of the chair. I thought of falling trees, explosions, wind squalls and other things, and it was some time before I realized that the sound must have come from the turkeys. Taking the gun, I hurried out to them. The moon shone on almost empty roosts, but I could see turkeys, like black hummocks, scattered over the clearing. As I passed these, each hissed like a snake and ran aimlessly a few feet. All had assumed what might be call the turkey position of fright—tail spread and depressed, feathers expanded and neck stretched out along the ground. I had never met such an expression of terror, and I grew a little nervous myself as I poked about in the shadows and the brush trying to find the cause, and only starting up more terrorized birds. Most of the remainder of the night was spent driving what I could find of the flock back to the roosts. Another search in daylight failed to throw any light on the disturbance. I thought it was all probably due to a fox until a similar incident occurred two nights later, and I found in the morning the body of a turkey with the head missing and some of the breast eaten, Traps set around the remains caught a horned owl the same night.

This first experience set the pattern for many that were to follow. The moonlit night, the explosion of the flock, the headless victim, the return to the kill were all typical. There were lulls and intermissions, some years the owls being more persistent than in others. The fully grown turkeys were bothered less than those aged eight to twenty weeks, and on rainy or overcast nights the owls preferred to stay home from the hunt. Yet, during all my years raising turkeys on the Barrens, I was never quite free from the expectation of a raid by the horned owl.

In the course of time we became unmitigated enemies. I don't think that any action that I took against him brought about any change in his habits, beyond eliminating them entirely once in a while, but he certainly influenced mine. What with years of anxiety, lost sleep, dead turkeys, and futile angry hunts in the dark, he even influenced my state of mind. I personified him in an ugly way as I have no other animal. There was something eerie and even unclean about him. He smelled loudly of skunk and his loose feathers were infested by a certain nimble parastitic fly that transferred itself to my neck when I handled him. I hunted him by every conceivable means, stalking his voice in the moonlight, running down every rumor of an owl seen perching in daytime, searching the woods for his nest in March, creeping up on him when crows were pestering him, and by the only really effective means—traps.

There were a few especially harrowing contests with these demons which I have no difficulty in recalling. One autumn, the turkeys being ranged far toward the back of the farm, more than half a mile from the buildings, there was a struggle lasting for weeks with what I believe was a single individaul. At least there was a routine that suggested one individual. Disturbances had been frequent, and I was sleeping in a portable shack kept in proximity to the flock. Almost every night, at about eleven o'clock, the birds would go out with a roar. There was about a thousand turkeys in this flock, and altogether several tons of meat moved through the night as fast as turkeys

could move. Roosts were broken, feeders overturned, fences smashed flat. The birds fanned out through the clearings and the woods, most of them remaining dispersed through the night. In the morning they could be heard calling and working their way back through the brush far away, some of them almost reaching the river in these panicky flights. The flock became exceedingly nervous, bunching through the day, refusing their food and going to roost reluctantly. This was serious, as market time was approaching and the flock was losing weight instead of gaining rapidly. In the meanwhile the owl had killed five or six birds. I recall his taking two of a group of five or six that I had penned in isolation as possibly diseased. He by no means killed on every visit. Traps were set about the kills, and though the owl returned to eat the breast flesh of some of the victims, he truly bore a charmed life and put no foot in either ground trap or pole trap. I caught a turkey and I caught my dog, but no owl. At this point I was practically living with the turkeys, and one evening, just before dusk, I saw a large horned owl settle in a solitary pine at the far end of the clearing. I tried to work up to him, or more probably her, with the gun, but he flapped away before I could get near. The following evening the owl returned in the same manner, and again I failed to stalk it. Thinking to take advantage of this business, I asked a neighbor, reputed to be a good shot, to bring his deer rifle and watch with me until dark the next evening. The owl, true to its luck, and perhaps feeling that further early patrols were unnecessary, did not show up until eleven o'clock. My neighbor will never forget that night—the turkeys thudding against the shack and crashing through the trees.

At times, after he had driven the turkeys out, the owl would remain in the vicinity, hooting and calling. I spent hours stalking the disembodied voice, hoping to catch his silhouette against the sky. The owl could see me, I suppose, and may have been aware of the advantage in his wonderful eyes. He must have watched with contempt while I crept along beneath him, tense with the hunt, teeth chattering with cold, stumbling over the frightened turkeys. Once or twice that wild blast of sound, described in the books as a bloodcurdling shriek, but actually too deep in tone for that term was released directly over my head. A genuinely hair-raising experience for anyone, not alone for children in fairy tales.

I never shot or trapped this owl, but I ended the raids by the only remaining means. I killed a defective turkey, tied it to an elevated platform, stuffed a pellet of strychnine into its mouth and left it for the night. The country people say that it's almost impossible to poison an animal with a crop, but the next morning the turkeys head and neck were gone, and the roosts were undisturbed the rest of that season.

I have little direct knowledge of the way in which the horned owl killed. He operated in darkness or dim light, and evidence was subsequently derived —post mortem, so to speak. In spite of many vigils, on only one occasion did I come close to seeing the actual kill. The almost mature birds left over from marketing had been moved into the breeding flock pen by the buildings. It was Christmas time and there was snow on the ground with

some consequent light. I had just picked up the gun and was leaving the cabin, intending to light the flares and see the flock to roost when the alarm notes sounded and the birds went out. I sprinted, and as I came up to the pen an owl, like a pale blur, left the ground ahead and drifted to a fence post a few yards away. I shot immediately and was lucky enough to drop him dead. Just across the fence from me lay a turkey hen, moving slightly. I made sure of the owl, and when I returned the hen was dead. The following morning I stripped the feathers away and examined the body. The only wounds I found were three slits in the neck that broke the knife like skin cuts and were certainly not fatal in themselves. Perhaps something of the manner in which the owl attacks these large birds can be inferred from this incident, When the turkeys are roosting every head along the rows is raised and thrust forward at the first alarm cluck—the birds quite literally sticking their necks out. As I imagine it the owl seizes one by the neck and hangs on until the turkey is throttled and exhausted. Hen turkeys of the type I raised weigh from 12 to 17 pounds at Christmas time while a horned owl weighs perhaps three or four. The turkeys are powerful birds also, as anyone who has handled them knows, and it seems to me that the owl would take quite a beating if he used any other method and didn't remove a vital spot in a hurry. How the head is removed and swallowed whole, I can only guess

One more somewhat gruesome incident concerned with the horned owl. The screen porches have been mentioned as effective protection for the young turkeys, and so they were except in one instances. The walls of these porches were of welded steel wire tko feet high, with a two by four inch mesh but while the poults were very young, a netting of finer mesh was drawn about them to keep the birds from slipping through. The tops of the porches were covered by ordinary hexagonal poultry netting of two inch mesh, rather loosely applied. When the poults reach an age of two or three weeks, some of them prefer to sleep on the porch floor after a hot day instead of within the house proper. As the brooder houses were so close to the cabin and I hadn't been bothered by weasels, skunks and so on, I didn't attempt to drive the birds inside at night, nor were flares or traps set. The principal concern was to keep the brooder stoves running in cool weather. One May night, however, I was aroused by a flutter of noises from the young birds. I listened for a moment, then hurried out. There was no moon at this time, only starlight, and I couldn't see at all well. Walking from porch to porch I could make out black patches of turkeys cloistered here and there on the floors. Then I saw, clinging to the far wall of a porch, a formless something which I took for a large cat. I ran around the porch and kicked at it, and an owl floated up and away like a ghost. After walking about for awhile and distributing the turks so they wouldn't pile up, I returned to bed, thinking that I could set traps in the morning and that the birds were safe even if the owl did return. That was a mistake. He came back while I slept, and in the morning I found two neat little mounds of crushed turkeys on one of the porch floors—seventeen birds in one heap and eight in the other. Apparently the owl had alighted on the cover of the netting and this had

sagged his weight so that he could reach the poults. He must have seized one after another, trying in vain to draw them through the mesh, until all within reach were killed.

There is no clear way of estimating the damage the flocks suffered from horned owls. I don't remember how many birds they killed outright, though fatalities were many enough. The most serious loss resulted from the continual harassing. In bad years, the final effect of the owls' work appeared as lost weight and finish in the dressed birds, and was once or twice a discouraging blow. I think it probable that a flock left to the owls through a season would be scarcely marketable in the fall.

With all this, I don't care to name the horned owl as everyone's enemy. My poultry, raised in a remote country where they were intruders and the owl native, was uniquely exposed and suffered more, I'm sure, than other flocks. Though the horned owl kept me angry for a long while, I'm glad my feud with him is over and that I can now admire his wildness and not see him in a trap, waiting for the boot or the club. I suffer from a lingering suspicion that the tenor of this paper, with all the hunting, shooting and trapping, misrepresents my attitude. It is well for everyone to know the capacity of these birds for harm, but I don't wish to give the impression that I am in any sense their enemy, or that any poultry grower should act against them without cause. During the years I spent alone on the Barrens, they and other animals were my chief source of mental stimulation and entertainment. No one with that experience could feel anything but an abiding friendship for them. Those goshawks! In retrospect, the image of their savage perfection is worth a good many chickens.

A List Of The Birds Of Port Arthur - Fort William And Vicinity

by

A. E. Allen

Since the reorganization of the Thunder Bay Field Naturalists' Club in the fall of 1937 its members have prepared several partial lists of the local birds. These included "Winter Birds of Thunder Bay District"; "Beginners Guide to Common Birds of Port Arthur-Fort William and Vicinity" (March, 1938) as well as a supplement to the latter paper in March, 1939. A mimeographed sheet "Average Dates of Arrival at Fort William-Port Arthur for 122 Common Birds, 1938-1944" was issued in 1947. In 1940 Col. L. S. Dear, Honorary President, published his brochure "Breeding Birds of the Region of Thunder Bay, Lake Superior, Ontario." (Transactions of the Royal Canadian Institute, Vol. XXIII, Pt. 1, No. 49, pp 119-143)

The present article is largely based upon the observations of the club members and the breeding records are those reported by Col. Dear as well as a few which have been made since 1940. Dates of arrival are based on the records for 1938-1949 inclusive. The area covered includes the territory lying within a radius of fifty miles of the Lakehead cities of Fort William and Port Arthur in the District of Thunder Bay, Ontario., It has been principally prepared for the use of members of the Naturalists' Club and for school teachers and their pupils who may wish a local reference when studying the district birds. It has therefore been made as practical as possible and in some instances the names may not be those recommended by our leading ornithologists. 239 species are included. Subspecies have not been considered except the readily distinguished White-crowned Sparrows (Zonotrichia l. leucophrys and Z. l. gambeli.) In the case of the Horned Larks only Hoyt's (A. a. hoyti) has been definitely indentified. Specimens of a majority of the species have been forwarded to the Royal Ontario Museum of Zoology.

KEY: B—Breeding; M—Migrant; SR—Summer Resident; R—Resident; V—Visitor; W—Winter Resident; 14.3.42-3&9—on 14 March in 1942, 1943 and in 1949.

A: MIGRANTS & SUMMER RESIDENTS: 154 Species & 1 additional subspecies.

ARRIVAL DATES

Species	Status	Earliest	Latest	Average	No. Years observed
American Crow	SR occ. R B	14.3.42-6	24.3.40&49	Mar. 19	12
Herring Gull	SR occ. WVB	11.3.46	3.4.40		20 11
American Robin	SR occ. R B	20.3.46	19.4.39	Apr. 3	11

Reprinted from "Thunder Bay Newsletter 4:3; April 8, 1950

September, 1953

Species	Status	Earliest	Latest	Average	No. Years observed
Snow Bunting	M occ. W	13.3.49	20.4.44		3 8
Marsh Hawk	SR	B 24.3.46	20.4.44-5		7 12
Western Meadow Lark	SR	B 15.3.42	30.4.45		9 11
Slate-colored Junco	SR occ. W	B 25.3.38	22.5.43		9 12
Bronzed Grackle	SR occ. R	B 31.3.45	24.4.47		12 11
Cooper's Hawk	SR occ. W	B 23.3.47	19.4.42		12 4
Red-winged Blackbird	SR occ. W	B 24.3.46	1.5.38		13 11
Yellow-bellied Sapsucker	SR	B 31.3.48	28.4.40		14 12
Mallard Duck	SR	B 24.3.46	30.4.39&44		14 11
Common Purple Finch	SR occ. W	B 18.3.45	29.4.47		14 11
American Golden-eye	SR occ. R	B 30.3.45	26.4.43		14 11
Song Sparrow	SR	B 31.3.45	23.4.47		15 12
Golden-crowned Kinglet	SR	B 31.3.45	27.4.40&47		16 12
Brown Creeper	SR	B 2.4.45	24.4.39		16 10
Yellow-shafted Flicker	SR	B 8.4.49	29.4.39		16 12
American Sparrow Hawk	SR	B 9.4.39	20.4.38,N1		16 10
Canada Goose	M	4.4.48	23.4.38		17 9
Black Duck	SR	B 8.4.42	1.5.39		17 11
White-fronted Goose	M	12.4.45	22.4.48		17 2
Old Squaw	M occ. W	31.3.43	26.4.49		17 4
Pintail Duck	SR	B 31.3.45	4.5.40		18 11
Common Merganser	SR occ. R	B 31.3.45	6.5.44		18 12
Killdeer Plover	SR	B 25.3.45	6.5.44		18 11
Short-eared Owl	SR	B 17.4.41	11.5.47		19 8
Tree Sparrow	M occ. W	6.4.46	30.4.44		19 12
American Woodcock	SR	B 3.4.42	30.4.43		19 10
Myrtle Warbler	SR	B 31.3.45	29.4.40&47		20 12
Fox Sparrow	M	10.4.48	1.5.38		20 8
Horned Lark	M	8.4.39	2.5.48		20 2
Eastern Bluebird	SR	B 17.4.49	29.4.47		21 3
Cowbird	SR	B 11.4.41	1.5.43		21 12
Ruby-crowned Kinglet	SR	B 12.4.45	29.4.47		22 12
Lesser Scaup Duck	M	11.4.42	9.5.43		23 9
Belted Kingfisher	SR	B 18.4.41-2&8	7.5.45		24 10
Bald Eagle	SR	B 21.4.48	27.4.49		24 2
Osprey	SR	B 19.4.42&6	30.4.39	Apr.	24 7
Lapland Longspur	M	6.4.49	2.5.48		24 7
Redhead	M	16.4.49	7.5.43		24 6
Blue Goose	M	17.4.49	4.5.39		24 6
Eastern Pigeon Hawk	SR occ. W	B 19.4.47	4.5.42		24 8
Sharp-shinned Hawk	SR	B 19.4.47	28.4.40		25 3
Mourning Dove	occ.	SV 23.4.40	26.4.42		25 2
Buffle-head	M	4.4.45	6.5.44		25 8
Great Blue Heron	SR	B 9.4.42	3.5.39		25 9
Balpate	M	18.4.45&8	7.5.43		26 7

Species	Status	Earliest	Latest	Average	No. Years observed
Rusty Blackbird	M	18.4.48	7.5.39		26 8
Greater Scaup Duck	M	18.4.45	7.5.43		26 5
Common Loon	SR	B 15.4.45	1.5.41&8		26 7
Canvas-back	M	19.4.45	9.5.43		26 3
Swamp Sparrow	SR	B 17.4.49	30.4.41		26 8
White-throated Sparrow	SR	B 23.4.43	1.5.44		27 12
Eastern Phoebe	SR	B 18.4.48	6.5.44		27 12
Ring-billed Gull	occ. M	17.4.49	10.5.47		27 5
Ring-necked Duck	SR	B 18.4.45	14.5.46		27 11
American Rough-legged Hawk	M occ. SR	3.4.49	9.5.48		27 5
Red-tailed Hawk	SR	B 18.4.48	5.5.40		27 6
Green-winged Teal	M	25.4.43&8	5.5.42		28 5
Savannah Sparrow	SR	B 12.4.45	9.5.44		28 8
Red-breasted Merganser	SR	B 21.4.45	7.5.40		28 10
Hooded Merganser	SR	B 18.4.42&8	10.5.47		28 6
Hermit Thrush	SR	B 23.4.41	4.5.42		28 10
Vesper Sparrow	SR	B 18.4.45	8.5.49		28 9
Pied-billed Grebe	SR	B 27.4.42	29.4.40		28 2
Wilson's Snipe	SR	B 11.4.49	6.5.47		29 10
Whistling Swan	M	15.4.45	7.5.43		29 6
Lesser Yellow-legs	M	18.4.38	8.5.49		29 8
Lesser Snow Goose	M	21.4.49	8.5.45		30 7
Greater Yellow-legs	M	18.4.38	10.5.40		30 11
Tree Swallow	SR	B 24.4.39	10.5.38	May 1	12
Blue-winged Teal	SR	B 21.4.48	7.5.39&43		1 9
Broad-winged Hawk	SR	B 26.4.42	12.5.45-6		4 11
Pine Siskin	SR occ. R	17.4.49	9.5.39&48		5 8
Chipping Sparrow	SR	B 27.4.48	12.5.47		6 11
Holboell's Grebe	SR	B 26.4.45	16.5.48		6 2
American Bittern	SR	B 25.4.48	15.5.38		8 12
Double-crested Cormorant	SR	B 21.4.48	25.5.40		8 10
Spotted Sandpiper	SR	B 27.4.41	18.5.46		9 8
Winter Wren	SR	B 26.4.42	25.5.46		11 8
Lincoln's Sparrow	SR	B 28.4.45	24.5.43		13 9
Clay-colored Sparrow	SR	B 6.5.43	23.5.49		13 7
White-crowned Sparrow	M	6.5.41	23.5.45		14 11
Cliff Swallow	SR	B 12.5.40	15.5.49		14 2
Palm Warbler	SR	B 2.5.42	24.5.38		14 10
Solitary Sandpiper	M	10.5.42&7	23.5.48		15 5
Nashville Warbler	SR	B 7.5.39	26.5.46		15 12
Bonaparte's Gull	M	5.5.42	22.5.45		15 6
Barn Swallow	SR	B 11.5.38	25.5.46		15 11
Harris's Sparrow	M	12.5.40	21.5.39		15 4
Shoveller	M	24.5.49	7.5.39		15 4

Species	Status	Earliest	Latest	Average	No. Years observed
Bobolink	occ. SR	12.5.38	20.5.39		16 2
Black-throated Green Warbler	SR	B 10.5.42	22.5.38		16 12
American Pipit	M	7.5.39	25.5.47		16 2
House Wren	SR	B 10.5.41	22.5.44		16 12
Cedar Waxwing	SR occ. R	B 22.4.45	5.6.39		16 8
Black and White Warbler	SR	2.5.42	19.5.43		16 12
Horned Grebe	M	11.5.47	21.5.49		16 2
Leconte's Sparrow	SR	B 6.5.39	24.5.41		16 10
Gambel's Sparrow	M	9.5.43	23.5.45		16 3
Sora Rail	SR	B 4.5.39	26.5.41		17 5
Yellow Warbler	SR	B 5.5.41	27.5.47		17 12
Magnolia Warbler	SR	B 12.5.38N2	25.5.46		18 11
American Goldfinch	SR occ. R	B 12.4.45	28.5.38		18 12
Northern Water-thrush	SR	B 11.5.41	26.5.46		18 8
Olive-backed Thrush	SR	B 7.5.40	29.5.48		18 9
Connecticut Warbler	SR	15.5.41-2	22.5.49		19 4
Eastern Wood Pewee	SR	B 15.5.49	25.5.40		20 2
American Redstart	SR	B 12.5.43	24.5.39	May	20 11
Tennessee Warbler	SR	B 14.5.44	5.6.48		20 10
Solitary Vireo	SR	B 14.5.44&46	29.5.43		20 8
Chimney Swift	SR	B 14.5.41&47	28.5.46		20 12
Wilson's Thrush	SR	B 23.4.48	31.5.47		20 10
Least Flycatcher	SR	B 15.5.44&49	31.5.42		20 10
Eastern Kingbird	SR	B 15.5.43&49	25.5.47		21 11
Cape May Warbler	SR	15.5.42	29.5.43		21 9
Oven-bird	SR	B 15.5.41	28.5.38&49		22 11
White-winged Scoter	M	14.5.48	27.5.47		22 3
Black-throated Blue Warbler	occ. SR	20.5.44	24.5.39		22 3
Brown Thrasher	occ. SR	22.5.45	24.5.42		23 2
Blackburnian Warbler	SR	B 15.5.49	30.5.42		23 10
Semipalmated Plover	M	19.5.48	29.5.41		24 5
Bank Swallow	SR	B 1.5.41	4.6.49		24 12
Rose-breasted Grosbeak	SR	B 20.5.45	27.5.39		24 6
Bay-breasted Warbler	SR	10.5.42	31.5.41		24 5
Hudsonian Curlew	M	24.5.48	24.5.49		24 2
Sanderling	M	23.5.48	24.5.49		24 2
Red-backed Sandpiper	M	20.5.48	25.5.40		24 6
Least Sandpiper	M	24.5.48	25.5.40&49		25 3
Chestnut-sided Warbler	SR	B 15.5.49	31.5.47		25 11
Philadelphia Vireo	SR	B 15.5.49	9.6.48		25 9
Black-capped Warbler	SR	B 18.5.41	31.5.47		25 8
Red-eyed Vireo	SR	B 20.5.42&45	31.5.47		25 11
Black-bellied Plover	M	24.5.41	25.5.42&47		25 3
Rubby Turnstone	M	23.5.48	27.5.45		25 3
Orange-crowned Warbler	M	22.5.38	27.5.47		25 2

Species	Status	Earliest	Latest	Average	No. Years observed
Parula Warbler	M	20.5.39	1.6.47		26 3
Piping Plover	occ. V	25.5.47	26.5.40		26 2
Maryland Yellow-throat	SR	B 16.5.47	5.6.39		26 11
Black-polled Warbler	M	18.5.41	1.6.47		26 6
Semipalmated Sandpiper	M	22.5.38	5.6.45		26 7
Nighthawk	SR	B 24.5.43-4&9	4.6.45		26 11
Red-headed Woodpecker	SR	B 22.5.49	2.6.40		27 3
Scarlet Tanager	SR	25.5.41	30.5.48		27 3
Ruby-throated Hummingbird	SR	22.5.42	31.5.46		27 7
Mourning Warbler	SR	B 24.5.42	31.5.47		27 6
Gray-cheeked Thursh	M	28.5.39	28.5.49		28 2
Alder Flycatcher	SR	B 14.5.39	3.6.49		28 9
Canada Warbler	SR	B 20.5.48	6.6.42		28 8
Olive-sided Flycatcher	SR	B 26.5.46	31.5.41		29 6
Yellow-bellied Flycatcher	SR	B 24.5.38	8.6.48		31 8
Black-billed Cuckoo	SR	B 29.5.49	9.6.38	June 4	6
Pectoral Sandpiper	Fall M	9.9.45	7.10.44	Sept 21	6
Golden Plover	Fall M	9.9.45	26.9.44	21	6

Notes: N1—also same date in 1940, 42 & 47; N2—also same date 1940 & 1942

B: UNCOMMON SUMMER RESIDENTS (No migration dates available) 10 species (all breed)

Red-throated Loon
American Coot
Upland Plover
Duck Hawk
American Long-eared Owl
Short-billed Marsh Wren
Brewer's Blackbird
Catbird
Indigo Bunting
Barred Owl

C: WINTER RESIDENTS—11 species

FALL ARRIVAL DATES

Species		Earliest	Latest	Average	No. Years Recorded
American Raven	NB1	5. 9.49	3.11.40	Oct. 4	8
Northern Shrike		11.10.45	28.10.48	21	5
Common Redpoll	NB2	13.10.44	2.11.40	26	5
Pine Grosbeak		19.10.41	9.11.43	28	9
Snowy Owl		25.10.41	30.11.46	Nov. 7	5
Bohemian Waxwing		6.11.40	1. 1.43	Dec. 15	6

Rare Winter Residents for which no adequate migration dates are available.

Golden Eagle
American Hawk Owl (A rare resident which Col. Dear found breeding on one occasion.)
Great Gray Owl
Richardson's Owl
Hoary Redpoll

Notes: NBI—The Raven is occasionally resident and has been found breeding

at Silver Islet. (Ken Campbell)

NB2-The Common Redpoll is a winter resident but is more abundant during spring and fall migration.

D: RESIDENTS — 18 species. (All breed)

Goshawk	Hairy Woodpecker	Blue Jay
Spruce Grouse	Downy Woodpecker	Black-capped Chickadee
Ruffed Grouse	Arctic Three-toed Woodpecker	Hudsonian Chickadee
Sharp-tailed Grouse		Red-breasted Nuthatch
Great Horned Owl	American Three-toed Woodpecker	Evening Grosbeak
Saw-whet Owl		White-winged Crossbill
Pileated Woodpecker	Canada Jay	

E: INTRODUCED: — 5 species (All breed)

Hungarian Partridge	Common Pigeon	House Sparrow
Common Pheasant	Common Starling	

F: RARE VISITORS — 29 species

White Pelican	Marbled Godwit	Yellow-headed Blackbird
Wood Duck	Hudsonian Godwit	Baltimore Oriole
Harlequin Duck	Northern Phalarope	Red Crossbill
Surf Scoter	Glaucous Gull	1950
American Scoter	Iceland Gull	Oregon Junco
Ruddy Duck	Common Tern	European Widgeon
Turkey Vulture	Black Tern	Florida Gallinule
Sandhill Crane	Whip-poor-will	1951
Greater Prairie Chicken	Purple Martin	Y. t. Vireo
Virginia Rail	White-breasted Nuthatch	Western Grebe
Willet	Mockingbird	Western Tanager
Knot	Migrant Shrike	
Dowitcher	Pine Warbler	

G: REPORTED FROM THE WILD BUT PROBABLY ESCAPED FROM CAPTIVITY—2 species.

Mute Swan Ring Dove

H: EXTINCT—1 species

Passenger Pigeon

I: LISTED IN LITERATURE BUT NOT RECENTLY REPORTED—9 species.

(a) Agassiz, Louis., 1850. Lake Superior. With a narrative of the tour, by J. Elliott Cabot, Boston, 1950.

White-rumped Sandpiper

(b) Atkinson, G. E., 1894. A Summer's Collecting and Observations at Port Arthur, Ont. Biological Review of Ontario, Vol. 1, No. 4, Oct. pp 94-101.

Arctic Loon	Great Black-backed Gull	Kittiwake
Audubon's Caracara	Ivory Gull	Smith's Longspur

(C) Wilson, Alfred W. G., 1910. Geology of the Nipigon Basin, Ont. Canadian Department of Mines, Geological Survey Branch, Memoir No. 1, p 32. Ottawa.

Gadwall Screech Owl

Note: Atkinson's records for Audubon's Caracara and Smith's Longspur are authentic, but the remaining seven species are listed as hypothetical.

Seasonal Report

by

Mary Lupient

Periods of excessive rainfall and drought characterized the weather for the season ending October 1. It was the hottest and wettest June since 1948. Tornadoes and heavy rains caused floods and much damage to crops in south-western Minnesota where more than half of five counties were flooded. Bridges were washed out and roads were blocked. At Mankato the river rose five feet in 24 hours. July was the wettest in forty years and heavy rains were still falling the first few days of August. Northern Minnesota was hardest hit at this time. The Mississippi River overflowed at Aitkin, and many families were forced to leave their homes. There was very little rainfall the last three weeks of August and all of September. The drought combined with very high temperatures caused damage to crops in some sections. There were scattered frosts in September, the first reported was in northern Minnesota, September 12.

Record of a heronry at Buffalo Lake, Waseca County was made in the last week of June by Dana Struthers. There were at least 20 Double-crested Cormorant nests, 30 Black-crowned Night-heron nests and so many Great Blue Heron nests it was impossible to make an accurate count. In this heronry there were 12 American Egrets. At General Shield's Lake 5 Egrets were seen feeding June 3, July 4 there were 10 Egrets. No nests were found. This report was sent by Orwin Rustad. For the past few years there has been a northern movement of American Egrets after the nesting season. Dana Struthers saw about 60 in Nicollet County August 27, Lewis Barrett reported 24 at Swan Lake Kandiyohi County, September 27. On an island in Marsh Lake above Lac Qui Parle Lake 50 American Egrets were seen by E. R. Norberg et. al., September 12. Among them there were eight too young to fly. A. C. Rosenwinkle reported that there were about 25 near Arlington September 6, and 4 at Hastings September 10. Mrs. C. E. Peterson, Madison made a survey of Lac Qui Parle County for 1953. Egrets were observed in eleven localities.

Thus there was an increase of 30% over the number in 1952 of breeding pairs of waterfowl in 48 countries in the best waterfowl area. These early nestings were ruined by the heavy rainfall and many of the ducks did not re-nest. The tree-nesting ducks were most successful. This report was made by Forest B. Lee, Biologist, State Game and Fish Dept.

At North Lake, Goodhue County, Dana Struthers and William Longley saw one female Hooded Merganser with seven young and two more with 15 young. No nests were found. At Rice Lake, Steele County, two females were observed June 30 by Orwin Rustad. Back on July 1, 1952 a female with five young was seen in Whitewater Refuge by William Langley, Arnold Erickson and Forest Lee.

The first report of Canada Geese was made by E. R. Cole, September 29.

A goodly number flew over Minneapolis.

Thousands of hawks migrated along the bluff back of Duluth in September. It was an unusual experience to stand at the Lookout high over the city and beautiful Superior Bay, and watch them fly at great height, sped by a strong wind. Some could be seen from above as they flew at all levels beneath the watchers. Apparently they were without fear because, many flew to within a few feet of the crowd of observers. Occasionally large flocks of one or two hundred would spiral upward on the air currents over the waters of the bay until they became specks in the clouds. A census was taken the second and third weekends in September, and it was estimated that 7220 were seen from the Lookout during those four days. P. B. Hofslund stated that 15 species of hawks were counted not including possible Harlan's and Krider's. He said the flight would continue on through October and November. This writer drove along the North Shore to Grand Marais, September 27 and saw hawks in decreasing numbers flying toward Duluth along the bluff. During the first part of September, Pigeon Hawks were reported at various points. Near Marine, September 10, one played merrily with a dozen Blue Jays and two Flickers. It flew with accomplished grace, and kept them all at bay.

Up to time of this writing, hunters have reported seeing fewer grouse than usual, which is in part due to heavy cover. A survey made in April and May by the State Conservation Department showed a 50% decrease in gunning count this year over last year. Brood counts in August and September showed that there were fewer and smaller broods probably due to the damp and cold season. Total population per square mile dropped from 104.6 in 1952 to 72.5 in 1953. This is an approximate drop of one-third which is apparently part of the expected decline.

Except in the western part of the state the observation of shore birds was hampered during the migration in August by high water levels and lush vegetation. Only small flocks were observed. In western Minnesota however, flocks of hundreds of thousands were seen at the peak of the migration during the second week of August. These observations were made by George Rickert, et. al. Dana Struthers reported about 50 Long-billed Dowitchers at Twin Lakes, Kittson County, July 31. Mr. and Mrs. I. S. Lindquist found five Sanderlings on the beach at Lake Harriet, Minneapolis, September 7. About 19 Golden Plovers and a few Black-bellied Plovers fed on Minnesota Point, Duluth September 19 and 20. According to P. B. Hofslund they have been numerous on the Point during all of September. Flocks of them flew along with the hawks during the migration. September 28, this writer observed approximately 100 Golden Plovers and 3 Black-bellied Plovers resting on a log boom in the bay at Grand Marais. During three hours of observation they didn't feed. One Sanderling was there also. Stilt sandpipers and two Buff-breasted Sandpipers were reported on Minnesota Point August 29 by Joel Bronoel. A knot was seen at Fisher Lake near Savage by A. C. Rosenwinkle, September 26. On a sand point near Shakopee about 200 Red-backed Sandpipers along with a few Peeps, Pectorals and several Black-bellied Plovers fed at the water's edge, October 1. Above them

approximately 500 Franklin's Gulls wove a beauteous shining pattern in the sun as they circled high, apparently catching insects. About 60 Ring-billed Gulls were seen on White Bear Lake, August 28 and nearly 200 were in the bay at Grand Marais, September 28. A note from Joel Bronoel stated that in banding Herring Gulls on Knife Island at Knife River, it was noted that many of the eggs were infertile and that there was a late hatching necessitating a second trip to the island to complete banding. Cold weather and storms in the spring may have been the cause of the infertile eggs. He stated also that the nesting colony of Common Terns on Harbor Island had greatly increased this season. According to M. Evanoff, Forster's Terns nested again this season at Mother Lake in Minneapolis.

Orwin Rustad reported that cuckoos, especially the Black-billed were more numerous this summer than in previous years.

Nighthawks, swifts and swallows migrated as usual. Large numbers of Yellow-shafted Flickers, Robins and Blue Jays migrated the last two weeks of September. Large concentrations of Bluebirds, Vireos, Flycatchers and a few Myrtle and Yellow Warblers were seen at several points west of the St. Croix River in the vicinity of Marine, September 10.

The migration of warblers occurred as usual, passing through, a few individuals at a time. They appeared in Grand Marais in small numbers the first week in August according to Theo Zickrick. Mrs. P. D. Tryon had the good fortune of having two Black-throated Blue Warblers in her yard at Christmas Lake, Excelsior the second week in September.

Red-winged Blackbirds apparently increased in numbers. Clouds of tens of thousands roamed the cornfields and pastures.

Dickcissels were with us again this year, fewer were observed than in the peak years.

Snow Buntings, Northern Horned Larks, Lapland Longspurs and American Pipits were feeding on the shoulder of the highway along the North Shore from Beaver Bay to Grand Marais, September 27-28-29. They were common on the streets and in the yards at Grand Marais.

This writer observed a Mockingbird near Savage, May 31. It evidently had selected a territory for it flew from place to place in a small area and sang incessantly. It was under observation for two hours. A Mockingbird was reported by several observers in the vicinity of Lake Calhoun during July.

Brother Theodore, F. S. C. sent a note dated June 11 stating that in the vicinity of Winona he had found nine pairs of nesting Bell's Vireos this season. Also a Henslow's Sparrow's nest containing 5 eggs.

Sally Davidson, et. al observed a Western Kingbird in Scandia Valley, Morrison County through July. One was seen near Anoka, May 27. **Minneapolis, Minn.**

The Canadian Lakehead

Edited by

A. E. Allin

The cold stormy weather of late April was followed by a mild, warm period lasting from May 2 to May 9. A maximum temperature of 90° on May 8 equalled an all-time high for that date at Fort William. The temperature fell to 47° on May 10 and the official maximum of 35° on May 11 was a record low. The cold was accompanied by snow and rain. Peter Addison, regional forester, reported many dead small birds in the outlying districts, and saw school-children readily catching robins in their hands. The remainder of May continued to be unusually cold. On May 20-21 we received the first heavy rains of the year, two inches falling in 48 hours. By the end of the month rivers were overflowing their banks and low grounds were flooded. It is believed ground-nesting birds, particularly ducks and sparrows, suffered severely. No information as to the effect on grouse is available. Cold wet weather persisted until June 7 but the remainder of the month was reasonably warm. July was very dry.

The unfavourable weather of May was not reflected in the migration picture. Several species were very late in arriving; others appeared unusually early. Over-all, migration averaged 3 days earlier than usual during May and June. Approximately a quarter of the species arrived later than average, and the others appeared several days earlier than expected. The myrtle warbler, ruby-crowned kinglet and broad-winged hawk first noted on May 3, May 6, and May 10, were, 4, 6, and 6 days later than previously recorded. On the other hand chimney swifts and black-throated green warblers arriving on May 5 and May 7, equalled the previous early arrival dates established in 1952. The Blackburnian warbler arrived on May 10, 5 days earlier than the previous record, May 15, 1949; the rose-breasted grosbeaks, seen by Mrs. Addison on May 14, were 6 days earlier than previously recorded (May 20, 1945, 1951, 1952). Most unusual was the black-billed cuckoo seen by Peter Addison on May 18. This is ordinarily our latest migrant arriving on June 4, preceded by the alder flycatcher (May 28), Canada warbler (May 28), olive-sided flycatcher (May 29) and yellow-bellied flycatcher (May 31). This year these species arrived in their usual order on May 24, May 29, June 2 and June 3, but the tardiest migrant was the cedar waxwing which did not appear until June 6.

Few rarities were reported among the perching birds. The rough-winged swallow first recorded locally on May 24, 1952, was again seen on June 7 (A. E. A.). They have probably been overlooked in the past, but following the M. O. U. meetings at Frontenac in 1952 and 1953 we had refamiliarized ourselves with their notes which to me are quite distinctive from those of the bank swallow. It was in a similar manner we detected cliff swallows in 1939. They had not been reported locally in several decades although probably present as we have subsequently located five colonies. A purple martin also

observed on June 7 by the Allins and L. S. Dear was the first reported locally for several years. It is difficult to understand its absence from the Lakehead cities as a large colony breeds regularly in the crevices of buildings in Kenora, 300 miles to the northwest.

June 7 was a red-letter day. In addition to the rough-winged swallows and purple martin, we saw the first crested flycatcher to be seen at the Canadian Lakehead. Long familiar with this species in Southern Ontario, and more recently at Frontenac we were attracted by the loud notes and soon discovered two birds. A new species for Dear's life-list they received more attention than otherwise would have been given, fortunately at close range. Rather than one bird producing two notes as we first expected we found that one bird was uttering a loud "wheep" to be immediately followed by a "whuir" from the mate sitting about 12 feet away. This antiphonal singing continued until both birds finally flew. The birds remained in the area for a fortnight and then disappeared.

May 13 was an unusually late date for two snow buntings to be present along a local beach where we also saw more American pipits than usual. On May 22 both a northern horned lark and a Hoyt's were present on the same shore. Both these subspecies migrate throughout this region but the prairie horned lark has not yet been reported. Harris's sparrow is ordinarily a rare migrant. Many years we miss the species entirely; other years we count ourselves fortunate if we see one or two birds. They were quite common in the fall of 1952 and again appeared in numbers on May 11, their usually rapid migration probably interrupted by the severe weather of that period. For a few days the shade-trees along our streets and in our parks resounded with their songs mingling with those of their white-throated and white-crowned cousins. It enabled local ornithologists to familiarize themselves with this species for the first time.

If the spring migration of perching birds was essentially uninteresting, quite the opposite was true in regard to the migration of shore and water birds. It was a banner spring for studying these two groups not only insofar as species were concerned, but also as to numbers of individuals. C. E. Garton observed an early sanderling on May 10 and on May 23 saw a pectoral sandpiper. This is probably the only spring record for this species at the Lakehead. On May 16, Garton, Mrs. Addison and Miss Penwarden saw four dowitchers. Sixteen more were seen by K. Denis and K. Eoll on May 24 as well as numbers of black-bellied plovers. Three knots were observed by D. Beckett on May 31. Flocks of red-backed sandpipers and ruddy turnstones appeared on May 21 and May 22, and remained until the end of the month. We were intrigued by the pugnacity of the turnstones. When a turnstone was approached closely by another bird it chattered loudly, jabbed rapidly at the intruder with its bill, and pursued it with head down and neck extended parallel to the sand.

Upland plovers returned on May 10 to the fields where we first saw them in 1945. Woodcock were first noted on May 4 in the area Dear discovered them in 1938. This bird appeared to be spreading for a few years but recently has again become uncommon.

Canada Geese first appeared on March 31 and flocks passed over throughout April and early May. Sixty tired birds landed in the local harbor on May 8. Both blue and snow geese were first reported on April 18. A snow goose was seen on May 26 and 3 blue geese were still present on May 28 (A. E. A.). There were summer records of "geese" on Lake Nipigon and on Whitefish Lake but there were no definite records that they nested. A few American golden-eyes appeared as early as March 31. The numbers of species and individuals of ducks increased throughout April, and probably reached a peak in mid-May when a thousand or more lesser scaup were present in the local harbors feeding on grain spilled at the elevators. Subsequently ducks declined in numbers but 150 ring-necked ducks remained until June 27. Were these non-breeding birds, or were they very late in nesting in 1953? Several rare species were recorded. These included a ruddy duck on April 26 (A. E. A.) and a male canvasback on May 31. On May 10, C. E. Garton reported four shovellers at Port Arthur. This scribe saw a pair at Fort William on May 22 and on several subsequent occasions, the last being June 21. There was no evidence that the pair bred here. The shoveller and the canvesback are rare spring migrants and the ruddy duck was a new spring record. Outstanding, however, was the presence of a pair of gadwalls on May 10 (A. E. A.). Apart from a doubtful record in the older literature the gadwall was an addition to the Lakehead list.

The breeding season was a disappointing one for local ornithologists. Weather conditions were unfavorable for studying the nesting birds and probably resulted in many early nests being destroyed. We have never heard so many males singing in July as we did in 1953. Probably many species were re-nesting. At Kenora on July 5, we saw a female American golden-eye accompanied by 24 small young. This brood was seen frequently in the following two weeks. An American merganser seen on Black Sturgeon Lake, Kenora, on July 14 had a brood of 14 very small, downy, young. This is said to be typical of conditions across Western Canada. First nests of ducks were destroyed by heavy rains but large second broods were being raised successfully.

As noted above rough-winged swallows were seen on June 7 in Paipoonge Township. On June 17, a pair was found nesting in Neebing Township, and on June 30 the nest contained 5 eggs. This is a new nesting record for Thunder Bay District. I believe the cavity in a bank had once been the home of kingfishers. The tunnel was greater in diameter than that of the bank swallow and the cavity holding the nest was very large.

A late nest of the cedar waxwing was located in Oliver Township on August 1, containing five eggs. Waxwings were uncommon during the summer possibly as a result of the scarcity of berries. The catbird, fairly common in 1952, was seen but once in 1953. Both mourning doves and bobolinks were present, but we again failed to find actual evidence of their breeding. The Brewer's blackbirds deserted the nesting area occupied for the past decade, but a few were seen in the district throughout the summer. The brown thrasher first found breeding here in 1952 was again present in small numbers. On June 28, Robert Robb saw a young thrasher at Kakabeka Falls.—**Regional Laboratory, Ontario Department of Health, Fort William, Ontario.**

Notes Of Interest

SNOWY EGRET IN NORTH DAKOTA—On May 30, 1953, six members of the Avifaunal Club found a Snowy egret in the Devil's Lake Region of North Dakota. It was seen at a small lake several miles south-east of Minnewaukan, Ramsey county, North Dakota. All characteristics, including the yellow feet, were carefully noted with the aid of a 20 power spotting-scope. The bird was feeding on the muddy shore near a flock of California Gulls, and its body was very near the size of the gulls. Members of the club who shared in the find were; William Pieper, John Futcher, Jeremy Berman, Norris Jones, William Nelson and myself.

I am aware of only two other records of the Snowy egret from North Dakota, both at Lake Tewaukon, Cayuga, North Dakota. One was seen there May 2, 1940 (**Birds of Suoth Dakota, Over and Thomas**) and May 8, 1952 (**Audubon Field Notes, Vol 7 No. 1**). Lake Tewaukan is only a few miles north of the South Dakota border. The bird we saw was about sixty-five miles south of the Canadian border.—**Raymond A. Glassel, Avifaunal Club, Minneapolis, Minnesota.**

HARBOR ISLAND CENSUS—1953.—A census of Harbor Island in St. Louis Bay at Duluth was taken on Sunday, June 28th, 1953 by Mr. Lloyd Hackl; Mr. O. A. Finseth; Mr. Harvey Putnam; Robert Cohen Mr. & Mrs. J. K. Bronoel; Mrs. Flora Evans; Miss Catherine Lieske and Miss Evelyn Palmer. Temperature 70 degrees, clear, northwest wind 5 miles per hour, time 9:00 A.M. to 11:30 A.M.

Common Tern	87
Mallard	1
Blue-winged Teal	3
Brown Thrasher	1
Red-winged Blackbird	9
Catbird	2
Spotted Sandpiper	2
Killdeer	2

A breakdown of the tern nests is as follows: 50- 3 eggs; 17- 2 eggs; 9- 1 egg; 2- empty; 4- 1 young; 4- 2 young; 1- 3 young.

The mallard nest contained 9 eggs. Blue-winged Teal 1- 1 egg; 1- 9 eggs; 1- 10 eggs.

Brown Thrasher 1- 3 young.

Red-winged Blackbird 4- 3 eggs; 1- 5 eggs; 2- 4 eggs; 1- 3 young; 1-1 young, 2 eggs.

Catbird 1- 2 eggs; 1- 4 young.

Spotted Sandpiper 1- 4 eggs; 1- 1 egg.

Killdeer 1- 2 eggs; 1- 3 eggs.

No piping plovers seen or heard. Great increase in tern nests noted. Yellow warblers present but no nests found. Many spotted sandpipers present.—**J. K. Bronoel, Duluth Bird Club.**

SOME BIRD OBSERVATIONS IN ST. LOUIS COUNTY—From October 4 until October 18, 1952, I stayed on the northern shore of Vermillion Lake at the Wake-em-up Narrows in northern St. Louis County. This area consists to a great extent of balsam, fir, and spruce forests locally mixed with birch, aspen, alder, and some pine. In several places the forested areas are interrupted by muskegs.

On two occasions I visited Big Rice Lake about 16 miles south of the Narrows. The following is an annotated list of the birds occurring at these points.

1. Common Loon: some singles on Vermillion Lake.
2. Geese: some flocks, too far away for identification, were seen over Vermillion Lake; I was told that one small goose stayed there for some time. Several geese were shot at Big Rice Lake (Oct. 1-6).
3. Mallard: a few individuals on both lakes.
4. Green-winged Teal: a flock of 8 teal, Oct. 10 at Big Rice Lake.
5. Ring-necked Duck: the most numerous duck at Big Rice Lake; none on Vermillion Lake.
6. Scaup: I shot one Lesser Scaup at Big Rice Lake where they occurred in small numbers. At Vermillion Lake there were some flocks of 10 to 20 Scaups.
7. American Golden-eye: a few only at Vermillion Lake, Oct. 12 to 17.
8. White-winged Scoter: one immature male was found dead by Mr. Ed Woolverton at Vermillion Lake, Oct. 16.
9. Buffle-head: on Oct. 16 and 17 a flock of 8 at Vermillion Lake,—possibly the same flock.
10. American Merganser: in small numbers at Vermillion Lake.
11. Hooded Merganser: at first single birds and in small flocks; on Oct. 17 early in the morning a flock of about 400 seen; this species seen only on Vermillion Lake.
12. Bald Eagle: one immature circled over my duck-blind apparently attracted by decoys, Oct. 14.
13. Red-tailed Hawk: one seen almost every day apparently the same specimen.
14. Rough-legged hawk: one seen on Oct. 7 on the way from Vermillion to Big Rice Lake.
15. Ruffed Grouse: during my stay at Vermillion Lake I found them in small numbers in places where they used to be abundant during the yast two years. In November Mr. Ed Woolverton saw them again in fair numbers. The fall of 1952 was very dry, and

possibly the grouse moved from their usual habitats to the muskegs as they did in other localities.

16. Spruce Grouse: present in the spruce forests south of the Wake-em-up Narrows. I did not visit these forests and can tell nothing about the abundance of this species.

17. Sharp-tailed Grouse: they occur on the farmland south of Vermillion Lake. As this land was posted, I could not find out whether or not this species was abundant.

18. Coot: about 5 at Big Rice Lake.

19. Wilson's Snipe: I saw only three single snipe on the shore of Vermillion Lake.

20. Herring Gull: only a few at Vermillion Lake.

21. Arctic Three-toed Woodpecker: Ed Woolverton found this woodpecker frequently at Vermillion Lake, but I saw it only once.

22. Hairy Woodpecker:

23. Downy Woodpecker:

24. Flicker: this woodpecker and the two above species were quite common in the forest at Vermillion Lake.

25. Raven: a common bird at Vermillion Lake, whereas the Crow is very rare.

26. Blue Jay: in the fall of 1952 the Blue Jays were abundant. They usually occured at Vermillion Lake in smaller numbers than the Canada Jay.

27. Canada Jay: I saw only a few at Vermillion and Big Rice Lakes.

28. Black-capped Chickadee: a common bird at Vermillion Lake.

29. Brown-capped Chickadee: none seen, but Mr. Ed Woolverton, who is a resident at Vermillion Lake, has seen them every year.

30. Red-breasted Nuthatch: a very common bird in the forests around Vermillion Lake.

31. White-breasted Nuthatch: only one specimen seen. According to Mr. Ed Wollverton this species is rare at Vermillion Lake.

32. Olive-backed Thrush: only one specimen seen on Oct. 11 at Vermillion Lake.

33. American Pipit: on Oct. 7 a small flock found feeding on the tops of water-lily leaves at Big Rice Lake.

34. Myrtle Warbler: single birds seen almost every day.

35. Rusty Blackbird: on Oct. 6 I saw a single bird at Vermillion

Lake; on Oct. 7, a flock of 10 at Big Rice Lake.

36. Evening Grosbeak: on Oct. 5 there was a flock of 10 birds at Vermillion Lake.

37. Fox Sparrow: only a few seen.

38. Tree Sparrow: a few in flocks of Juncos.

39. Junco: in small flocks and singles. These and the two preceding Species were seen in the forest, in the muskegs, and near the shore of Vermillion Lake.

40. Harris's Sparrow: a small flock at Vermillion Lake on Oct. 16.

Michails Ivanovs Minnesota Muesum National History, University of Minnesota. Minneapolis.

HUSH. . . THE SLEEPING FAWN—On my return from a botanical collecting trip at Treasure Island area of Vermillion Lake June 8, 1953, I stopped in a Jack pine forest just south of Sand Lake on Highway 53. While searching for trailing arbutus and wood anemonies I came upon a sleeping fawn.

Fully exposed to the sun it lay on its left side on a bed of pine needles at the base of a large pine. In startled silence I viewed it for a moment. The abdomen and legs were resting up the gentle slope of its bed; the back with its golden fur variegated with sinuous-white markings glistened in the penetrating warmth of the sun; the flower-like ears, upward-cupped, filmy with white-tipped hairs concealed the eyes and the downward pointing face. Still and relaxed, seemingly in full repose it slept; tremors alone, scarcely perceptible, in the abdominal area, betrayed life.

Feeling grateful for so much beauty at my arm's reach, I cautiously withdrew. In Nature's Nursery the presence of a human becomes a tragic discord. Although this nursery was never meant for human eyes, it was less than one hundred feet from the highway traffic, screened off by a protective border of alders.—**Olga Lakela, U. of Minnesota, Duluth Branch.**

DATES OF SEASONAL BIRD MOVEMENTS

Common loon	April 11, 1950	Dakota County
	April 5,(1952	Anoka County (10 loons were seen sitting on Linwood Lake).
Holboells grebe	April 19, 1952	Anoka County, Linwood Lake.
Pied-billed grebe	April 11, 1950	Dakota County
	April 30, 1951	Lake County, Beaver R. Island.
	April 20, 1952	Anoka County, Linwood Lake.
Great blue heron	March 29, 1952	Near Shakopee in Minnesota River bottom. (4 birds seen).
	March 31, 1952	Carver County, (3 birds on Lake Waconia).
	April 8, 1952	Anoka County, Linwood Lake.

	April 12, 1952	Crow Wing County.
American bittern	April 18, 1952	Anoka County, Linwood Lake.
Snow geese	April 14, 1952	Anoka County, Island Lake. (E. Longtin)
	October 3, 1952	St. Louis County, (flock seen flying over Talmadge river, 1 mile inland)
Old squaw	June 2, 1950	Cook County, (male and female seen near Schroeder on Lake Superior).
	May 28, 1951	Lake County, (flock of 33 seen near Castle Danger in Lake Superior—heard trumpeting).
	May 29, 1951	Flock heard trumpeting in same location. (Last date recorded in 1951).
Turkey vulture	April 11, 1950	Fillmore County, near Lanesboro.
	October 4, 1952	St. Louis County, near Talmadge River, (several seen together, believed in migration).
March hawk	March 16, 1952	Carver County, (seen flying over ice on Lake Waconia).
Osprey	April 19, 1952	Anoka County, Linwood Lake (Ed Longtin)
	May 6-7, 1950	St. Louis County, French River.
Sparrow hawk	April 11, 1950	Ramsey County, south of St. Paul.
	April 2, 1951	Ramsey County, fairgrounds in St. Paul.
	March 29, 1952	Carver County, Lake Waconia.
Killdeer	April 11, 1950	Fillmore County, Watson Creek.
	April 5, 1951	Ramsey County, St. Paul, near State Fish Hatchery.
	March 29, 1953	Carver County, (seen flying over ice on Lake Michigan).
	April 18, 1952	Anoka County, Linwood Lake.
Wilson snipe	April 15, 1952	Anoka County, Linwood Lake. (E. Longtin)
Mourning dove	April 11, 1950	Fillmore County, Watson Creek.
	April 6, 1951	Ramsey County, St. Paul.
	April 1, 1952	Ramsey County, St. Paul, (2 together).
	April 8, 1952	Anoka County, Linwood Lake.
	October 13, 1952	St. Louis County, Lakewood Township.
Kingfisher	April 5, 1951	Ramsey County, St. Paul near State Fish Hatchery.
	April 8, 1952	Ramsey County, Bald Eagle Lake.
Flicker	April 11, 1950	Fillmore County, Watson Creek.
	May 6, 1950	St. Louis County, (abundant near French River).
	April 20, 1952	Anoka County, Linwood Lake.
	September 17, 1952	St. Louis County, near Talmadge River migrating in large numbers.
Red-headed wood-		

pecker	September 9, 1952	St. Louis County, (female near French River on McQuade road).
Kingbird	April 19, 1952	Anoka County, Linwood Lake.
Phoebe	April 16, 1952	Anoka County, near Linwood Lake.
	May 1, 1951	St. Louis County, Sucker River.
Wood peewee	April 16, 1952	Linwood Lake, Anoka County.
Horned lark	March 2, 1951	Chisago County, Rush Lake.
	September 12, 1952	Lake County, (pair seen near junction of Algier-Smith railroad grade and old North Shore road).
Crow	February 11, 1952	Anoka County, Linwood Lake.
Short-billed marsh wren	April 16, 1952	Anoka County, Linwood Lake. (E. Longtin)
Olive-backed thrush	October 11, 1952	St. Louis County, (One near Island Lake and one near Mirror Lake, just north of Duluth).
Hermit thrush	April 14, 1952	Anoka County, near Linwood Lake.
Bluebird	April 11, 1950	Fillmore County, Watson Creek.
	April 15, 1950	Crow Wing County, near Deerwood.
	April 8, 1952	Anoka County, Linwood Lake (heard).
	April 15, 1952	Anoka County, Linwood Lake (seen).
	October 11, 1952	St. Louis County near Talmadge River (pair seen).
Golden-crowned kinglet	April 10, 1952	Ramsey County, St. Paul (pair).
	April 11, 1952	Ramsey County, St. Paul (numerous).
Ruby-crowned kinglet	March 29, 1950	Fillmore County, Watson Creek.
	September 21, 1950	Cook County, Clearwater lake (numerous).
	April 20, 1952	Anoka County, Linwood Lake.
	September 21, 1952	Lake County, W. B. Split Rock River.
	April 22, 1952	Lake County, W. B. Split Rock River.
Northern shrike	April 12, 1952	Sherburne. near Monticello.
Phil. vireo	September 6, 1950	Cook County, Two Island River.
Red-eyed vireo	May 17, 1952	Anoka County, Linwood Lake.
	September 20, 1950	Cook County, Clearwater Lake.
Louisiana water-thrush	April 30, 1950	Fillmore County, South Branch Creek.
Myrtle warbler	April 15, 1950	Crow Wing County, Deerwood.
	April 17, 1951	Ramsey County, St. Paul (2 together).
	April 10, 1952	Ramsey County, St. Paul.
	September 20, 1952	St. Louis County, Meadowland.
	October 20, 1952	St. Louis County, French River Hatchery.
Palm warbler	May 13, 1950	Ramsey County, St. Paul fairgrounds.

	May 12, 1951	Lake County, E. B. Split Rock River.
	September 8, 9, 10, 1952	Lake County, W. B. Split Rock River, (numerous).
	October 2, 1952	Cook County, Thompson Lake.
	October 19, 1952	St. Louis County, French River Hatchery.
	October 26, 1952	St. Louis County, French River Hatchery.
Northern water-thrush	October 2, 1952	Cook County, Mink Lake.
Yellow-throat	April 19, 1952	Anoka County, Linwood Lake.
Tenn. warbler	May 14, 1952	Ramsey County, St. Paul (large numbers seen in migration).
Blackburnian warbler	September 15, 1950	St. Louis County, Sucker River.
	May 19, 1952	Anoka County, Linwood Lake.
Nashville warbler	May 14, 1952	Ramsey County, St. Paul (abundant in migration).
	September 21, 1950	Cook County, Clearwater Lake.
Meadowlark	April 11, 1950	Dakota County
	March 27, 1952	Carver County, Lake Waconia.
	April 8, 1952	Anoka County, Linwood Lake.
Red-winged blackbird	April 11, 1950	Fillmore County
	April 4, 1951	Ramsey County, St. Paul fairground
	March 29, 1952	Carver County, Lake Waconia, (many flocks).
	April 8, 1952	Anoka County, Linwood Lake.
Baltimore oriole	May 14, 1950	Ramsey County, St. Paul.
	May 17, 1952	Anoka County, Linwood Lake.
Bronzed grackle	April 5, 1952	Ramsey County, St. Paul.
	April 8, 1952	Anoka County, Linwood Lake.
Fox sparrow	April 8, 1952	Anoka County, Linwood Lake.
	April 22, 1952	Lake County, W. B. Split Rock River.
	October 11, 1952	St. Louis County, Island Lake.
Tree sparrow	October 13, 1952	St. Louis County, Duluth, near Fauvelle Road.
Chipping sparrow	April 8, 1952	Anoka County, Linwood Lake.
Song sparrow	April 11, 1950	Fillmore County, Watson Creek.
	September 15, 1950	St. Louis County, Sucker River.
	April 8, 1952	Anoka County, Linwood Lake.
	April 20, 1952	Anoka County, Linwood Lake (abundant).
	April 22, 1952	Lake County, W. B. Split Rock.
White-throated sparrow	September 21, 1950	Cook County, Clearwater Lake.
	May 1, 1951	St. Louis County, Sucker River.

	October 27, 1952	Lake County, W. B. Split Rock.
Slate-colored junco	April 11, 1950	Fillmore County, Watson Creek.
	April 2, 1951	Ramsey County, St. Paul fairground.
	April 8, 1952	Anoka County, Linwood Lake (first seen).
	April 8, 1952	Became very abundant. Not so plentiful by April 15.
	April 22, 1952	Lake County, W. B. Split Rock, (abundant).
	October 11, 1952	St. Louis County near Talmadge.
Smith's long-spur	September 21, 1952	Lake County, meadow near W. B. Split Rock river (flocks).
Snow bunting	October 15, 1952	Lake County, flocks near Finland.
	October 18, 1952	St. Louis County, flocks near Talmadge and elsewhere.

John and Helen Hale, Duluth, Minnesota

BIRD OBSERVATION IN VIRGINIA AREA

Species	1928	1929	1930	1946	1947	1948	1949	1951	1952	1953
Pied-billed Grebe					5-12				4- 7	
									8- 9	
Great Blue Heron				4- 5						4-21
					10-11			9-15		
American Bittern				4- 7					2-22	
				11- 8	9- 1					
Whistling Swan							3-28			
Snow Goose					4-22					
Mallard					4- 8	4- 8	4-19		4- 1	
					10- 2			9-24		
Baldpate									4-21	
Green-winged Teal									4-21	
					9- 1					
Blue-winged Teal									4-22	
Wood Duck									4-21	
Redhead									4-21	
Canvas-back									4-21	
Scaup							4-16		4-15	
								10-15		
Golden-eye					4-17	4- 9		4-10	2- 3	
Buffle-head					4-15					
American Merganser					10-21					
Red-breasted Merganser					4-22		3-23			
					10-21					
Sharp-shinned Hawk					10-22					

Species	1928	1929	1930	1946	1947	1948	1949	1951	1952	1953
Cooper's Hawk						9-10				
Red-tailed Hawk		6- 1		10- 2				9-24	4-12	
Krider's						11- 1				
Broad-winged Hawk		5-25								6-17
				9-18						
Rough-legged Hawk					8-20					
Marsh Hawk			8-17		4-17	4-13	4- 9			
						10-13		10-15		
Osprey									3- 7	
					8-20	9-12				
Pigeon Hawk					10-11		8-28		8- 9	
Sparrow Hawk				4- 3						
				10- 2	9-20					
Ruffed Grouse				permanent resident						
Prairie Chicken						10- 5				
Sharp-tailed Grouse								9- 6		
					8-28	10-23		11-10		
Bob-white						7- 8				
Sora Rail					5-23	5- 9	5-16			
Killdeer	4- 2	3-29			4- 6	4- 5	4- 1		4- 7	3-29
	9-28					9-10				
Woodcock					10- 1					
Wilson's Snipe		3-27								
	10-29			10- 1	10- 1					
Spotted Sandpiper						5-21				
Solitary Sandpiper							5-10			5-14
Pectoral Sandpiper					5-23					
	10-20				8-20					
Herring Gull					4-15	4- 5		4-17		
Black Tern							7-10			
nested here in the summer of 1949										
Mourning Dove	one reported for fall of 1950-no date									
Black-billed Cuckoo										6-17
				9-11	9-13					
Short-eared Owl		5-25								
Nighthawk	5-23				5-19	5-25	5-18	5-19		5-22
					9-26	9- 1		9-16	8-26	
Chimney Swift	5- 7	5-13			5-11	5-17	5- 9			
Hummingbird		5-30			5-21					
		9- 6			8-28					
Kingfisher	5-10				4-27	4-13	4- 8		4-22	

Species	1928	1929	1930	1946	1947	1948	1949	1951	1952	1953
	9-30			9-21	9-28	10- 2				
Flicker	4-28	4-18			4-24	4-24	4-25		4-22	4-28
	10- 6			10- 1	9-25			9-24	9-23	
Pileated Woodpecker		5-25				6- 8				
Red-headed Woodpecker		5-25								
Sapsucker	5- 3	4-26			4-22	4-14		4-27		4-21
					9-26			10- 9		
American 3-toed Woodpecker	9-29									
Kingbird		5-25				5-22				6- 1
						8-22				
Crested Flycatcher							5-24			
						9- 5				
Phoebe		4-21			4-27					4-28
				9-17	9- 1	9-10				
Alder Flycatcher		6- 1			5-21				5- 8	
Least Flycatcher	5-19	5-17			5-23	5-17	5-17	5-19	5- 8	5-14
					9- 4				8-15	
Wood Pewee						5-21				
					9-21	9-10			8- 9	
Olive-sided Flycatcher					9- 4					
Prairie Horned Lark	3-18		4-18		4- 8					
					10-11					
Northern Horned Lark									2- 6	3-14
					10-15					
Tree Swallow	5-10	4-21			4-28	4-18	4-21	4-25	4-28	4-20
					8-20				8-26	
Bank Swallow			5-25			5-21				
						8-20				
Barn Swallow	4-28		5-25		4-28	5-21				5-14
					9-14					
Cliff Swallow					5-17	5-17				5-14
Martin	4-27	4- 2			5- 2	5-13	4-21	5- 3	4-18	4-25
									8-11	
Canada Jay									10-30	
Blue Jay						5-17				5-10
					10-16	10-26		11-10	10-18	
Raven	Some have wintered around Virginia for last 3 years.									
Crow	3-18	3- 9				3-24	3- 9		2-17	3- 7
					10- 5	10-26		9-28	10-30	
Black-capped Chickadee	permanent resident									

Species	1928	1929	1930	1946	1947	1948	1949	1951	1952	1953
Tufted Titmouse	5-14									
White-breasted Nuthatch					permanent resident					
Red-breasted Nuthatch							4-25			
								9- 1		
				9-25				9-15		
Brown Creeper					4-24		4-21			4-21
	9-23				10- 6	10- 7		10-15		
House Wren	5-14	5-15	4- 9		5-19	5-10		5-15		
					9- 3			9-16		
Winter Wren					8-20					
Long-billed Marsh Wren						5-21				
Short-billed Marsh Wren					8-20					
Catbird					5-23	5-21	5-17		5-17	5-14
				9-21	9-26	9-25		9-19		
Brown Thrasher		5-12			5-11	5-11	5- 7	5- 3	5-17	5- 8
				10- 2	9-11	9-29		9-16		
Robin	3-21	3-27			3-17	3-20	4- 2	4- 2	4- 8	3-31
	10-20			10- 2	11-26	10-26		11-10	10-21	
Wood Thrush	reported by Mrs. Durant Barclay								7-15	
Hermit Thrush	5-13									
		10- 6								
Olive-backed Thrush								5-19		
						10- 2				
Gray-cheeked Thrush					5-15			5-17		
				9-21	9- 4	10- 2				
Willow Thrush		5-25			5-23	5-17	5-15	5-17	5-16	5-22
				9-25	9- 4					
Bluebird					4- 2					
				9-14	9-26			9-30	9-23	
Golden-crowned Kinglet	9-23			9-18	10-16					
Ruby-crowned Kinglet	4-29	5- 1			5- 2	4-18	4-21	5-11	4-22	4- 2
				9-18	10-10	10- 3			8- 9	
American Pipit									4-29	
	10-13				9-12			9-24		
Cedar Waxwing		3-29								
				9-21	9-26	9-19				
Northern Shrike	5- 5	4- 7								
	10-28				9-29					
Starling			permanent resident							
Blue-headed Vireo							5- 9			
					9-11	9-24				

Species	1928	1929	1930	1946	1947	1948	1949	1951	1952	1953
Red-eyed Vireo	5-27					5-21	5-16	5-19		5-24
						9-12			8-15	
Philadelphia Vireo							5-24			
					9-11		8-28			
Warbling Vireo						5-11	5-16	5-19		
					9-16	9- 5		9-15		
Black and White Warbler		5-17			5-12	5-13	5- 9	5-11	5-16	
					9- 4	9- 5		9- 1	8- 9	
Tennessee Warbler		5-17			5-24	5-19	5-16	5-19		5-14
						8-19			8- 9	
Orange-crowned Warbler		5-17				5-17	5-24			5- 8
					10-20	10-20			10- 8	
Nashville Warbler		5-17				5-17	5- 9	5-19	5- 8	5-10
					9- 4	10-10		9-15	8-15	
Parula Warbler	In the summer of 1950 one nested in top of tall white pine north of west end of Lake Vermillion									
Yellow Warbler	5-18	5-26			5-17	5-13	5-10	5-14	5-16	5-14
				9-21	8-20				8- 9	
Magnolia Warbler		5-17			5-24	5-19	6-16		5-16	5-14
					9- 4	8-20				
Cape May Warbler		5-25					5-17			5-24
Myrtle Warbler	5-28	5- 1			4-24	4-26	4-25		4-28	5- 4
				10- 2	10- 6	10-27		10-21	10- 9	
Black-throated Green						5- 6	5- 2		5- 8	
Blackburnian Warbler		5-17			5-24	5-18	5-17	5-19		5-24
					9-22				8- 9	
Bay-breasted Warbler					5-24					
Chestnut-sided Warbler	5-19	5-25			5-28	5-21	5-17	5-17	5-16	5-22
					9- 4					
Black-poll Warbler	5-27	5-25			5-24	5-22	5-17	5-17	5-16	5-22
					10-22					
Pine Warbler										
					9- 4					
Palm Warbler	5-28				5-11	5- 4	4-30	5-17	5-16	5-14
				10-11	10-10	10- 5		10- 1	10- 8	
Oven-bird	5-18	5-16			5-19	5-18	5-16	5-17	5-16	5-22
					5- 5	9- 5			9-10	
Grinnel's Water-Thrush			9-21			9- 5		9- 1		
Connecticut Warbler					9-26	5-21				
Mourning Warbler		6- 1					6- 5	5-25		6- 1
Northern Yellow-		6- 1			5-31	5-21	5-16	5-19		

Species	1928	1929	1930	1946	1947	1948	1949	1951	1952	1953
throat				10- 1	9-12	9-10				
Wilson's Warbler	5-27									5-24
					9-11				8-15	
Canada Warbler		5-30			5-23			5-19		5-24
Redstart	5-20	5-19			5-17	5-19	5-16	5-17		5-24
	9-23	9-14		9-25	9-11	9- 5		9-15		
Bobolink	Seen nesting one summer south of Lake Fourteen but I have no record of the date.									
Western Meadowlark		4- 1			4- 6	4- 5	4- 4	4-28	4- 5	4-21
					9-13			9-24		
Red-winged Blackbird					4- 6	4- 7	3-30	4-14	4- 8	4- 2
					10-10	10- 5		9-28	10- 8	
Baltimore Oriole					5-11	5-19	5-16	5-17		5-16
					8-20					
Rusty Blackbird						5-21				
	10-20			9-11	8-27					
Brewer's Blackbird						5-22				
				10- 1	9-17	9-19				
Bronzed Grackle	3-24	4- 1			5- 2	4-26	4- 9	4-28	4-17	4-21
	10-29			9-21		9-29				
Cowbird							4-28		4-17	5- 4
				10- 2		9- 1				
Scarlet Tanager								5-25		
Cardinal	A pair nested on the farm place of August Neubauer some years ago.									
Rose-breasted Grosbeak	5-20				5-23	5-19	5-16	5-17	5-16	5-24
					8-20	8-24				
Indigo Bunting							6- 5			
Evening Grosbeak						10-28		11-10		
		5-25								5-14
Purple Finch	Abundant all the winter of 50-51.				4-24	4- 9	4-20		4- 8	4-21
						10- 2		10-15		
Pine Grosbeak	To be seen almost every winter.							11-10		
Redpoll		3-17			4-17					
	permanent resident									
Pine Siskin					6- 5	5- 6	5-10	5-19		5-17
Goldfinch		3-11				5- 4	5-17	5-17	4-26	
	9-23			9-25	9-30	9-25		9-28		
Red Crossbill						9-20				
White-winged Crossbill					10- 5					
Towhee						5-28				

Species	1928	1929	1930	1946	1947	1948	1949	1951	1952	1953
						8-24			8- 9	
Savannah Sparrow		5-12			5-19	5- 9	4-22	5- 3	4-28	5- 8
						10-11	9-30	10-15	10- 8	
Vesper Sparrow		4-18			5-13	5- 9	5- 1		4-26	
	9-22			9-21	10- 1			9-24		
Junco	4-27	4- 6		4- 6	4- 8	4- 9		4-18	4- 8	4- 2
	10-22			10- 2	10-21	11- 1		10- 9	10-30	
Tree Sparrow	10-29				10-21	10-21		10-15	10- 9	
Chipping Sparrow	5- 7	5- 1			5- 6	4-28	5- 2	5-11	5-12	5- 8
				9-18	10- 5	9-25				
Clay-colored Sparrow					5-19	5- 4	5- 7	5-11	5-17	5- 8
					10- 6			9-16		
Harris' Sparrow					5- 7					5-10
	10- 6			9-25	10-11	10-13		9-19	10- 8	
White-crowned Sparrow									5-12	
	9-29			10- 1	9-26	10- 7				
White-throated	5-10	5- 4			4-24	4-26	4-28	5-11	5- 8	5- 8
Sparrow	10- 6			10- 2	10-16	9-29		9-24	10- 1	
Fox Sparrow	4-29	4-18				4-22	4-25		4-22	
	10-13	10-19			10-16	10-15		10- 9	10-10	
Lincoln's Sparrow					10-11			10- 9		
Swamp Sparrow					9-26					
Song Sparrow	3-24	3-31			4- 2	4- 9	4- 9	4-25	4-12	4-21
	10-13			10- 1	10-11	9-25		10- 9	10- 8	
Lapland Longspur									3-29	3-14
						10-13		10- 9	9-22	
Snow Bunting		3- 9							10-18	
	10-29				Common during winter.					
Lark Bunting								11-10		
Magpies reported by the mailcarrier at Zim.								3-28-47		

Vera F. Barrows, Virginia, Minnesota

NEW LOCALITY RECORDS FOR CERTAIN MAMMALS—The printing of the **Mammals of Minnesota** (reviewed in this issue) has revealed many gaps in the knowledge of mammal distribution in the state of Minnesota. This cannot be blamed on the authors, but rather that Minnesota does not have a medium of publication for such records. Until such a publication can be inaugerated (we are thinking that such an opportunity could come through the Minnesota Academy of Science) **The Flicker**, although ostensibly a magazine devoted to ornithology, will make space available for such observations. The following notes are from my records and the specimens present in the University of Min-

nesota Duluth Branch collection.

It is painfully evident from a study of the distribution maps that certain parts of Minnesota are virtually unexplored from at least a collector's standpoint. It appears that most small mammals are found around the Twin Cities, Duluth, and the northwestern part of the state. The reason, of course, is obvious. Trained mammalogists are found at the University of Minnesota, its Duluth Branch, and the Forestry and Biological Station at Itasca State Park. Certainly there are qualified and interested personnel among our high-school biologists, teacher college staffs, game wardens, etc. who can help roundout our knowledge of local distribution. I was impressed by the lack of collections from the southwestern part of the state, particularly Cottonwood County where I spent my boyhood days. Here there are only 11 records, four of which are from authenticated specimens. I have very vivid recollections of such mammals as **Scalopus aquaticus, Lepus townsendii, Sciurus niger, Geomys bursarius, Rattus norvegicus, Mus musculus, Spilogale interrupta,** and **Taxidea taxus.** These are, however, just recollections, and are no longer represented by actual specimens. The following list of mammals are represented by actual specimens now in the University of Minnesota, Duluth Branch collection:

Eptesicus fuscus Collected May 20, 1950 by P. B. Hofslund on the Nortondale Tract, Duluth, St. Louis County, Minnesota.

Lasionycteris noctivagans Collected May 23, 1939 by V. Curtis at Proctor, Minnesota, St. Louis County.

Lasiurus cinereus Collected September 17, 1950 by G. Biron, South Lake St., St. Louis County, Minnesota.

Lepus americanus Several specimens collected in St. Louis County, Minnesota.

Sylvilagus floridanus Several specimens collected in St. Louis County, Minn.

Citellus tridecemlineatus Collected July 7, 1949 by M. Gjessing at Eagle Lake, St. Louis County, Minnesota.

Sciurus carolinensis Two specimens from Pine City, Pine County, Minnesota collected by L. M. Thiry on November 9, 1952.
Collected on December 8, 1950 by V. Garlough on the Nortondale Tract, Duluth, St. Louis County, Minnesota.

Peromyscus maniculatus bairdii Collected by Frank Maida in Fairmount Gardens, Duluth, St. Louis County, Minnesota, October 17, 1950. The skin of this specimen was destroyed, but the ratio of tail length to total length is less than 40%, and the skull which is still in the collection is of the measurements fitting it into the **bairdii** group.

Rattus norvegicus and Mus musculus Several specimens of each from St. Louis County, Minnesota.

Vulpes fulva A skull collected by George Biron from St. Louis County in 1950. **P. B. Hofslund, University of Minn., Duluth Br.**

THE WILLET AT DULUTH—On May 19, 1953 the ornithology class of the University of Minnesota, Duluth Branch sighted a willet on the lake side of Minnesota Point. Presumably the same bird was seen again, this time by M. O. U. members attending the Duluth Bird Club's Annual Field Day, near Harbor Island on May 23. J. K. Bronoel and I saw it again on May 24 on the lake side, and a separate report for the same day from Harbor Island was sent in by William Pieper and other members of the Avifaunal Club, Minneapolis.

Apparently this is the first record for this bird from the northeastern part of the state. Roberts (1936) in his **Birds of Minnesota** reports only one northern record, that from Moorhead, Minnesota. **P. B. Hofslund, University of Minnesota Duluth Branch.**

YELLOW-HEADED BLACKBIRD AT DULUTH—Yellow headed blackbirds are occasionally seen in Duluth, but they are rare enough to deserve comment. A single male was seen in migration on Minnesota Point by the ornithology class of the University of Minnesota, Duluth on May 19, 1953.—**P. B. Hofslund, University of Minnesota, Duluth Branch.**

BLACK TERN COLONY, ST. LOUIS BAY—Mr. O. A. Finseth and I made a preliminary check of the marshy area extending into St. Louis Bay south of the Oatka Boat Club on Minnesota Point on June 21st and found one nest with one egg; one with 2 eggs and indications of several more. We, with Robert Cohen, returned to the area on June 30th for a further check. It was a very foggy day with temperature of 58° and northwest wind. We covered the marsh as thoroughly as possible and found two nests with 3 young; one nest with 2 eggs and one nest with one egg. Sora Rails were noted in the area.

Miss Olga Lakela advises that a colony of Black Terns occupied this area about 1937 and one of our members wrote a paper on it. Apparently they were driven off for a period of years and have again returned in some numbers—**J. K. Bronoel, Duluth Bird Club**

DULUTH BLUE BIRD TRAIL—1953—During the summer of 1953 I again made observations covering boxes placed on our Blue Bird Trail north of Duluth during the previous summer. Of a total of 65 boxes originally set out, only 43 remain. The balance were either stolen of destroyed. The results during the past year were as follows:

Tree Swallow nests	32
House Wren	3
Blue Bird	2
English Sparrow	3

Remained empty	3	
	43	

No attempt was made to count eggs or young. There was no increase in the Blue Bird nests, and a decrease in the nests of House Wrens. The English Sparrows occupied nests at the parking area on Park Point where they are numerous.—**J. K. Bronoel, Duluth Bird Club**

EARLY NESTING OF THE ROBIN—On March 26, 1953 I noticed a robin starting a nest. Robert's (Birds of Minnesota, 1936) gives April 8, as the earliest record for southern Minnesota. Other items of interest noted in the early spring of 1953 included:

Wilson Snipe—February 16—Cedar Avenue Bridge on Long Meadow Lake.

Winter Wren—January 2—Camp Ajawah

White-throated Sparrow—February 12—Cedar Avenue Bridge

Swamp Sparrow—January 2—Camp Ajawah

Magpie—February 16—Long Meadow Lake

On March 26 there were 23 Whistling Swans accompanied by one Canada Goose in a slough by the Automobile Club. When they took off, the "honker" led the way.—**Norris Jones, Avifaunal Club, Minneapolis, Minnesota.**

The Book Page

Gunderson, Harvey L. and James R. Beer **THE MAMMALS OF MINNESOTA.** University of Minnesota Press, Minneapolis, Minnesota, 1953. 190 pp. Illustrated. Cloth, $3.50; paper, $2.00.

At last a book on Minnesota mammals to compare with such other distinguished members of the University of Minnesota Press series as Breckenridge's **Reptiles and Amphibians of Minnesota,** Eddy and Surber's **Northern Fishes,** and Robert's **Birds of Minnesota.** It fills the gap left when previous booklets on the Minnesota mammals (Surber, 1932, Swanson, Surber, and Roberts, 1945) went out of print. It is authoritive, printed on a fine quality of paper, well illustrated, and is well written. It is a book that should be on the shelf of every public and school library in Minnesota, and at the hand of every sportsman and nature lover in the state.

As the preface states, "Not only does the account present what we know, but it also points out many gaps in our knowledge." One need only to look at the distribution maps of **Mus musculus** and **Rattus noregicus** to realize this, Obiviously they are not correct pictures of the distribution of these rodents in Minnesota. Such is the value of distributional maps, for they not only educate, but they stimulate to fill in these gaps. The striking thing about these maps is the large gaps in the state where apparently no collecting has been done. People in a position to fill in our lack of knowledge should do so, following the correct procedure given in the first chapter of the book.

It would be unfair to say there are no objections to the way the material is presented. I have several, although I don't consider them as serious. First, the legends under the distributional maps are rather ambiguous. My first impression was that the authors had not gone very thoroughly into the available material, or else our knowledge of the state's fauna was exceedingly scant. "Specimen's seen" indicate to me sight records, and "authentic records", museum specimens. Page 23 straightened me out on this matter, but I still felt that "museum specimens examined" and "authentic records" might be better.

Secondly, there is a good glossary of terms, perfectly clear to one trained in examining museum specimens, but one that I feel will be difficult for the average layman to use particularly in identifying mammals with the keys. For instance, what is a "guard hair"? The definitions themselves fail to portray a visual picture to any but a trained observer. It is true that anyone really interested will be able to train himself, but keys are at best a portrayal in words of how the maker of the key visualizes it. I am sure that some people will have a great deal of difficulty in visualizing a "cuspidate crown". There is an excellent drawing of the carnivore skull, but how are people untrained in some type of comparative osteology going to reconcile this picture with a rodent skull? A key that is useful should portray the characters visually as well as by means of words. This is particularly

true in a book of this type which will find its greatest sale among sportsmen and the non-technically trained, but extremely interested people in Minnesota.

A third objection I have also is concerned with the keys. I believe that ordinarily nobody but the trained specialist will go to the trouble of preparing the skull in a manner suitable for examination. They would, however, key out the specimen by skin characteristics. Separate keys for skin and skull characteristics would have been more satisfactory to the general user.

Don't let my objections discourage you from buying the book. All in all is it a fine job, and it is a book that really has a place in your library. **P. B. Hofslund. Biology Dept. University of Minnesota, Duluth Branch.**

Eighty-one different kinds of mammals, ranging in size from the Grizzly Bear down to the Pigmy Shrew, have been identified within the borders of Minnesota, according to authentic records. This is the report of two University of Minnesota mammalogists, Harvey L. Gunderson and James R. Beer, in their new book, "The Mammals of Minnesota," just published by the University of Minnesota Press.

Three of these animals, the Grizzly Bear, the Antelope, and the Bison, are now gone from the state, the authors explain, and evidence is lacking that two others, the Wolverine and the Martin, are still to be found here.

"It may be a surprise to have the great Grizzly Bear included in a discussion of the mammals of Minnesota," the authors write, "but it was once an inhabitant of the great plains, where it followed the herds of Buffalo."

The Muskrat is cited as Minnesota's most valuable fur-bearing animal, the state having produced nearly two million pelts in a single year, 1943. Two other fur-bearing animals, the Raccoon and the Skunk, have built up relatively high populations within the state in the last few years because the lack of demand for long-haired furs has reduced the trapping.

The authors describe the White-tailed Deer as Minnesota's best known and most important big-game animal. While this year deer is usually associated with the north woods, its original habitat was what is now the agricultural area of Minnesota. It was not until lumbering and forest fires opened clearings in the north woods that the deer moved northward. A reverse trend is now occurring to a minor degree, Gunderson and Beer report. Through rigid forest-fire controls, many of the burnd-over areas of the north are again growing up to dense timber, unsuitable as deer habitat. Thus, they point out; what many have been known as "good deer-hunting country" ten years ago may be "poor deer-hunting country" today.

The famed "Minnesota Gopher" has several common names, according to the authors. It is known variously as Striped Ground Squirrel, Striped Gopher, or Thirteen-lined Ground Squirrel, and is found throughout the state except in the northwest corner.

The Cottontail Rabbit, while not hunted extensively in Minnesota, is

described as the most important single game species in the United States. The Cottontail has been found in almost every county of the state, according to a map of distribution, and it is found in an area covering roughly the eastern two-thirds of the United States.

The new book, a popular manual for use by schools, conservation groups, hunters, trappers, and other interested in Minnesota's natural history, contains a systematic catalog of all the mammal species found in the state. Each species is described, keys to its classification are given, and the use of the keys is explained. Seventy-four maps of Minnesota show the distribution, county by county, of the various species, and smaller maps indicate the distribution throughout North America of the same species.

Detailed instructions are given on ho wto study mammals, with directions on trapping specimens, preparing study skins, marking animals for recapture, and keeping records of specimens. These methods are illustrated with photographs and drawings, and there are also photographs of a number of the animals described.

The authors explain that the account not only summarizes existing knowledge about the state's mammal populations but points out gaps in the present information. They hope, therefore, that sportsmen, students, and others who are interested in nature lore will report their information about mammals to the University's Museum of Natural History or Division of Entomology and Economic Zoology in order to increase the storehouse of data. Mr. Gunderson is on the Museum staff and Dr. Beer is an assistant professor in the latter department. The material in the book is based on the collections and data in these two University departments.—**University of Minnesota Press.**

LAKELA COLLECTION

Audubon: Birds of America

The Auk, 1930-1936, and one copy 1914

Barbour: Naturalist at large

Barth: Make Skrik

Beard: Fading trails

Beebe: Pheasant—their lives and homes

Bent: Life histories of North American flycatchers, larks, swallows and their allies

Bent: Life histories of North American shore birds, Part 2

Breckenridge: Reptiles and amphibians of Minnesota

Chapman: Camps and cruises of an ornithologist

Commons: The log of Tanager Hill

Coulter: The story of the plant kingdom

Coulter: New manual of Rocky Mountain botany

Dixon: The human side of birds

Dear: Breeding birds of the region of Thunder Bay, Lake Superior, Ontario

Dice: The biotic provinces of North America

Dickerson: The frog book

Dubkin: The murmur of wings

Eames: Morphology of vascular plants—lower groups

Fairchild: The world is my garden

Ferril and Folsom: Indoor bird watcher's manual

Gaeumann: Principle of plant infection

Goldman: Rice rats of North America

Gunderson: A study of some small mammal populations at Cedar Creek Forest

Heilner: Our American game birds

Hickey: A guide to bird watching

Howell: Revision of the American pikas

Hylander and Stanley: College botany

Jacques: How to know the insects

Keeler: Bird notes afield

Kortright: Ducks, geese and swans of North America

Leopold: A Sand County almanac

Lincoln: Migration of American birds

Maheshward: Introduction to the embryology of angiosperms

Mathews: Field book of wild bird and their music

Menaboni: Menaboni's birds

Miller: Butterfly and moth book

Murie: Moose of Isle Royale

Nice: Studies in the life histories of the song sparrow, Part II

Peattie: Green laurels

Peterson: Birds over America

Peterson: Field guide to the birds

Peterson: Field guide to western birds

Pough: Audubon bird guide—eastern land birds

Rickett: Green earth

Ridgeway and Friedmann: Birds of North and Middle America, Part X

Robbins and Rickett: Botany

Rourke: Audubon

Sanderson: Animal treasures

Shelford: Animal communities in temperate America

Storer: Flight of birds

Swain: Insect guide

Tanner: Ivory-billed woodpecker

Tilden: Minnesota algae, Volume I

Troughton: Furred animals of Australia

Ware: Wing to wing

Newman: Outlines of general zoology

Connoly and O'Harra: Mineral wealth of the Black Hills

Bates: Nature of natural history

Taverner: Birds of Western Canada

Lack: Galapagos Finches (Geospizinae)

Peters and Burleigh: Birds of Newfoundland

McElroy: Handbook of attracting birds

Saunders: Guide to bird songs

Cheney: Wood notes wild: notations of bird music.

Witchell: Evolution of bird-song, with observations of the influence of heredity and imitation.

Broley: Eagle Man

Walkinshaw: The Sandhill Cranes

West: Algae, Volume I

Wood: Animate creation, Volume II

Wood: Illustrated natural history

Wayman and Burnell: Field book of birds of the southwestern United States

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The Flicker

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The President's Page

Historians now quite generally agree that the soil of Minnesota was first touched by the canoes of explorers coming up the great lakes and landing at or near what is now Grand Portage in the far northeastern tip of the State. But although this section was the first to be discovered for history, it has seemingly been the last to be explored for ornithology. Early surveys of the State's wild life were nearly all made in the southern and western part of the State.

In 1923, a Major Long left Fort Snelling with a small exploring party and penetrated as far as the Canadian border. He was followed some thirty years later by an Englishman, Captain Blakiston, heading a similar expedition. Both produced some valuable early reports as they had among their members. scientists who collected and reported on the bird life of the region.

But both these expeditions took the central and western route, crossing over to and going north through the Red River Valley. Here they found the going quite easy for they discovered, among other things, Minnesota's original highway system, north and south trails made by hoof and moccasin on the sand ridges that skirt the eastern boundary of the valley where Indians had hunted and treked for untold centuries. Even the present highways, in some places, follow these original trails.

In this early period the northeastern corner of the State was in a way by-passed and neglected. Even up to a rather recent date most of the bird observations recorded, including those of Dr. Roberts, were from the southern part of the State.

The reason for this may be quite obvious. Before the era of iron mining began and the highway to the Canadian Lakehead was built and improved, travel in this section was slow and hazardous, and acted as a deterrent to those who would do research here. Inland were only logging trails, discouraging all but the most venturesome from entering the forest area. Timber cruisers were numerous, ornithologists were few.

In a letter to the writer as late as 1932, Dr. Roberts commented on this fact in the following words: "Your section has been largely a blank spot as I have never been able to locate anyone who kept regular records."

It was about this time that Dr. Lakela came to State Teachers College and took up her work of exploring and reporting from this corner of the State. Of late many others have come into this section and made interesting discoveries. Notable among these is Dr. Breckenridge of the state university who has made frequent visits to the area, filming and recording his observations.

It was on one of these trips, while cruising Lake Superior with some fishermen, that "Breck" filmed an unusual gull. Unable to collect it, he submitted the film to various bird experts, and it was declared to be a black-backed gull. From the lake shore Dr. Lakela glimpsed an ivory gull, a rare visitor from the far north. Now comes another report, this time of an eider duck, rare indeed south of the arctic—not collected, but sight reported. Maybe the haze that sometimes hangs like a curtain over the "Shining Big Sea Water," and the hills that flank its shores hold other secrets from eager watchers, that promise adventure for the amateur, problems for the professional ornithologists.

O. A. Finseth, Pres.

"Whiskey Jack"

by

P. B. Hofslund

What could be more symbolic than the picture (frontispiece) of the Canada Jay sitting on the camp axe? Sometimes cordially disliked, because it is a thief, its companionship along the trails of the lonesome woods more than makes up for its less desirable qualities.

Expressive of its character are the many names commonly applied to this bird. "Camp robber," "lumber jack," "moose bird," "whiskey jack," and many another sobriquet has the Canada Jay. Perhaps "whiskey jack" is its most common alias, a name that has no reference to a liking for hard liquor, but rather a corruption of the Indian name, "wiss-ka-chon" or "wis-ka-tjon."

Even though the snow is on the ground, and the March winds blow with all their fury, the Canada Jay is already on its nest. Nesting begins in late February and early March and after 16-18 days the eggs are hatched. Apparently the female does all the brooding and incubation, although the male does help in caring for the young. The young birds remains in the nest for about 15 days, and although when very young they are unlike the adults, by August and September they are practically indistinguishable from them.

Like its relative, the Blue Jay, the Canada Jay has a variety of calls, from harsh "jay" notes to beautiful songs. It is something of a mimic, and the hawk screaming in the fir woods is often nothing more than our jay friend.

The Canada Jay is strictly a northern bird, and even in its wanderings is seldom found far from the northern tier of states. It well could be the symbol of the north, and surely of all birds, it should be the emblem of the trappers' trails and the canoer's portages. **Univ. of Minn., Duluth.**

"Whiskey Jack"

William Kilgore, Jr.

by

W. J. Breckenridge

Thanksgiving Day, 1953, saw the passing of one who for many years was one of the most loved figures among the "bird people" of Minnesota and the midwest. Mr. William Kilgore, Jr. quietly passed away after a long long illness, leaving a place in the hearts of his many friends that will remain unfilled for years to come. His genial personality and affable manner were gifts with which few persons are fortunate enough to be endowed, and his unending wealth of stories, appropriate to all situations, made him an ever welcome visitor in any company.

Born on August 15, 1879, Mr. Kilgore was the youngest of a family of 10 children. His school days were spent in his home community of north Minneapolis during the days when only a short walk took him into the open wild country. Here he acquired his love for hunting and the out-of-doors. Palmer's Lake, Shingle Creek, and the woods along the Mississippi River between Minneapolis and Anoka made up his adventuring wilderness. Here one of his dangerous pastimes was climbing about on the log drives that choked the Mississippi above the saw mills. During this period he learned much of wood and nature lore from his father who was widely read in many fields. From him young Kilgore acquired a love for good books, and later in life the fact that his formal education in the field of ornithology was limited did not deter him from acquiring a surprising grasp of the field, through his extensive reading.

While he was still in school Will Kilgore met the already much loved and respected physician, Thomas Sadler Roberts. Dr. Roberts' knowledge of birds led Will to go to his house one day to have a hawk that a friend had shot identified, and this contact developed into a firm friendship. After working for Northern States Power Company for several years, and spending only hobby time with Dr. Roberts, he was finally invited in 1921 to join Dr. Roberts as his assistant in the newly-formed Museum of Natural History on the University of Minnesota campus. Here Mr. Kilgore's major life's work in natural history began. He assisted in the class room as well as in field work with the students, where his pleasant smile and friendly conversation always hit a responsive chord in students, and his genuine, deep-seated enthusiam for bird watching was passed on to a great many of them. In fact, his unusual success in transmitting this enthusiasm to others was one of Mr. Kilgore's major contributions to his associates. While he was at the Museum, the conducting of visiting school groups through the exhibit corridors was a part of his work, and he aided Dr. Roberts in field collecting and the photographing of birds during the summers. It was this help he afforded his friend and superior, that was a major determining factor in causing Dr. Roberts to begin the writing and publishing of his monumental BIRDS OF MINNESOTA. All through the years it was evident that William Kilgore's heart and soul were in the study of birds; and close behind was

his devotion to Dr. Roberts and to the Museum.

I shall always remember Dr. Roberts' recounting an early incident in Mr. Kilgore's career as an ornithologist which might be wise guidance for budding bird watchers. Day after day Dr. Roberts and Mr. Kilgore had spent ranging the Big Woods in southern Minnesota looking for southern nesting species—Bell's Vireo in particular. Night after night they returned and repeatedly Will's answer to Dr. Roberts', "Well, any unusual birds today?" was "No, nothing out of the ordinary." Finally, Dr. Roberts, far from being disappointed in him, seemed to put his stamp of approval on young Kilgore as a careful, skeptical field observer by remarking, "Will, you're going to be a good bird man. You're not always coming in with wild reports of rare birds."

Some of my own happiest recollections are of days spent in the field with Will Kilgore as, under the guidance of Dr. Roberts, we searched some of the lesser known corners of Minnesota for certain data that Dr. Roberts felt were lacking for the completion of his BIRDS OF MINNESOTA. Although not a rugged individual physically, Mr. Kilgore's interest was sufficient to keep him going in many a tiring search for the nests of such rare species as Connecticut Warblers, Nelson's Sparrows and Yellow Rails. I will always remember our walking miles over virgin Red River prarires, dragging a rope tied between our ankles trying to flush a Sprague's Pipit from its nest. Finally, our spirits began to drag along with our tiring feet, and we coiled up our rope and started back. "Can you imagine two people covering so much ground in territory where we know Pipits are nesting and not flushing one?" I commented dejectedly as we approached the car, and just as the words left my mouth, a Sprague's Pipit flushed from a nest directly between us—a real story book ending for our patient efforts.

Again I recall when Will and I were together in an experience involving a Prothonotary Warbler. Dr. Roberts with a local observer had visited a nest of a Prothonotary Warbler in the valley of the Rum River near Cambridge, Minnesota, the northernmost nesting for this species. Twenty-five years later he returned to the area with Will and me to see if the birds could still be nesting there. After locating what he thought was the general area where the birds had nested, Dr. Roberts dispatched the two of us to look around in the lowland woods and listen for a singing male warbler. We cruised around through the heavy soft maple woods for some time, but heard no loud ringing Prothonotary songs, and began to feel that the seach would be fruitless. As we moved quietly along listening intently, Will casually pointed to a rotting maple stump and remarked "Now, there would be a perfect place for a Prothonotary to nest—if there were any here." There appeared to be a long-deserted Downy Woodpecker's hole in the stump, and, glancing into it as we passed, we caught sight of some tiny speckled eggs in the cavity. "Could these possibly be Prothonotary eggs?" we puzzled. So, retreating a short distance, we sat down and waited. Sure enough, along came a Prothonotary Warbler and slipped into the cavity to incubate the eggs. Here again Mr. Kilgore's knowledge of this bird's habits, together with some aid from Lady Luck, enabled us to locate a rare nest with not even a suggestion of a song to guide us to the territory.

Many other incidents—the measuring of the height of the Sprague's Pipit during its aerial courtship song; a lucky find of a Duck Hawk eyrie on Superior's North Shore; our struggles to collect a Yellow Rail and finally killing one with a stick as we mistook it for a meadow mouse; our unsuccessful try to trap young Yellow Rails with hair nets; the thrill of finally locating the nest of a Nelson's Sparrow after many days of searching —all these are experiences that spotlight my recollections of 25 years of association with my good friend, Will Kilgore.

Perhaps the fact that the Fates chose Thanksgiving Day to mark Mr. Kilgore's passing should direct our thoughts to those of thanks to the Almighty for the cheer and the enthusiasm, the fun and the friendliness that is ours, because of our contacts with such a friend as William Kilgore.

Museum of Natural History, Minneapolis, Minnesota.

William Kilgore, Jr.

Bird Watching on a Trip to Churchill, Minnesota

by **Catherine E. Lieske and Evelyn Palmer**

Unfortunately, the Canadian National Excursion Train to Churchill, Manitoba is not scheduled to coincide with the greatest concentration of birds in that area. In order to avoid the hordes of mosquitoes which infest that region earlier in the season, the excursion train leaves in mid-August, a rather poor time for observing birds.

Traveling north on this train from Winnipeg, in 1952, we noted great numbers of Franklin's Gulls flying over the vast prairies of wheat.

At Flin Flon which was our first long stop there was a scarcity of birds, because of the smelter gas and rocky terrain. However at Beaver Lake which is 20 miles out of town, and where we spent most of the day, we noted Downy Woodpeckers, Red-breasted Nuthatches, and Chickadees in the spruce and pines. On a boat ride on this lake, which is not unlike any of our northern Minnesota lakes, we saw a Kingfisher, a Loon, a female Pied-billed Grebe, and numerous Cormorants.

At Sherridon we had a trip on an open railway car, usually used by the working crew, to watch track laying operations for the railroad going to Lynn Lake. A guide pointed out an Eagle's nest on top of one of the tripod-supported telephone poles. These poles with their odd three way support are common to the north land because of the perma-frost and rocky terrain. A Blue-winged Teal swam unconcernedly in a drainage ditch as we went by. No doubt there were numerous birds in the nearby woods, but we had no opportunity to observe them.

On our return to Sherridon, we visited an Indian cemetery. There we saw and heard three Sparrows—the Savannah, Song, and White-throated, as well as Chickadees and Goldfinches.

Upon leaving Sherridon, we traveled over the Hudson Bay Railway, a one track line laid over vast muskeg swamps We passed Cormorant Lake, and wished we had an opportunity to stop over at this great water-fowl sanctuary. Going farther north, the only birds observed from the train were an infrequent duck or cormorant. From Gillam north the sphagnum moss makes such excellent insulation that frost is encountered at a depth of about one-fourth inch in summer and from here on the terrain is almost completely that of muskeg swamp.

At Emery, we began to travel due north among stunted tamarack and spruce. This is where the Arctic Partridge or Willow Ptarmigan are hidden in the brush, well concealed by their seasonal plumage which changes to white in winter and brown in summer.

At Churchill, we were met by our friend, Mrs. Eva Beckett, a well known Canadian naturalist. She suggested a trip to Fort Prince of Wales immediately so we could take advantage of the sunshine, as the weather in Churchill is most fickle. We walked to an Eskimo village on the Churchill River where a smiling Eskimo invited us to

get into his whaling canoe. No sooner had we left shore than we spotted a Jaeger, the famous predator of the North, stealing a fish from an Arctic Tern in flight. Bonaparte Gulls and Arctic Terns were continuously circling above us. The white whales rising for air looked like white caps on a calm day.

Upon reaching the Fort, we had our first glimpse of Hudson Bay. Amidst the creeping willows and low scrubby laurels, we observed numerous White-crowned Sparrows.

Walking back to Churchill, after our return to the Eskimo village, we flushed up flocks of Lapland Longspurs and Pipits as well as English Sparrows.

The next day was gloomy and misty. After an early breakfast, we walked to the Whaling Plant, but were sidetracked by countless shorebirds wading about in the little pools formed by the backwash of the high tide. The majority of these birds were immature Bonaparte Gulls, which came within just a few feet of us. There were also many Ruddy Turnstones busily living up to their names, as well as the Semipalmated Plovers and Semipalmated Sandpipers, two of the commonest shore birds in the area. A few White-rumped Sandpipers darted here and there. Common Terns and Herring Gulls were rare, but Arctic Terns and Bonaparte Gulls by the score were screaming overhead, while an occasional Parasitic Jaeger would suddenly dive in to attack. Many Bonaparte Gulls were busy pecking at the carcasses of the white whales that had just been brought in.

Mrs. Beckett had promised us a birding trip over the Heath as the high tundra is called, but as it began to rain heavily, she suggested going to her cottage on the rocks overlooking Hudson Bay. On the way we visited the Grain Elevator, the main reason for Churchill's existence. Nearby was a slough where we saw flocks of Old Squaws.

While eating lunch, Mrs. Backett told us to look out the kitchen window. There we saw several Hudsonian Curlews walking back and forth across the rock shelf busily searching for food. They nest not far from the cottage. Another bird that nests nearby is the Harris's Sparrow, which we so greatly admire when we see him during spring migration. We were surprised to hear that in his northern home, he is quite a bully and drives other birds away from the feeding trays. The rain turned to snow so further birding was impossible.

As we sat and chatted we were interested to learn that were it not for a law forbidding the collection of bird's eggs within Churchill and its immediate environs, very few birds would be left in this Ornithologists' Paradise. Some so-called bird enthusiasts had been taking out hundreds of eggs each year for their collections, thereby endangering the bird population. Mrs. Beckett was instrumental in bringing this depredation to the attention of the Governmental authorities.

Reurning from Churchill, we made only one stop. This was at The Pas, Gateway to the North. As we were walking around the town, we were thrilled to see hundreds of Pintail Ducks literally covering a small lake. We later learned that this lake is a Wild Fowl Refuge.

It is our hope and ambition to take another trip to Churchill, but on the local train, the Muskeg Express, which will take us there in June or early July when nesting is at its height.

Duluth, Minn.

The Eider in the Upper Midwest

by

William R. Pieper

Two species of Eiders have been recorded in the upper midwest. The King Eider and/or the Common (American) Eider can be found on the state lists of Michigan, Wisconsin, Iowa, and North Dakota.

The King Eider (which has been recorded more often) is included in Dr. P. L. Hatch's **"Note on the Birds of Minnesota"** with the following statement: "A pair of these ducks was obtained in Grant county by Mr. Emery Armstrong, of Herman, in October, 1885. After considerable correspondence, I learned that one of them was sent to Philadelphia, and the other to some friend in Michigan. The same gentleman says that he has seen quite a number of them flying over the level praries in the vicinity of Herman, and he has shot several without suspecting it was a rare species in the state. . . . As the locality is a favorite hunting resort of mine, and Mr. P. H. Clague resides there, a friend who loves ducks (to eat) as well as I do (to list), I propose to settle this regal question if it takes a good many duck-seasons to do it in."

Apparently Dr. Hatch never settled his "regal question" as Dr. Roberts relegated the record to the hypothetical list in 1932 ("Birds of Minnesota, 1932 and 1936).

Observers in neighboring states have been more fortunate. In Wisconsin the following records have been obtained. The American Eider was recorded at Racine in the winter of 1875 by Hoy. Two specimens were also taken at Milwaukee (no date) and were preserved in the Public Museum. A female was shot on Lake Koshkonong in November, 1891. The King Eider has been taken at Milwaukee "many years ago." Two specimens were taken at Milwaukee on Jan. 7, 1900 and Dec. 25, 1899. A female was taken in the Milwaukee harbor, Nov. 28, 1903, Another was taken at Muskego Lake, Nov. 8, 1933.

In Michigan two authentic specimens of the King Eider were recorded; one in November, 1911, at Gun Lake, Barry county. and one found dead Nov. 11, 1936, at Union Pier, Barrien county. Barrien county is located on the shore of Lake Michigan.

In Iowa an American Eider was shot in Woodbury county. No. 1, 1901, and a King Eider was shot on the Mississippi near Keokuk on or about Nov. 18, 1894. Another King Eider was killed on Des Moines Rapids (Lee county).

The American Eider is included in the check-list of North Dakota birds compiled by Robert N. Randall in 1952 (no date or location given).

It is readily seen that the majority of the records of both Eiders came from Lake Michigan in the month of November. Bearing this fact in mind, it is not impossible to surmise that the birds could occur on Lake Superior in November as well as on Lake Michigan.

With this information in mind, several M.O.U. members have long held

that the Eider does occur on Lake Superior in the fall. This belief was finally rewarded when on Nov. 7, 1953, an American Eider was observed on the inner harbor at Grand Marais on Lake Superior.

The bird was studied by Mr. Raymond S. Glassel and the writer (sometimes at extremely close range) from 8:00 A.M. until noon. During this time the bird remained in the inner harbor without once taking flight. On one occasion as the bird was apparently swimming for the open water we headed it off by chasing it away from the narrow opening to the lake proper.

The bird was (in my estimation) apparently an immature, but it might have been a female adult. It was very tame as are so many of these birds in the far north where nesting places are provided them, and the down is harvested from their nests. When approached by an occasional lumberman's or fisherman's boat it would merely swim aside to allow the boat to pass, but it never made any real effort to escape.

The following identification marks and habits were noted, sometimes at distances of only 30 or 40 feet. The basic color was a soft brown with the head somewhat lighter colored. The breast and sides were heavily barred with dark brown (female and immature Eiders are the only ducks so marked). The eyes were yellowish-brown with a white fleshy ring. A leathery process extended from each side of the base of the bill towards the forehead, giving the head a canvas-back-like profile. Sickle-shaped feathers were noted on the wings. The bird dove frequently always by half opening its wings as if to fly under water. It was once timed at 43 seconds under water.

The bird was still in the inner harbor when we left. It was in this very place that Dr. Breckenridge took the only Minnesota record of the Harlequin Duck. Two American and two Surf Scoters were also present in the inner harbor at the same time that the Eider was noted. It is hoped that this hypothetical record of the American Eider will be substantiated by additional reports by other observers in the Lake Superior region in future years. **Avifaunal Club, Mple.**

The Varied Thrush in the Interior

by

Olga Lakela

The varied thrush was first placed on record in Minnesota in the winter of 1941. (The Flicker 13 (1): 18., 1941). Mrs W. S. Telford discovered it at her feeding station on the lawn of her Congdon Valley residence in Duluth. There it was seen by many local bird observers through April of that year.

Later, another record was made at Grand Marais. Quoting from a letter of Dr. Thomas S. Roberts, addressed to me, Nov. 28, 1941, he wrote, "I have to make a report which I am afraid will distress you and your Duluth bird friends. Dr. W. P. Abott of Grand Marais and of Duluth collected a few days ago an adult female Varied Thrush. He sent us the specimen and we have it in the collection. I have looked up your description of the bird, and you speak of the breast band being interrupted. This would mean a young of the previous year. The young female has no sign of the band but the adult female has a dull band across the breast in the same location as the distinct black band of the male." His reference to the bird with an interrupted breast band is the one seen at Duluth. In his characteristic thinking in terms of absolute truth he continues." The question arises whether the Abbot bird could be the bird seen at Duluth. The absence of the band makes it almost certain that it is another bird." So Dr. Roberts was almost certain that two individual varied thrushes, a male and a female, were in Minnesota that winter.

Two additional interior records of the varied thrush known to me come from Wisconsin. (The Passenger Pigeon 8 (2): outside of back cover, 1946) gives the following: "On February 13, 1946, this very rare and interesting bird, varied thrush, appeared in the backyard feeding station of Mr. and Mrs. W. J. Allen of Janesville." It was a male, associating with blue jays, titmice, cardinals and evening grosbeaks during feeding visits, until last seen on Feb. 28. The second is an earlier fall record, appearing in print for the first time on the cover of the given reference. The record is given as Oct. 28, 1944 by Mrs. H. R. English at at Madison. She observed the thrush at the bird bath for a "couple of hours." The bird did not appear again.

The present Minnesota record, the winter of 1953-54, comes again from the North Shore of Lake Superior. Reportedly the varied thrush was sighted first by the Larkins at the feeding station on their home grounds in Encampment Forest on Dec. 8, 1953. Since that date, many local bird watchers have seen it there. During the absence of the Larkins, Mrs. Hazel Fields of Cedar Grove area, has the pleasant task of seeing that the bird will have plenty to eat.

Under her aupices on Jan. 3, 1954, Missess Mary I. Elwell, Mary Fulton and I were able to observe the bird, climaxing the winter census of the North Shore erea. Ahead on the decending rail to the Larkins place from Highway 61, she broke the ground cover of fresh-fallen snow over 10 in. deep. Below gleamed the open lake with

sparkling wavelets of silver and gold, and with Encampment Island centering the depth of the heavens mirrored in the encircling band of its calm shores.

The layering snow leveled the forest floor with deceptive smoothness; it shrouded the boughs of the evergreens and topped the houses where the warm sun thawed it into trickles of water wetting their shingled exterior, and it capped the ancient rock on the trailside with a doming cushion on which Mrs. Fields deftly sprinkled a food mixture of raisins, bread crumbs, and crimson berries of Mountain Ash, in expectation of the avian arrival from the far west.

Soon it was sighted in the trees, but for a closer view we four huddled together for concealment in a porch shelter flanked by a low pile of snow-covered wood, each trying to be as inconspicuous as possible and yet command a full view of the stage set before us. Closeby at the bountiful suet supply, without concern, were feeding a number of chickadees and downy woodpeckers. One could hear the gentle splashing of waves on the shore just reaching the dripping icicles festooning the banks. In silence, our eyes searched the sunlit vistas of the shorewoods, their winter whiteness softened by blue streaking shadows. Directly in front of us the silvery birches with their mauve-tinted sprays wove a lattice against the cloudless sky canopying the food-laden rock. Repeatedly we were alerted by subtle movements in firs and cedars. "It will come to birches," whispered Mrs. Fields. It came again and again, displaying its gorgeous plumage at all angles. With a robin-like chuck it viewed the food. Finally after several appearances, hunger overcame caution; it alighted on the snow, and seemingly tip-toed about to pick up a large crumb of bread, disappearing to the nearby evergreens.

The brilliancy of its plumage far surpassed my expectations. The orange throat and upper breast, set off by a jet-black, complete breast band which in looking from below seemingly formed a complete circle of black enclosing the face, the throat, and the upper breast. The upperparts glowed with blue. Undoubtedly the brillancy of its plumage was accented by the sun, for in side view it was reminiscent of a Blackburnian warbler, as some one remarked, (referring to the coloration). Without doubt this third varied thrush seen in Minnesota is a mature male. The word "tawny," has been used by some authors to describe the color of the underparts. It is a far cry from the actual color of a living bird, even in winter; its nuptial plumage must be bright, indeed.

"Why does a bird like that come here in winter" some ask. The breeding range of the varied thrush is in the Pacific northwest. In migration some individuals adventure off the usual routes, to new areas as casuals or accidentals.

Two races of the varied thrush, **Ixoreus naevius** are regarded by some authorities. The northern race, **Ixoreus naevius meruloides**, from the interior North American and the far northwest, Yukon Valley and Alaska, is known to migrate as far as Montana. However, sight records are not sufficient to establish the race. As a casual migrant the varied thrush, race not specified, has been recorded from New Jersey to Massachusetts on the eastern coast, and in the southwest interior, from Kansas, Nebraska, New Mexico and Colorado. **U. of Minnesota, Duluth Branch.**

Occurrence and Distribution Records of Minnesota Birds and Mammals

From time to time, we have been requested to prepare distribution maps of various Minnesota game birds and mammals. Usually we end up with a map that contains not a little guess work. For example, where is the southern line of pinnated grouse distribution. Is it Anoka County? We just do not know.

All of us keep records, if we happen to remember to jot down observations, but they are not uniform, nor do they come in regularly. I believe that it would be desirable to collect county records for all game birds are probably mammals too, over a period of years so that we will know more about their their range and distribution in Minnesota. Wildlife is dynamic. Because of habitat changes, weather conditions, etc., the range of wildlife is constantly in flux.

After much thought, Forrest Lee and I have prepared a 3x5 card for recording observations. The card will give us nesting data as well as occurrence data. Cards will be filed here in the St. Paul office, by species, and distributions will be plotted on county maps. Such a file will keep us constantly in touch with the changing range of game birds and mammals and keep us aware of the ecological significance back of these changes.

Observations are needed for all species of upland game birds, waterfowl, avian raptores, mammals and predators, no matter how common. This does not mean that every time a pheasant, a ruffed grouse, or a snowshoe hare is seen in and about a certain locality that a record should be made. However, records of common species that show range, distribution, and/or nesting and breeding should be made. Special cases for observation are given below:

1. New birds just moving into the state. Examples: black duck, American scoter, white-winged scoter. The black duck is still expanding its range in the state.
2. Well established birds whose range is shrinking or expanding. Examples: pinnated grouse, quails, scaup.
3. Winter visitants. Examples: pinnated grouse (in southern counties), old squaw, snowy owl.
4. Summer residents tending to lag behind and winter over. Examples: various species of ducks, jacksnipes, Canada goose.
5. Birds moving northward into the state after nesting outside the state. Examples: This is a characteristic of birds of the heron family, but some ducks as the fulvous tree duck and the cinnamon teal might appear in Minnesota under these circumstances.
6. Birds whose normal breeding range lies outside Minnesota. Examples: European widgeon, greater scaup, avocet.
7. Evidence of nesting not established or only recently established. Examples: pelican, cinnamon teal, white-winged

scoter.

8. Bird which formerly nested in the state. Example: Canada goose.
9. Recently introduced species. Examples: Hungarian partridge, chukar partridge.
10. Erratics. Example ptarmigan.
11. Threatened species. Examples: snipe, quail.

Arnold B. Erickson

DISTRIBUTION and/or BREEDING RECORD: BIRDS AND MAMMALS

Species ..... Number Seen .....

County where seen ..... Date .....

Obesrvation locality by Twp. ..... R. ..... S. .....

Nearest Town .....

Type of cover observed in .....

Nesting: Nest found contents .....

Adults feeding young .....

Nesting cover (i.e., alfalfa, jack pine, bulrush) .....

Mammals: (evidence of breeding) .....

Observer's Name .....

Address .....

(Put only one observation on each card.)

Seasonal Report

by

Mary Lupient

The record breaking heat and drought of early fall continued on through October and to November 19. Then a rain fell and reduced the hazard of forest fire, which was a matter of concern during the hunting season. The weather was unusually warm and sunny except for a brief spell of severe cold that occured about the middle of December, when the mercury dropped to 29 below at Bemidji with correspondingly low readings through the state. Precipitation was mostly in the form of rain in eastern and southern sections, elsewhere light snow fell.

Between 250 and 300 Whistling Swans arrived at Mud Lake Refuge at Holt during the first week in November, and nearly all of them stayed until November 22. This report and others from Mud Lake Refuge was sent by J. C. Carlson, Ass't Manager of the Refuge. On Rondeau Lake near St. Paul the appearance of 24 Whistling Swans was reported by H. D. Klien, November 5. A lone swan which stopped over night December 10 on Whitefish Lake was reported by George T. Ryan. Joel Bronoel stated that 196 were seen at Duluth during migration.

An American Bittern was seen near Savage, December 20, by J. W. Wilkie.

Many observers in Eastern Minnesota reported a heavy migration of Canada Geese, October 6. Five Canada Geese tarried at Pleasant Lake near St. Paul through November and early December. Snow Geese and Blue Geese migrated more to the west, and were seen also at Whitefish Lake the third week in October. P. B. Hofslund, et. al. said that great flocks of Snow Geese passed along the hawk flyway at Duluth, October 12. The migration of Blues and Snows at Mud Lake Refuge was the best since 1949. About 4000 used the refuge waters and, untold thousands passed over during the last two weeks in October. The migration peak for ducks occured during the week of October 18-24. The peak total was 62,000 of which 45,000 were Mallards. Mr. Carlson stated that all species of ducks without exception, and diving ducks especially, were down in numbers during the season's migration. Reportedly there were fewer ducks elsewhere in the state. Flights of northern ducks, mostly Mallards, occurred the third week of November. This fall Hooded Mergansers were much more abundant than usual. Observers reported flocks of more than 100 in some places. An exceptional report was made by Florence and Lee Jacques who counted about 1,000, mostly males, on the waters of the Hill Farm near St. Paul, November 6. At North Lake near Etter, October 15, an Old Squaw drake was killed by hunters. The specimen was brought to the Musemum of Natural History and identified by John Jarosz.

According to P. B. Hofslund the hawk migration at Duluth continued through October and the first part of November. A large flight of eagles was observed there October 22.

Golden Plovers and Black-bellied Plovers lingered far beyond their usual departing date. They were

still at Duluth November 10 and several were seen by this writer along the Minnesota River bottoms November 19. About 25 Killdeers were with them. Sally Davidson saw a Killdeer at the Isaac Walton Bass Ponds November 29. A Northern Phalarope was seen at Osseo by William Pieper, October 28.

Approximately 800 gulls, mostly Franklin's stayed for weeks on the Minnesota River near Shakopee. Date of last report was November 10.

Report of Snowy Owls were received as follows: November 9, Holt, Marshall County, J. C. Carlson; November 1, Two Harbors, William Feeney; November 14, St. Louis County, Dana Struthers; December 24, Worthington, Carl Johnson. There was an influx of Short-eared Owls this fall in Duluth, reported by P. B. Hofslund.

A Yellow-shafted Flicker came to Mrs. Marie Thompson's feeder in Minneapolis, December 23, and four came regularly all season to Mrs. William Whiteford's home near the Minnesota River, not far from Minneapolis.

The very rare record of a Raven in Southern Minnesota, an account of which appears elsewhere in this issue, was sent in by Robert Hanlon. From reports received during the past two years this bird appears to be extending its winter range southward. Two dead ravens were seen by Harvey Gunderson south of Mille Lacs Lake, Mille Lacs County, November 20.
A Winter Wren was seen by A. C. Rosenwinkel near a feeder in Vadnais Forest, St. Paul in December. At feeders in this area 10 Red-breasted Nuthatches and 8 Tufted Titmice were observed December 17 by R. E. Cole. Titmice were relatively common in the Twin City area this season. The following report was sent to W. J. Breckenridge by H. H. Goehring, St. Cloud; "I have just banded a Tufted Titmouse, No. 21-151072 on November 17, 1953. They were first seen by Mrs. Max Partch at her feeder November 9, 1953. On November 10 she saw 4 at one time in the flock. On November 14 I had three at my feeder. On November 17 only one appeared and I banded it. There is no question about its identity."

Apparently there was an influx of Northern Shrikes. Numbers of them were reported from all sections of the state.

Three Meadowlarks were observed near Afton by Margaret Burr, December 23, after they had weathered the severe weather a few days earlier.

The first week in November there were several records of Evening Grosbeaks in the vicinity of the Twin Cities. Only a few records of Pine Grosbeaks were received. At Duluth, however, Joel Bronoel said that both grosbeaks were common. Bohemian and Cedar Waxwings were there in numbers, as also were Red and White-winged Crossbills. Two White-winged Crossbills were seen November 7 in Theodore Wirth Park, Minneapolis by G. Lowry.

Tree Sparrows appeared along the brush covered banks of the Minnesota River October 20, and Snow Buntings in large flocks were seen in the same vicinity, October 29. A White-throated Sparrow was reported near St. Paul by A. C. Rosenwinkel. The rare record of a Varied Thrush in Minnesota was made by P. B. Hofslund and Evelyn Putnam. It was in Encampment Forest December 8 and has been seen several times since.

The following migration record was received from Arnold B. Erickson,

Game Research Supervisor of the Pittman-Robertson Federal Aid Project. He was checking deer hunters in the Tamarac National Wildlife Refuge when he observed 5 Sandhill Cranes flying south, November 15. The latest migration date listed in Robert's **Birds of Minnesota** was November 9.

A very interesting and unusual report from William Longley was received too late to be published in either the June or September issues. On May 21, 1953, he saw at close range a Little Blue Heron at Whitewater Game Refuge. It was flushed twice and was observed at from 60 feet to 50 yards for nearly 30 minutes. **Mary Lupient, Minneapolis, Minnesota**

The Canadian Lakehead

by

A. E. Allin

The dry weather of late summer continued throughout the fall of 1953 with the result the marshes and fields were dry, streams and rivers low. No storms occurred during September or October in contrast to those of 1952, and a record high of 81° was reported on October 2. The minimum low was 22° on October 28. This unusually mild weather was reflected in the migration pattern particularly as it applied to water-fowl. The temperature fell to 7° on November 5, but the heavy snow storms occurring throughout much of North America were absent from the Canadian Lakehead. Marshes froze for the first time on November 3, and within a few days small, shallow, lakes were also frozen. A trace of snow fell on November 11. This cold period was followed by one of unprecedented mildness with a record temperature of 62° reported on November 16. On the same day two house sparrows were observed carrying nesting material!

A few belated summer records have been received since August 10. A mockingbird was seen at Silver Islet on July 1 and 2 by Nellie Cooper. C. E. Garton saw what was probably the same bird on the peninsula on September 3. The mockingbird has been reported on only one previous occasion at the Lakehead.

Whip-poor-wills are rare visitors in our area, but three were heard in 1953. The brown thrasher has been occuring in increasing numbers for the past few years and a breeding record was established by Col. L. S. Dear in 1952. Jas. Robb saw an adult with one young at Kakabeka Falls on June 28, and Dr. P. M. Ballantyne had a similar experience in Port Arthur in mid-July. The double-crested cormorant is frequently seen in the local harbour particularly in the spring. The nearest known nesting colonies have been at Black Bay, 40 miles northeast, and in the Nipigon area. More than a decade ago commercial fishermen suggested there was probably a colony on the north shore of Lake Superior not far from Pigeon River. On August 8, Garton and J. Murie visited the area and found 40 nests on an isolated island. Despite the late date eggs and very small young as well as large young were present.

The first migrants were reported on July 28 when David Allin reported "shore birds" on a local golf-links. Twenty-three night hawks were noted migrating south-westerly along the shore of Lake Superior on August 12 (A. E. A.). Three rose-breasted grosbeaks were seen feeding on wild raspberries on September 5, a late date for this latitude. K. Denis reported a very heavy flight of migrating warblers and white-throated sparrows on September 13. A ruby-throated hummingbird observed on September 22 by Bill Addison, is a late record for the species. American pipits, Lapland longspurs, and northern horned larks appeared on September 20. By September 26, thousands of Lapland longspurs were present in the wild rice beds of Whitefish Lake.

In general, thrushes were uncommon:

robins, however, were very abundant. Flocks appeared on September 15 and remained until October 14. In late September and early October, the trees of the Lakehead cities sheltered thousands of these birds, and on drives throughout the surrounding country great flocks were under almost constant observation. Although there was a fair crop of rowan berries, few survived the attacks of the robins. There will be little food available this winter for pine grosbeaks and Bohemian waxwings. Mrs. W. P. Hogarth reported seven bluebirds on September 20.

The golden plover is a more-or-less common fall migrant at the Canadian Lakehead. This year a few appeared on September 20, and flocks of varying size were present for the following month. On October 10, at least 1,000 were seen feeding on old pasture lands on the outskirts of Fort William. (Dorothy and A. E. Allin). An occasional black-bellied plover was seen with the small groups of golden plover, but not with the large flocks. Are these birds part of the "interior flight", or do we receive the edge of the flight from the northwest to the Atlantic coast? Those collected in the past have been immature birds. None was collected in 1953. Other shore birds were not common, but C. E. Garton was fortunate enough to see two Baird's sandpipers on September 20, and on September 27 he was given a dead specimen. This is an addition to the Lakehead list. The three northern phalaropes seen by L. S. Deer at Whitefish Lake were unexpected. There are only two previous Lakehead records.

The migration of water-fowl was disappointing. Blue-winged teal were abundant on September 19, the opening of the local duck season. Within a few days the majority had gone. The expected flight of ring-necked ducks about the first of October failed to materialize. A heavy flight of "bluebills" was reported on October 10—13, but we missed it, and do not know whether they were ring-necks, or lesser scaup, or both species. During the remainder of October and until freeze-up of Whitefish Lake on November 3, few birds were seen on that lake, which is normally a favorite stop-over for ducks. The only rarity reported was a wood duck on September 19 (J. Auden). No buffleheads or greater scaup were reported, and there were few American golden-eyes. In mid-November great rafts of ducks were reported on Lake Superior miles from the mainland. Geese migrated throughout late September and October. The first Canadas were noted on September 26. The main flight of geese was on October 13 when many thousands were seen. Many flocks rested on the local lakes for several hours a rather unusual occurrence in this region.

Since it is generally believed the large numbers of hawks observed each fall at Duluth have been carried into the area by favorable air currents along the north shore, naturalists at the Canadian Lakehead felt there should be a similar but smaller migration in this area. However, prior to 1952 there was no evidence that one actually occured. On September 4, 1952, Allan Gordon noted numbers of sharp-shinned hawks moving south along a line of hills several miles inland from Lake Superior. C. E. Garton reported numbers of broad-winged hawks at Port Arthur on September 17, 18 and 19. This year, local naturalists again spent considerable time searching for migrating hawks. No flight was found despite extensive efforts on September 4, 5 and 13. On September 13, a number of naturalists

drove to Grand Marais to watch for hawks along the ridge west of that village, but only an occasional sparrow hawk was seen. On September 20, Garton again noted broad-wings passing over Port Arthur, and the following day a definite migration was noted over the ridge north of Port Arthur, the birds apparently coming from the northeast and drifting towards the southwest. A similar, but larger movement was observed on September 21. Broad-winged hawks were in the majority on both days, but a few sparrow, pigeon, sharp-shinned, Cooper's and red-tailed hawks were seen as well as a single goshawk and one duck hawk. Keith Denis reported 80 American rough-legged hawks migrating over the same area on October 23.

At the present time (mid-November) the summer birds are gone, and except for the occasional robin, crow and cedar waxwing, only the resident species and winter visitors are present. The first northern shrike appeared on October 4, and several have been noted subsequently. Snow buntings appeared on October 17. A few remain, but the great flocks seen in 1952 have been absent. A pine grosbeak was heard on October 24, and a flock of 15 was seen on November 15. They are unlikely to remain as the robins and starlings have consumed most of the fruit of the rowans and high-bush cranberries. The first common redpolls were seen on October 25, and a few are still present. A barred owl appeared in Fort William on November 9. The American rough-legged hawk is unusually common, several being seen on each drive through the country. Evening grosbeak appear to have become resident species so the presence of seven on November 15 was not unexpected. **—Regional Laboratory, Ontario Department of Health, Fort William, Ontario.**

Notes of Interest

V'S IN THE WINTRY SKY.—A flight of Canada geese from the north was observed at Fond du Lac, Duluth, on the morning of Nov. 22, 1953. Over 300 geese in seven V-formations appeared at the rim of the hills above St. Louis River valley. Flying low under the heavy gray clouds with impending snow fall, the first of the year, they veered southeast over the expansive river estuaries. The largest formation, a broad V, at times with changing leaders, included over 60 individuals. In the snowy landscape they became lost from the view, but the passing crescendo of their directed flight, and the resonance of their coordinated cries, cast a lingering spell of the spirit of wilderness in their wake. **—Olga Lakela, University of Minnesota, Duluth Branch.**

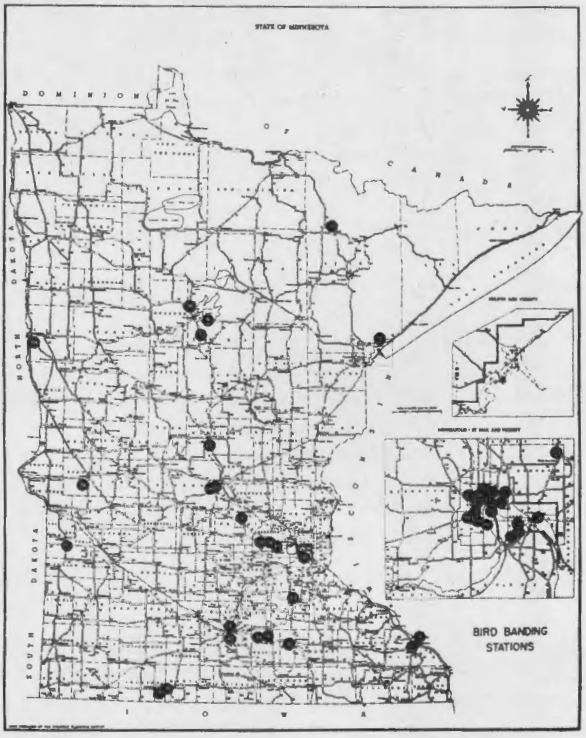
BIRD BANDERS IN MINNESOTA—As in all states, Minnesota Bird Banders are cooperating with the U. S. Dept. of the Interior, carrying on scientific studies of migration, life span, distribution and many other interesting projects. The bureau issues permits to approved persons who are ornithologists, or pursue avian life as as an avocation. The list in Minnesota is steadily growing. It was the late eminent ornithologist, Dr. Thomas S. Roberts, who became the first Minnesota Bird Bander. He was a charter member of the Audubon cluub, who originally carried on banding in the United States.

Many members of the MOU are no doubt tempted to venture into this method of scientific bird study. Be prepared to spend about four times the amount of effort now spent in field work. The rewards at first are few and far between. Soon however, this is overcome by startling secrets revealed to you in your closer observations; the puzzle of identification is unveiled when one can hold the species in the hand. Color phases, moulting, field marks etc. are thus verified. This knowledge is priceless to you. All your skill and prowess is exhibited in attempts to trap the wary species. No hour passes as fast or relaxation offered in any other way as it will in bird-banding.

It is suggested that those interested in assisting in this work write direct to the Fish and Wild Life Service of the U. S. Dept. of the Interior, Patuxent Research Refuge, Laurel, Maryland.

Usually during the annual meeting of the M. O. U. it has been the pleasure of the banders to get together at a special session. Our local problems are discussed, suggestions made, and new acquaintances sought. As a result much interest was expressed by other members. For the 1953 caucus it was suggested that we meet as a part of a regular meeting. Introduce these members to the group present. A map was prepared to further illustrate the locations of those present, those not able to attend, and other outstanding stations of interest. There are no doubt others who will want to have their names and locations listed. Please write the editor of the Flicker who will forward this information to us at the first opportunity.

Walter A. Jiracek, Minneapolis, Minnesota



Locations of Bird Banders on Map of Minnesota

1. Dr. T. S. Roberts, first bander author-scientist, Director of Natural History Museum, University of Minn. Enlisted others to become banders.
2. Mr. Ron Anderson of Mankato has succesfully banded swifts amongst other species. Operation of an all weather and feeding station for year around banding.
3. Mr. L. S. Ryan of Little Falls—located on the Mississippi River Rural Route #4 in the center of the state.
4. Mrs. Charles Peterson of Madison—here is one of our most colorful banders. During the dreadful dust storms in the '30's she harbored hundrers of birds on her premises, and has been rewarded with their presence since.
5. Mr. R. A. Kortmann of Newport, between Hastings and St. Paul on the Mississippi River, has a beautiful yard, garden and feeding station.
6. Mrs. Don F. Hamilton, Melody Hill, Hopkins. Also the home of those splendid feeders and nesting boxes.
7. Mr. Lyman W. Newlin of Broadwater Lodge near Hackensack has unlimited opportunities to study waterfowl. Hummingbird studies have been facinating here also.
8. Mrs. Paul A. Becker maintains a special banding station at her summer home near Walker, Minn.

9. Mrs. Melvin Jacobson of Jackson, an energetic and enthusiastic bander for some time in that locality.
10. Alice Culbertson also of Jackson is assisted by her husband. Have been banding since 1950.
11. Morrie and Ruth Self of White Bear Lake, banding locally as well as having studied methods while traveling in Europe.
12. Miss Constance Everett of Waseca is carrying on the work her father started. The station started in 1925 is one of our most successful.
13. Brother I. Vincent of St. Mary's College, Winona now banding in that area has had experience in other states as well.
14. Mr. Elmer Ollhoff, also of Winona, is inactive as a bander at the present time.
15. Mr. Edward Woolverton is our northernmost independent bander, operating a local station at Cook, St. Louis County.
16. Mrs. Luella N. Quady of Buffalo Lake, Buffalo, Wright County.
17. Mr. Harry H. Goering of St. Cloud Teachers College bands birds, and has made special study of bats.
18. Mr. Wallace Mac Brair, also of the St. Cloud Teachers College, and also a bander of bats.
19. Mrs. John A. Thompson of south Minneapolis, one of early active banders (1926). Outstanding results achieved in a heavily populated area.
20. Dana R. Struthers, Minneapolis, takes a long lead in being our outstanding bander of hawks. Practices falconry as an aid in his investigations.
21. Dr. Dwain W. Warner, Ornithologist, Univ. of Minn. Supervises speci projects utilizing banding under a master permit to the University.
22. Dr. W. J. Breckenridge, professor of Zoology, director of Museum of Natural History.
23. Milton D. Thompson—Formerly of Science Museum, Minneapolis Library, now on leave.
24. Brother Pius of Cretin High School, St. Paul. Active in bird study utilizing banding on such projects as life history study of the Goldfinches, etc.
25. William H. Cummings of St. Paul. Located on the heights of the cliff overlooking the Mississippi River near confluence with the Minnesota River.
26. Dr. William Marshall of the University of Minn. Farm School St. Paul.
27. Walter A. Jiracek, Minneapolis, Minn. Banding state wide. Concentrating on Bank Swallows.
28. Mrs. E. R. Selnes of Morris, Minn.
29. Miss Julie Hawkes of Waseca, Minn.
30. Dr. James R. Beer, U. of M. Campus, St. Paul. Has carried on interesting work with rails and shore birds.
31. Miss Margaret Drum of Owatonna.
32. Dr. O. Pettingill, Carlton College, Northfield. On leave.
33. Mr. Marvin H. Adams of St. Paul—Active bander in heavily settled area

of a large city.

34. Mr. Arthur S. Hawkins, Minneapolis. Office here, however, bands in Canada as well. Biologist, U. S. Dept. of the Interior. Master permi' holder.
35. Mrs. H. F. Sandhoff of Mound (Deceased).
36. Mr. and Mrs. Frank Commons-Wayzata-Lake Minnetonka-Our most outstanding successful station to date. (Since closed upon passing away of both).
37. N. L. Huff Professor Emeritus of the U. of M. Banded many birds in Minnesota. Now inactive.
39. Miss Signe Lee—Moorhead. One of our westernmost station operators. locations. Banded with other banders on gulls and other birds.
39. Miss Signe Lee—Moorhead. One of our westermost station operators.
40. Mr. and Mrs. Boyd Lien of Minneapolis. Recent addition to our list of active banders.
41. John S. Futcher of Minneapolis. Student at U. of M. Banding just started under authorized permit.
42. William R. Luwe of Mankato. A recent addition to this list. Formally banded at other locations before moving to Mankato.
43. Dr. Pershing B. Hofslund of Duluth—Gull colonies, as well as other birds, have been banded. Contemplating hawk banding station.
44. A. B. Erickson—Conservation Dept., St. Paul. Master permit. Supervisor, Area Game Biologists, located at Thief River Falls. Roseau, Ely, Bemidji, Aitkin, Brainerd, Fergus Falls, Glenwood, Marshall and Rochester.

A SCREECH OWL INCIDENT—On the evening of December 5, 1953 a bird flew against our window, and fell to the ground and then flew from the ground to a nearby tree. This bird was seen by flashlight and was identified as a Screech Owl (red phase). After about five minutes it flew away. A few days later this incident was repeated, although, this time the owl did not hit the window quite as hard. It was concluded that this owl was attempting to strike our pet parakeet which was perched in its cage by the window. Attacks were repeated two subsequent evenings, the last attack noticed, was on the evening of Dec. 12, exactly seven days after the first attack. After three of the four attacks, all of which occurred at about 10 P.M., the owl was seen (with the aid of a flashlight) sitting in nearby trees for periods up to five minutes before flying away. The owl has not been seen or heard since the evening of December 12. **Robert Nordgren, Minn. Bird Club.**

A LATE OVEN-BIRD RECORD—An ovenbird was seen on November 15, 1953, by Kathleen and Ray Anderson in their yard at 2197 Selby Avenue, St. Paul. In Roberts' "Birds of Minnesota," Volume II, Page 247, late records of sighting of ovenbirds in southern Minnesota are given as October 16, 1914 in Lanesboro and October 16, 1929 in Minneapolis. **Kathleen and Ray Anderson, St. Paul.**

RAVEN RECORDED FROM BLUE EARTH COUNTY:—Not since 1900, when a northern raven was reported killed in Sherburne County, have I been able to

locate a record of this bird in the southern half of our state. However, on October 7, 1953, Mr. Earl Hofmaster was startled by the sight of a "large crow" flying low overhead, while he was duck hunting at Madison Lake, Blue Earth County. He shot this bird and brought it home to his son Gary, an amateur ornithologist who identified it as a raven, mounted the bird, and turned it over to the biology laboratory at the Mankato Senior High School. It is now on display with the Eastern Crow, where the raven's large size and wedge-shaped tail differentiate it clearly from our common crow. The bird measures 26 inches in length. I would like to know about any other observations of the raven this far south in Minnesota. **Robert Wm Hanlon, Mankato Senior High School.**

LATE RECORD FOR THE NORTHERN PHALAROPE—On October 27, 1953, I saw a lone Northern Phalarope on a small pond near highway 52, about two miles north of Osseo in Hennepin County. I visited the area again on October 28, and found the bird in the same place. It appeared active and flew well, and I believe it was a healthy bird. Dr. Roberts(**Birds of Minnesota, 1936**) cites a record for October 18 as the latest record of the species in Minnesota. Hence, this observation extends by ten days the latest Minnesota record. The bird was not seen on October 29, despite an intensive search of the area. **William R. Pieper, Avifaunal Club.**

Call Notes

by

Franklin Willis

Visitors from seven states plus Canada and Costa Rica attended the Hawk Count at Duluth on September 19 and 20. There were approximately 300 people registered from Duluth, Minneapolis, St. Paul and 11 other cities in Minnesota. The Hawk Count on this and the preceding weekend recorded a little over 7,000 birds of 15 species ***

Dr. Warner and his family are spending the winter in Mexico city, Mexico. One wonders if they will miss the highly invigorating weather of this northern clime? ***

"The Mammals of Minnesota" by Harvey L. Gunderson and James R. Beer is an authorative text written in popular style that you will want to add to your library. The book fills a definite need in the literature of the state as a reference for school use and for those who have an active interest in the world of Nature and its furry inhabitants. ***

"Waterfowl of North Dakota" by Paul A. Johnsgard is an attractive and easy to use picture key for the identification of waterfowl. The birds are depicted in flight and on the water with distinguishing characters arrow-pointed much in the manner of Peterson's "Field Guide." The pamphlet may be obtained free of charge from: North Dakota Institute for Regional Studies, North Dakota Agricultural College, Fargo, North Dakota. ***

Ralph Boeder, a former vice-president of the Minnesota Ornithologists' Union died suddenly at his home in Duluth in August. His death followed that of his wife, Evelyn, another active member of the M. O. U. by about a month. ***

Were it not for hunting and predation pressure, ducks, geese and swans could live to quite a ripe old age. Kortright states that captive birds have been known to reach the following ages: ducks, 20 years; geese, 30 years; swans, 40 years with just a few Mute swans living from 50-100 years. What is probably the oldest wild duck on record is one shot in California on Dec. 27, 1952. It had been banded at Lake Merritt, California on Dec. 8, 1932, making it at least 20 years old when shot. ***

An ostrich egg weighs about 3 pounds and holds approximately as much as a dozen and one-half chicken eggs. ***

The man of war of frigate bird, has the longest wingspread of any bird in proportion to its weight. Averages are weights of 3.5 pounds and wingspans of 7.5 feet. ***

Of interest to teachers:

The Sept.-Oct. 1953 issue of **Audubon Magazine** contained a very interesting and challenging article on the use of a Nature appreciation program in junior high school teaching. I suggest that all of you in education make an effort to obtain this article to determine for yourselves what the potential of a program such as the one described would be in your own school. Teachers who are able to utilize their enthusiasm in

the out of doors in their classrooms have a tremendous opportunity to plant the ideals of conservation and outdoors appreciation in the minds of children. ***

A fifteen-page bibliography of "Free and Inexpensive Materials for conservation Education" can be secured from the National Association of Biology Teachers for 10 cents. Copies can be secured from Dr. Richard L. Weaver, P.O. Box 2073, Ann Arbor, Michigan. Materials listed arefrom private, industrial and governmental sources. ***

The Book Page

Pettingill, Olin Sewall, Jr. **A Guide to Bird Finding West of the Mississippi.** 1953 Oxford University Press, New York. 709 plus XXIV pp. $6.00

This is the companion volume to the guide for the area east of the Mississippi reviewed in the September, 1952 issue of **The Flicker.** Like the first volume, each state is covered with respect to general physiographic and ornithologic features with the introduction of each chapter presenting the ornithology of the state with particular reference to the physiographic regions, biological communities, bird migration, and the winter season. There are 25 chapters in all, 22 of them covering the states west of the Mississippi. The three other chapters deal with the plan of the book, hints for the bird finder, and an extremely uneful one on suggested reference materials. There is a very complete index. The beautiful pen-and-ink drawings of George Sutton, as usual, add that extra little something to the volume. Minnesota readers will be especially interested in the 29 pages devoted to our state.

There are so many things that could be said about this book, but words are inadequate to describe the value and interest of this new effort of Pettingill's. In my own library of essential ornithological books I must add this volume to Pettingill's **Guide to Bird Finding East of the Mississippi,** his **Manual,** Peterson's **Field Guides,** the A. O. U. **Check-list,** Hann's **Biology of the Birds,** and Hickey's **Guide to Bird-watching.** It is well worth every penny it costs. **P. B. Hofslund.**

Johnsgard, Paul A. **Waterfowl of North Dakota.** 1953. North Dakota Institute for Regional Studies at North Dakota Agricultural College, Fargo, North Dakota. 16 pp. Free in single copies.

This is the nicest booklet of this type that we have ever seen. It should be especially useful to hunters (in other states of the midwest besides North Dakota) who wish to identify the waterfowl in their game bag. It is divided into two main sections a picture key to the waterfowl and a description of common waterfowl. Special mention should be made of the Peterson-style drawings pointing out field characteristics. There are four pages of these drawings. Other noteworthy features include descriptions of birds commonly mistaken for ducks and geese, a map showing where to look for ducks in North Dakota, and a notice of identification service . A very fine pamphlet. **P. B. Hofslund.**

Reichert, Robert J. and Elsa. **Kow Your Binoculars.** Reprint from Jan.-Feb. and Mar.-Apr., 1951 **Audubon Magazine.** 12 pp. Available from Mirakel Repair Co., Mount Vernon, New York for 10 cents per copy or 20 for $1.00.

A fine well-illustrated pamphlet explaining the use, make-up, and care of binoculars by well-known authorities in the field. This pamphlet should be read before you buy binoculars. **P. B. Hofslund.**

Hicks, Ellis A. **Common Hawks and Owls of Iowa.** 1950. Iowa Youth Series, No. 2. Agricultural Experiment State, Iowa State College, Ames, Iowa. 23 pp. Free.

Another well-illustrated pamphlet which will interest many if not most **Flicker** readers. The drawing, a la Peterson, of hawks in the air will be useful to members watching the hawk flights in the fall. **P. B. Hofslund.**

Minnesota Ornithologists' Union Field Trips For 1954

Would you like to observe these ornithological treats during 1954: the winter bird life of the North Shore of Lake Superior; the spring goose migration at Sand Lake, South Dakota; the shore bird migration and abundant prairie bird life of North Dakota; and the fall hawk migration at Duluth? These birding experiences can become a reality for all M. O. U. members who wish to participate in a series of four field trips planned by the M. O. U. field trip committee with the cooperation of local bird clubs. Reservations are necessary for these excursions, and they must be made two weeks in advance of the trip.

The initial trip is planned for February 19-21. Bird-watchers will leave Duluth Saturday morning, travel to Pigeon River, and then stop at Grand Marais Saturday night. This area is an excellent one for viewing winter birds as more than 80 species of land and water birds have been found along the North Shore in winter. Birds usually seen on this trip include northern species, such as Old Squaws, Glaucous Gulls, Ravens, Canada Jays, Hudsonian Chickadees, Red-breasted Nuthatches, Northern Shrikes, Evening and Pine Grosbeaks, and Snow Buntings. Hotel reservations for Saturday night should be made with Mrs. Joel Bronoel, 1703 East Third St., Duluth, Minnesota.

The trip over the weekend of April 9-11 is planned to observe Sandhill Cranes, Geese, and Ducks at Fergus Falls, Minnesota and the Sand Lake Refuge in South Dakota. Friday night will be spent at Fergus Falls, and the next day's intinerary will include Rothsay Slough, Lake Traverse, and Sand Lake. More geese can be seen at Sand Lake Waterfowl Refuge in April than at any other place in the world. All species of geese that occur in this area, and most of the ducks found on the check-list can be seen on this excursion. Saturday night's stop will be at Aberdeen, South Dakota. Hotel reservation should be made with Vera Spakes, 2417 Lyndale Avenue North, Minneapolis, Minnesota.

The last trip in the series is planned for the weekends of September 11-12 and 18-19, when the hawk migration is at its height in Duluth, Minnesota. Enormous number of hawks of many species migrate through the Duluth area in September, and this is one of the finest hawking spots in the entire country. The flight of Broad-wings which occurs in spectacular numbers, and that of other species of predators can be watched from the rocky bluffs that overlook the city of Duluth. Individuals are asked to make their own hotel reservations for this excursion. There are adequate accomodations available at Duluth.

Further information concerning these trips may be obtained from the M. O. U. field trip committee: **Vera Sparkes, Mpls., John Futcher, Mpls., Bill Pieper, Mpls., Doris and Joel Bronoel, Duluth, P. B. Hofslund, Duluth Branch, University of Minnesota, Robert Hanlon, Mankato High-school, Mankato, O. A. Rustad, St. Paul, and chairman Lewis L. Barrett, 1930 Lincoln Street, N. E. Mineapolis, Minnesota.**

Mankato Audubon Society

Officers: President, William R. Luwe; Vice-president, R. W. Sheley; Secretary, Mrs. Ada Polchow; Treasurer, Esther Klassen.

REQUEST FOR ANNUAL MEETING PAPERS—May I call your attention to the fact that our program for the annual MO.U. meeting doesn't just grow like Topsy. Its success depends on finding people who have interesting things to report and convincing them to prepare papers telling about them. If you have such material, please volunteer for a place on the program. Many people hesitate to do this without some prodding and encouragement from co-workers who recognize the interest value of their work.

Won't each of you assume the responsibility of trying to locate some interesting material? Then apply some salesmanship in persuading such individuals to prepare their accounts for presentation at the M.O.U. meeting at Duluth on May 21-22, 1954. Papers that can be suitably illustrated with slides, movies, or specimens are particularly invited.

Please report all possibilities for papers to: **W. J. Breckenridge, Museum of Natural History, University of Minnesota, Minneapolis 14, or to P. B. Hofslund, Biology Dept., University of Minnesota, Duluth Branch.**

CORRECTION: **The Flicker 25:11**

While abstracting **The Flicker** 25:1:10-23 I noted that the nesting season report states that the Cerulean Warbler nests were the first to appear in the nesting records for **The Flicker.** If you will check the nesting record reports for both 1934 and 1935 you will note that both carry reports for this species. G. M. Rysgaard.

Correction: in Flicker, June, 1953

Page 63, column 2, line 6: for "Snuperfamily" read "supertribe."

Page 65, column 2, line 28: for "Nyctanassa (=Oidemia)" read "Nyctanassa (=Nyctocorax); Melanitta (=Oidemia)."

Correction

The volume number on the September, 1953 **Flicker** cover has been reversed. It should read Volume 25 rather than Volume 52. **P. B. H.**

1954 ANNUAL MEETING OF THE MINNESOTA ORNITHOLOGISTS' UNION

The 1954 annual meeting of the Minnesota Ornithologists' Union will be held at Duluth, Minnesota on May 21-23. The meeting will open Friday night with informal field trips to watch courting performances of the Woodcock and Wilson Snipe. Saturday will be devoted to field trips, annual business meeting, and the paper session. Sunday morning there will be more field trips. Mimeographed instructions with more details of the program will be sent out to each M.O.U. member before the meeting date.

Minnesota Ornithologist's Union

Affiliated Societies

Albert Lea Audubon Sociey

Officers: President, Helen Johnsrud; Vice-president, Iva M. Loy; Treasurer, Loes P. Scott; Recording secretary, Esther Jorgenson; Corresponding secretary, Mrs. C. Flugum.

Meet the second Tuesday, September through May.

Avifauna Club

Officers: President, Burton Guttman; Vice-president, Betsy Jerabek; Secretary-treasurer, Jeremy Berman.

Duluth Bird Club

Officers: President, O. A. Finseth; Vice-president, Evelyn Palmer; Secretary, Catherine Lieske; Treasurer, Harvey Putnam; Field Chairman, J. K. Bronoel; M. O. U. representative, O. A. Finseth.

Meetings are held at the University of Minnesota, Duluth on the second Thursday of each month, September through May.

H. J. Jager Audubon Society

Officers: President, Dr. H. A. Northrop; Vice-president, Lawrence M. Lee; Secretary, Mrs. H. A. Northrop; Treasurer, Mrs. John P. Zimmerman; M. O. U. representative, Mrs. H. A. Northrop.

Meetings are held every fourth Monday evening at the Owatonna Library.

Minneapolis Audubon Society

Officers: President, Mrs. Whitney Eastman; Vice-president, Mrs. George Ludcke; Treasurer, Mrs. T. A. Peppard; Recording secretary, Mrs. Edgar Bedford; Corresponding secretary, Mrs. Myrtle Mahoney, Field secretary, Mrs. J. A. Tompson; Auditor, Mrs. E. D. Swedenborg; M. O. U. representative, Mrs. I. S. Lindquist.

Meetings are held the first Friday at the Walker Branch Library, October through June.

Minneapolis Bird Club

Officers: President, Wilbur S. Quam; Vice-president, Boyd Lien; Secretary, Florence Messer; Treasurer, Amy Chambers; Membership Chairman, Marie Vind; Field Trip Chairman, Helen Lien; Editor, Vera Sparkes; M. O. U. representative, Amy Chambers.

Meetings are held at the Minneapolis Public Library.

Minnesota Bird Club

Officers: President, Robert W. Hanlon; Vice-president, Nelson Spratt; Secretary, Jessie Richardson; Treasurer, Lucille Hunter; M. O. U. representative, Walter J. Breckenridge.

Meetings are held at the Minnesota Museum of Natural History.

St. Paul Audubon Society

Officers: President, Mrs. J. H. Reisinger; Vice-president, Mr. John Hall, Sr. Corresponding secretary, Virginia Yelland; Recording secretary, Mary Chapin; Treasurer, Marvin Adams; Assistant treasurer J. E. Mcdonald; Directors at large, John Haag, R. A. Kortman, John Neihart, V. L. Whipple, J. H. Reisinger; Ex officio, Mrs. C. E. Hart.