

# *The Flicker*

VOLUME 34

MARCH 1962

NUMBER 1



PUBLISHED QUARTERLY BY  
**THE MINNESOTA ORNITHOLOGISTS' UNION**

PERMANENT ADDRESS  
MUSEUM OF NATURAL HISTORY  
UNIVERSITY OF MINNESOTA  
MINNEAPOLIS, MINNESOTA

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## THE FLICKER

Organ of the *Minnesota Ornithologists' Union*. Published quarterly in March, June, September, and December. *The Flicker* is sent to all members not in arrears for dues. Dues for members: Active, \$3.00, Sustaining, \$5.00; Life, \$50; Patron, \$100 or more. All articles and communications for publications should be sent to the editor. Subscriptions, memberships, and requests for back issues should be sent to the treasurer.

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### FRONT COVER

Photo by A. G. Skoglund of a Blue Goose wintering on Silver Lake, Rochester, Minnesota, January 1962.

## PRESIDENT'S PAGE

With the coming of Spring, about the time you receive this issue of *The Flicker*, you will be getting enthusiastic to get out-of-doors to observe the beginning of the parade of migrating birds. I have been encouraged by an ever-lengthening list of new contributors to the seasonal report. I hope our M.O.U. Representatives in the several member organizations will be active this year in securing records from their members and then sending them in to our editor. Our organization is made up of many people who have many interests. The more people we get involved in contributing to *The Flicker* and the M.O.U. organization the greater will be their interest and of all our members.

I want to encourage any person who watches birds throughout the State of Minnesota to be on the look-out this Spring for birds which may be killed at TV or radio towers, against the sides of tall buildings, and ceilometers. I would like to have all reports of these kills sent in either to me or the editor. A stop at these towers after a foggy night may reveal a kill, even a minor one.

Since the material contained in *The Flicker* ought to reflect the interest of all our members, our M.O.U. Representatives of member clubs, should be seeking items for our "Notes of Interest" column and an occasional story from the membership. We want items from individual members, too, but these representatives can help stir up and stimulate interest through the clubs because they see many people at club meetings.

From time to time I talk with individuals across the state or they write to me about their interest in what goes into *The Flicker*. Those who are professionally trained in biology, or related fields, feel that there should be more material on a professional level. The non-professional, amateur birder wants less technical material. All any editor can do is to try to keep a balance between the two types of material. On one hand he needs to stimulate the amateur to be more observing and learn how to make a worthwhile contribution to professional ornithology. And, by keeping "Notes of Interest" and publishing articles by the amateur he keeps the paper on a warm and personal level of interest. The majority of our membership is made up of amateur birders and we have a responsibility to them as well as to the student who wants his papers published in *The Flicker*.

The third week-end in May, the 19th and 20th, we have plans in the making for a wonderful "Big Day" at Madison, Minnesota. The local plans are under the direction of Richard Olson, a teacher in the local public school. You will find details for registration elsewhere in this issue. I hope you will find it possible to spend the week-end at Madison. Already we have an indication that the newly organized Hiawatha Valley Bird Club of Winona will extend to us an invitation to meet there in May of 1963 or 1964.

Since our December meeting of the Policy Committee I have been trying to find and appoint persons for the established committees. To date I have had only two responses from the M.O.U. Representatives suggesting persons for these committees. I have to depend upon these representatives for it is not possible for me to know the total membership.

The M.O.U. organization is a luxury item for all of our members. We give it our "extra" time. It takes many people working cooperatively giving of their time to make any group worthwhile. Won't you give some of your extra time to make this year a good one with suggestions for field trips and sharing your observations in the field with all the members through *The Flicker*?

*Forest V. Strnad, Kasson, Minnesota*

# M.O.U. Spring Field Trip

## May 19 - 20 - 1962

### SCHEDULE

**Registration—Faith Lutheran Church basement,  
6th Street & 5th Avenue, coffee,  
8:30 - 10:30, Remainder to  
register at noon lunch.**

**Saturday lunch—12:00                      1.00**

**Saturday night  
banquet                      — 6:30                      1.50**

**Sunday noon  
box lunch                                      1.00**

Coffee will be available for thermos bottles. Reservations for meals must be in by May 5, 1962.

Please send meal reservations, with check, to Mr. Richard K. Olson, 411 - 5th Avenue, Madison, Minnesota.

**Overnight accomodations can be obtained by writing:**

**Madison Motel  
804 - 6th Street**

**Nu Madison Motel  
Highway 75 N.**

**Lac Qui Parle Hotel  
202 - 6th Ave.**

**Parkside Motel  
1st and Oak  
Dawson, Minnesota  
(Ten miles from Madison)**

Private rooms in home obtainable from Madison J.C.'s: Write Mr. Ron Baron, 414 - 7th Avenue.

Lac Qui Parle State Park is open for overnight camping 16 miles from Madison.

Field trips are planned and maps of the area will be available.

Mr. Arlin Anderson, State Game Refuge manager, will be the Saturday evening speaker.

There will be scheduled bird trips Saturday beginning at six a.m. The field trips will originate from Faith Lutheran church.

# DESTRUCTION OF MIGRATING BIRDS AT THE DULUTH CEILOMETER

by Janet C. Green

For more than a decade reports of nocturnal bird migrants being killed around TV towers and airport ceilometers have appeared frequently in the literature. However, no close watch on structures causing bird mortality has ever been kept in the Duluth area and no mass destruction of birds has ever been brought to the attention of observers here until the fall of 1961.

A chance telephone call to the Duluth (Williamson-Johnson) Municipal Airport the morning of September 12 by a reporter searching for news uncovered the fact that a large number of birds had been killed there the night before. When Raymond Naddy, another reporter for the Duluth Herald and News Tribune learned of this, he went out to the airport early in the afternoon and then notified me of the destruction and told me he was returning to the airport with a photographer from the newspaper. My husband, Dr. John C. Green, and I immediately arranged to go out with them and we arrived at the airport about 3:30 p.m. There were many dead birds scattered about the grassy area around the ceilometer (a high-powered mercury-vapor lamp that produces an intense vertical beam of light used to measure the cloud ceiling) as well as a few injured birds fluttering around the buildings. We worked for about an hour, picking up as many birds as we could before we had to return in the press car. We also visited a refuse pile near the airport where a heap of dead birds, collected early that morning from the concrete runway and apron near the ceilometer by airport personnel, had been dumped. The total number of birds picked up from the grass was 99, and a rough count of birds dumped on the refuse pile yielded 250 more. The larger birds on the refuse pile were identified on the spot (1 Sora, 2 Common Snipe, 1 Rose-breasted Grosbeak, and the rest appeared to be mostly warb-

lers and vireos.) No birds were collected from the refuse pile and only those mentioned were identified. That evening was spent, with the help of my husband and Mrs. Rosalie Naddy, in identifying the birds collected.

The next morning Raymond Naddy, my husband and I returned to the airport and carefully paced all the area around the ceilometer until we felt that all the dead birds had been found; we collected 91 more birds that morning. From their water-soaked appearance (it had been raining lightly or drizzling since before noon the preceding day) it was apparent that all but four of these birds had been killed on the night of September 11-12. These four birds included two that were still alive when found but died later. These birds might have been killed from collisions on the night of 12-13 and are listed separately in Table 1. While talking to the airport personnel that morning, I discovered that the birds dumped on the refuse pile represented only a part of those found dead on the concrete runway on the morning of the twelfth. A cleanup detail from the air base that shares the runway facilities with the Municipal Airport had come with a vacuum cleaner and picked up the greater portion of the birds and had taken them to the city dump where they were destroyed. Although I later got in touch with the man who operated the vacuum cleaner, I could not get an intelligent estimate of the birds taken away. From his description of the size of the pile, I would guess 500 or more (perhaps many more) had been carted away to the city dump. This would bring the estimated number of birds killed to about 1000. Airport personnel indicated that this was the largest number of birds ever found around the ceilometer, although finding dead birds there was not an uncommon occurrence.

Again with the help of my husband and Rosalie Naddy, the rest of the birds collected were identified. The breakdown of species appears in Table 1; this does not include birds identified from the refuse pile. Because of space limitations only the better specimens were saved for museum skins. The number of birds saved is listed in parentheses after each species. They have been turned over to the Biology Department of the University of Minnesota at Duluth.

That evening, Wednesday the thirteenth, the control tower of the airport called me and reported that, starting about 9:15, birds were again spotted in the beam of the ceilometer. Being keenly interested to see what happened when birds were attracted by the ceilometer, my husband and I went out to the airport. When we arrived at 10:00 p.m., we estimated that about 100 birds could be seen at one time in the lighted area around the ceilometer, and sometimes as many as eight or ten at one time in the strong beam itself. The ceiling was 2200 feet and birds could be seen from 20 feet above the ground up to the first layer of broken clouds below the solid overcast. We noted that the higher birds tended to circle in and around the light and the lower ones flew erratically around and through the beam though sometimes changing course to avoid the beam entirely. We stayed at the airport until 11:30 p.m. and although birds were constantly flying around the light in the numbers estimated at first, there was no sign of mortality. A check around the ceilometer the next morning revealed that there had been none.

This experience gave us a better understanding of the circumstances surrounding mortality of migrating birds at a ceilometer, and also allowed us to talk to control tower personnel who had been on duty the night of the eleventh and twelfth. The greatest difference between that night and the night we watched seemed to be the number of birds observed around the beam. Edward Formiller, a Federal Aviation Agency employee at the Duluth Municipal Airport Control Tower, noticed that an unusually large num-

TABLE 1

Species	Sept.	Sept.
	11-12	12-13
Sora	1	
Yellow-shafted Flicker	1	
Flycatcher (Sp. ?)	2	
House Wren (1)	1	
Swainson's Thrush (1)	1	
Gray-cheeked Thrush	1	
Ruby-crowned Kinglet	1	
Solitary Vireo (1)	1	
Red-eyed Vireo (3)	10	1
Philadelphia Vireo (2)	2	
Black-and-white Warbler (2)	9	
Tennessee Warbler (3)	15	
Nashville Warbler (1)	5	
Yellow Warbler (1)	3	
Magnolia Warbler (3)	12	
Black-throated Green Warbler (1)	1	
Blackburnian Warbler	2	
Chestnut-sided Warbler (2)	7	1
Bay-breasted Warbler (10)	33	
Blackpoll Warbler (6)	7	
Ovenbird (4)	30	
Northern Waterthrush (2)	9	1
Connecticut Warbler (2)	2	
Mourning Warbler (4)	7	
Wilson's Warbler	2	
Canada Warbler	3	
American Redstart (5)	17	
Scarlet Tanager (1)	1	
Lincoln's Sparrow (1)		1
Total	186	4

*Number of each species killed on the nights of September 11-12 and 13-14, 1961. Number in parentheses represents the number of specimens saved for museum skins.*

ber of birds were fluttering around the ceilometer, starting about 9:30 or 10:00 on the evening of the eleventh. The number appeared as "thick as snow flakes" by the time he left at 11:00 p.m. and was much greater than on the night that my husband and I observed. Dan Grambush, an employee on the next shift, noted that the birds flew

in a large swarm all night, and their number never seemed to taper off. He saw several crash into the windows of the tower, apparently attracted by the lights in the control room, though he did not see any fall in the ceilometer beam. When it became light on the morning of the twelfth, he could see birds all over the runway and apron to the southwest of the ceilometer. All the birds picked up from the concrete and grassy areas around the ceilometer and from the parking lot nearby lay within the obtuse angle formed by lines bearing N80°W and S15°E from the ceilometer. Birds were found as far away as 500 feet to the west. The nearest building to the southeast is 400 feet away and to the west-northwest is 1000 feet away; no other buildings are close to the ceilometer.

The weather conditions on the night of September 11-12 fall within the pattern of those described for other mass mortalities at ceilometers (Howell et al., 1954; Laskey, 1956). The sky was completely overcast and the ceiling was 2400 feet at 9:00 p.m., rising to 5000 feet at midnight and falling again to 2700 feet by 5:00 a.m. The visibility was 15 miles all night; there was no rain. The wind was calm early in the evening but after midnight was from the ENE to NE from 4 to 10 mph for the rest of the night. A stationary front had remained over Duluth all day Sunday, the tenth, and had caused cloudiness and rain to the northwest

on the night of September 10-11. The front finally moved out of Duluth about 9:00 p.m. on the tenth, when the wind shifted to the NW and the temperature began to drop. By 1:00 a.m. on the eleventh the cold front was over north-central Wisconsin, and by 1:00 a.m. on the next day it had moved southeast to a line from central Missouri to northern Maine. The night of September 11-12 was cloudy from Duluth northwest to Canada but, in contrast to the previous night, there was no rain until about 5:00 a.m. at Duluth when occasional showers started. By early afternoon of the 12th it was raining fairly constantly in Duluth, a condition caused by hurricane Carla that continued until about noon of September 14.

As has been pointed out in many articles, the direct cause of death of the birds at ceilometers is impact with a solid object—a building, another bird or the ground. Whether being blinded by the ceilometer beam is a primary cause of the collision or not is a disputed point. My observations of the birds around the ceilometer beam (see above) together with the fact that mortality does not necessarily result from low to moderate concentrations of birds about the ceilometer leads me to conclude with Howell et al. (1954) that the birds collide with each other, and then perhaps with the ground, when there is a very large number of birds swarming

TABLE 2

Date	Place (Reference)	Percentage Distribution by Family			
		Turdidae	Vireonidae	Parulidae	Fringillidae
8/29/59	Eau Claire (Kemper)	1.4	18.5	73.3	0.6
9/ 3/57	Eau Claire (Kemper)	16.0	37.7	40.6	0
9/12/61	Duluth (this paper)	1.1	7.4	87.0	0.5
9/20/57	Eau Claire (Kemper)	1.5	7.7	90.0	1.1
10/ 1/59	Eau Claire (Kemper)	11.1	11.8	64.6	3.7
10/13/59	Madison (Hickey)	5.1	0.8	17.9	57.3

Four families of birds killed at TV towers or ceilometers compared between Duluth, Minn. and localities in Wisconsin.

around the ceilometer making the probability of collisions high. Whether they are necessarily blinded by the beam first is uncertain.

The conditions that produce these great number of birds seem to be primarily a heavy migration (usually precipitated by the passage of a cold front in the fall) and an overcast sky that attracts the birds to the ceilometer beam. It does not seem to me that the height of the overcast itself is a primary factor. On the night of the Duluth accident the ceiling varied from 2400 to 5000 feet and as is pointed out in Berger (1961, p. 116) most nocturnal migrants fly between 2000 and 3000 feet.

In most cases of mass mortality cited in the literature a cold front has passed through the area within 24 hours, usually during the morning or afternoon of the day before. In the incident discussed here the cold front was stalled in Duluth and finally moved out in the early evening hours of the night previous to the mass mortality. That no mortality occurred that night might be attributed to the fact that rainy weather to the north of Duluth caused the migrants to remain grounded even after the front had passed.

The species killed in Duluth on the night of September 11-12 are typically those that have perished in accidents elsewhere. Using the most abundantly represented families, the percentages

of birds killed are presented in Table 2 along with those of mass mortalities in Wisconsin (around both TV towers and ceilometers). There is a good comparison between the birds killed at Duluth and those killed at Eau Claire (135 air-line miles away) on Sept. 20, 1957 (Kemper, 1958). Not only is there a correlation in the composition according to families but also four of the five species suffering the greatest mortality are the same in both cases. This similarity is probably due to the fact that the two dates are only about a week apart (neglecting the year) and that these are the birds that are usually migrating at that time in this part of the continent.—1923 Greysolon Road, Duluth, Minnesota.

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# BIRDS KILLED AT THE KROC-TV TOWER, OSTRANDER, MINNESOTA

by Forest Strnad

Saturday, September 2, 1961 there was a marked change in the weather from summer to more autumn-like conditions, in southeastern Minnesota. There was a fog, with visibility as low as 2½ miles in the early morning, but it cleared before noon. A thunderstorm occurred in the Rochester area in the evening with a total rainfall of 1.35 inches and a peak wind gust of 40 mph. Visibility dropped as low as ¾ths of a mile during the rain. During the daylight hours there were many clouds covering the sky, with an average of 5/10ths for the entire day. The highest temperature was 89 degrees F. and a low of 65 degrees F. The average wind was from the south at 14.1 mph. The wind shifted as the thunderstorm passed in the evening and became northwest.

On Sunday, September 3 the temperatures were much cooler with a high of only 67 degrees F. and a low of 50 degrees F. During the morning .02 inches of rain fell. The cloud cover was total for the whole day. The average wind out of the northwest was 12.3 mph, with the highest at 19 mph. Visibility was excellent.

I received a telephone call at 8:20 the next morning, September 4, from Mrs. Carl Johnson of Rochester saying that personnel at KROC-TV station had called her to tell of a bird kill at the new tower south of Ostrander. The old tower, 2½ miles west of Rochester was approximately 600 feet tall, but since the new tower has been erected it has been cut down to about 300 feet, with a reflector antenna to catch the signal from the new tower near Ostrander.

KROC-TV's new tower was built in 1960 and was put into use in December. It stands on a plot of open ground, Section 17 Beaver Township in southwest Fillmore County, some four miles south of Ostrander, Minnesota and

some 28 miles, cross-country or 35 miles via road, south of Rochester.

The tower is 1314 feet above ground, or 2642.3 feet above sea level. From the top of the antenna there shines a protective light to warn all airplanes that come into the area. On top of the 1200 foot, 250,000 pound tower is a 112 foot antenna. 132 stories high, it reaches into the air farther than the Empire State building. It puts forth 316,000 watts, the legal maximum for any commercial station in the United States. Thus in southeastern Minnesota we have one of the largest TV towers in the nation.

The tower is anchored with fifteen cables connected one at each of the three sides of the tower at five levels. These fifteen cables are 14,150 feet long, nearly three miles.

Four flashing hazard beacons, each with two 620 watt bulbs adorn the tower, plus 15 obstruction lights with one 111 watt bulb each. The beacons flash automatically and are controlled by a photo electric cell which cuts them on and off, depending upon the visibility.

On Sunday night, September 3, Jerry Saxton, the resident engineer, came home to his house trailer at 11:15 and heard birds around the tower. Upon shining a spot-light from his car onto the tower he saw the birds, "milling around like moths. They didn't seem to be going any direction but were flying in all directions." The next morning he called the telecasting station at Rochester to report the bird kill.

My daughter and I arrived at the tower about 10:00 A.M. September 4 and spent the next 2½ hours picking up dead and injured birds. There was intermittent rain during this time. Many of the birds were found in the plowed area around the tower and the

control building. This area was perhaps 75 feet wide and on three sides of the tower and station and along both sides of the road into the station from the county road. Some of the birds were alive, but crippled, and could not fly away. Perhaps one-tenth had been only stunned and when we reached down to pick them up they flew away.

When we stopped picking up birds around 12:30 P.M. we had two boxes quite full. Since I planned to put them in a deep freeze so they could be salvaged by the staff at the University of Minnesota Museum of Natural History, we hurried on home knowing that many had not been picked up.

Upon arriving in Kasson we began to separate them out into groups and found there were many species. The flycatchers and some of the warblers we did not key down closely, but hurried to get them into sharp freeze. There were approximately 33 species and 526 birds had been picked up.

A camera man from KROC-TV station came down to take pictures and estimated the kill at between 1500 and 2,000 birds, but this estimate seemed to be a bit too high.

Seven days later, on Monday, September 11 it was cloudy and rainy and another kill was recorded at the tower that night. The engineer called Don Orke, who lives near the tower, on September 12 and Don called the Johnsons. That afternoon Mr. and Mrs. Carl Johnson and I went down to help Don pick up more birds. Don had spent more than three hours in the morning picking up dead and injured birds and we spent another hour in the afternoon helping him. When we were done we took the birds to Don's home and worked for nearly two hours drying out the wet, soggy birds we had picked up in the afternoon. We found that by spreading the birds out on a ball of wire and placing it over the heated floor furnace we were able to identify most of the birds. 763 birds of approximately 40 species had been killed. On our way back to Rochester we stopped at the tower again to talk

with the engineer, and to get a ladder to look on top of the control building to see if any birds were lying there, as they had been after the first kill. Here we found 40 more birds, making a grand total of 803 birds of approximately 40 species that had been killed and recovered.

Don stopped at the tower twice in the next three days and found an additional 98 birds that had been killed. New species in these kills were a Common Tern, Pectoral Sandpiper and an Eastern Phoebe.

On Monday morning, October 9 Carl Johnson received another call from KROC-TV station personnel saying that more birds had been killed the night before. That afternoon Carl and I spent more than an hour searching the ground around the tower and the surrounding area, but we found only 111 birds of approximately 26 species. This time there were more sparrows including the Swamp, Fox, Lincoln's, Le Conte's, Sharp-tailed, Savannah, Song, Chipping and White-throated and both kinglets. Four Red-breasted Nuthatches were found this time whereas before there was only one on each of two occasions. This time we found only one each of the Ovenbird and the Red-eyed Vireo while in the first two kills these were the two top species killed. Thus we know that this autumn these two species were migrating over a period of more than 30 days.

In these five kills a total of approximately 66 species were found. The last time we found many piles of feathers and partly decomposed birds indicating small kills that were not reported to us. The first two times many birds were crippled but on October 9 most were already dead when we found them. Only five or six flew out of the area.

Of unusual interest in the kills were the Yellow Rail on September 13 and the Le Conte's and Sharp-tailed Sparrow on October 9. Also the Common Tern and the Pectoral Sandpiper found by Don Orke in the minor kills.

On the first two kills many of the birds were found in the oat stubble which surrounds the tower and control building outside the plowed area. A few birds were found on the north side of the tower, outside the plowed area. Red-eyed Vireos were found as far as 150 yards south of the tower and many birds were in the oat stubble to the south and southeast of the tower. Especially did we find live and crippled birds in the weeds surrounding the area where five cables were anchored to the southwest of the tower.

From these kills which we know totaled more than the 1,547 birds we picked up we may learn something of the time and length of migration during the autumn of 1961. We know something about the birds which migrate together. We know that some

birds like the Le Conte's and Sharp-tailed Sparrow and the Yellow Rail which we thought were in the western part of Minnesota are either more widely distributed or come east in their migration.

Some questions that remain unanswered are: Did the birds hit the tower and/or the supporting cables. At what height did they hit? Since the birds were flying around the tower, "like moths" according to engineer Sexton were they drawn into the area of the tower by the lights or some electrical energy? How wide was the migration, 100 yards, one-half mile, twenty miles? Why couldn't the birds detect the presence of the tower and guy wires since the lights were on and flashing? These are questions that remain to be answered by more extensive research.—*Kasson, Minnesota*

#### REQUEST FOR INFORMATION ON THE PURPLE MARTIN

Mr. J. C. Finlay, 6710 - 102 A Avenue, Edmonton, Alberta, Canada, is conducting a study on the Purple Martin. He has requested answers to the following questions:

1. First arrival for this year and any other years you may have: Day, time, summary of weather at your colony house, and to the south for the previous week?
2. Date when most or all of your birds seem to be back?
3. Date of first serious nest building activity?
4. Date when most birds finished making nests and settle down?
5. Last departed bird: Day, time, summary of weather a week prior to birds departure?
6. Was there a peak of departure (on what day) or did birds gradually leave until the last and left on the date mentioned in question #5?
7. Number of young fledged and left for south per pair of parents or per colony and thus the average number of young raised per pair?
8. Any other comments, data, etc.?

Please send a card to Mr. Finlay if you are able to help and then forward the answered questions in the fall when the Martins have left.

Editor

# MRS. C. E. PETERSON'S BANDING

by Forest V. Strnad

When Mrs. Charles E. (Mae) Peterson began banding birds at Madison, Minnesota back in 1933 there were only a handful of banders in the State. Ideas for traps weren't too plentiful and Japanese mist nets hadn't been introduced into this country for the use of bird banders. During the twenty-seven years that Mrs. Peterson was an active bander she put the aluminum government bands on 120 species of birds. Most of these species ventured into her traps. Among those that were brought to her for banding were the Blue Goose, American Bittern, Virginia Rail, Sora, American Coot, Common Snipe, hawks, the Barn and Bank Swallows and the Common Crow.

Dr. Thomas S. Roberts stopped at Madison during the summer of 1924 to see if he could locate some local person interested in the nesting bird populations on the virgin prairies. He was especially interested in seeing Lark Buntings. At the local drug store (where strangers used to go in those days to get all the local news) Dr. Roberts inquired about some person who could tell him about the bird life of the area. Mr. Charles Peterson, the pharmacist, told him he didn't know of anyone interested in birds but that his son had a butterfly collection and knew something about birds. In conversation later, Mrs. Peterson told Dr. Roberts that she had seen what probably were Lark Buntings just the day before. The following day she directed Dr. Roberts out to the place where she had seen them and to her embarrassment they turned out to be Bobolinks. "But", Mrs. Peterson said, "Dr. Roberts was interested in having my reports about birds even if I proved to be wrong some of the time. He was always happy to hear from me and so friendly and pleasant." This was Mrs. Peterson's introduction to birding.

It was 1927, in his "Bird Lore" Spring Migration report that Dr.

Roberts carried his first note from Mrs. Peterson about sighting two Whistling Swans near Madison.

Six years later, in 1933, Mrs. Peterson got into the field of bird banding. She had told Dr. Roberts that she had seen the Arctic Towhee. At that time this bird was considered a full species, but now it is considered a sub-species of the Rufous-sided Towhee (*Pipilo erythrophthalmus articus*). In order to prove to Dr. Roberts that she was seeing this species in her back yard she decided to trap the bird since she couldn't shoot it. She bought a government sparrow trap and captured the Towhee which she sent to Dr. Roberts at the University of Minnesota Museum of Natural History. In all she got four specimens for him: two males and two females.

Mrs. Peterson did not have an impressive back yard as far as acreage or trees is concerned. It was only a 50' by 100' lot in the north part of Madison. It used to be on the edge of town and there was a large tract of woods just a block west of her. Today the town has grown beyond her place and the woods are long gone.

In her yard she had several bird houses and baths and around the latter she placed her Brenkle water traps. Her banding season was not twelve months long, but began in the spring about the time the Robins returned and when the snows came in November she took her traps in.

As Carl Johnson and I talked with her in her home in January of 1960 about the unusual species which she had trapped and banded, she mentioned first the Arctic Towhee, a first record for the state. Then she said there was the Black-throated Gray Warbler, and the MacGillivray's Warbler, also first records for Minnesota.

Her complete list of 15,033 individual birds banded is most interesting for

one person and especially since she trapped and banded most of them in her own yard and in the early days of banding in our State before the use of mist nets.

It is most remarkable that Mrs. Peterson at 84 years of age was still young in heart and active in banding.  
—Kasson, Minnesota

## MINNESOTA'S 1961 CHRISTMAS CENSUS

by  
Ronald Huber

*Historical considerations:* The predecessor of *Audubon Magazine* (and ultimately *Audubon Field Notes*), first published a Christmas Census in 1900. In 1905, Minnesota broke into the census ranks for the first time. Then, between 1905 and 1943, forty-eight reports from 15 Minnesota localities were submitted. Largest count during that period was 16 species and 119 individuals (St. Peter, 1918). Smallest count was 2 species and 52 individuals (Minneapolis, 1910). Average of the 48 reports was 8 species! Roberts (1932) states that, "Ten or twelve species for a midwinter day bird census anywhere in Minnesota would be a good showing." Currently, we find such a total to be unbelievably small. The difference seems to be in the number of observers turning out and also the rapid means of transportation which allows us to cover a considerable area in a short time. Hence our different picture of winter birdlife today.

*General considerations:* The Great Blue Heron occurred for the fourth time in the past six counts. The Canada Goose count at Rochester was even higher than on last year's census. Ten species of ducks and geese were seen on last year's count while 15 species were seen this year. The Harlequin Duck at Duluth was perhaps the standout of the entire count. The total Mallard count was reduced from last year. Nine species of hawks and eagles were reported, one more than last year. Five gallinaceous species were seen. The Ring-necked Pheasant total was much higher than last year. The Greater Prairie Chicken was reported again after an absence of many years. The

Common Snipe was seen again this year, but not the Killdeer. A Virginia Rail was found by the Excelsior group. Apparently this is only the second winter record for Minnesota. With the exception of the Long-eared Owl, the same owls were seen as for last year's count. The Yellow-bellied Sapsucker was seen by two different groups this year, whereas it is usually seen by just one group, and has been seen only three times on the last six counts. It is interesting to note that for the past six counts, the only other upper midwest census records for this species are from Iowa. The Red-bellied Woodpecker was seen by ten different groups this year as compared with only six last year. The Red-breasted Nuthatch, seen only by the Rochester group last year, was spread evenly over the state this year (reported by 9 groups) but was still in very small numbers. Tufted Titmice tripled in number, with the Winona group alone surpassing the entire 1960 census total. Robins were absent almost everywhere. Cedar Waxwings were greatly reduced from last year's total and were reported by only 4 groups as compared with 10 groups in 1960. Bohemian Waxwings and Northern Shrikes were more widely spread than last year. Both species of meadowlark were reported (how were they identified?) this year but neither was seen on the 1960 census. The Brewer's Blackbird was seen for the third time in the past six counts. Cardinals were seen by 14 groups and were twice last year's total. Evening Grosbeaks were not much increased in numbers over 1960 but were more widespread (this year they were

reported by 10 groups as compared with only 2 groups last year). The same was true for Pine Grosbeaks (9 groups versus 3 groups last year). Pine Siskins were reported only by the St. Cloud group this year as compared with 5 groups in 1960. Neither crossbill was seen this year, while both were seen last year. Tree Sparrows were only about half of last year's total. The White-throated and Song Sparrows were seen for the fifth consecutive census. The Swamp Sparrow at Rochester is apparently the first one in the past six censuses.

*Statistics:* Excelsior again had the high total with 42 species, while a new-comer, the Hiawatha Valley Bird Club of Winona had 41. This is probably the first time that two groups have observed more than 40 species each on the same census. Except for St. Paul North, which lost 11 species from last year's count, and Southeast St. Paul, which gained 6, most groups had about the same number of species as last year. Because of a late report last year, the final figures for the 1960 census were altered somewhat. A summary of the past five counts is as follows:

	1961	1960	1959	1958	1957
Total No. Groups Participating	18	14	16	17	12
Total No. Individual Birds Seen	28,835	32,029	23,824	18,789	13,320
Ave. No. Individuals per Group	1,602	2,288	1,489	1,105	1,110
Avg. No. Species per Group	26.8	26.8	23.5	23.1	24.9
No. Groups with 35 Species	5	4	1	1	1
No. Groups with 30 Species	5	6	3	3	4
No. Groups with 3000 Individuals	3	4	3	1	1
No. Groups with 2500 Individuals	5	6	3	1	2
Total No. of Observers	148	142	111	151	83
Total No. Miles Traveled	2,192	2,115	1,711	1,866	953
Total No. Species Observed	87	82	79	82	70

*Summary:* A large turnout of observers and the highest total mileage during the past six counts undoubtedly contributed to the highest total of species during that period. The participation by more groups from diverse areas of the state provided better coverage of the state as a whole, but more coverage of the western portion would be welcome. Except for the absence of both crossbills and the shortage of

Pine Siskins, the usual winter finches were well-distributed over the state. After a scant year in 1960, the Common Redpoll was seen in large numbers on the 1961 census; eleven of 18 groups reported them. Open water along the North Shore and in the southeastern corner of the state accounted for a high number of waterfowl species. The following is a list of species and totals for the 1961 census:

MARCH, 1962

	HIB- BING	SE PAUL	ST. WHITE- WATER ANOKA	DUL- UTH	ROCH- ESTER	ST. CLOUD	NE ST. CEDAR PAUL CREEK	MPLS. NORTH	MPLS. SEBEKA- WEST NIMROD	EXCEL- AFTON	NORTH- SIOR	ST. FIELD PAUL N	WIN- ONA	MOOR- HEAD	TOTAL				
Great Blue Heron													2		2				
Canada Goose					2810		13								2,823				
Blue Goose					1										1				
Mallard		26	4		2	323		65	36		1	1		19	477				
Black Duck											6				6				
American Widgeon													3		3				
Wood Duck						2									2				
Ring-necked Duck													3		3				
Greater Scaup						2									2				
Common Goldeneye		67		65		38		276			160				606				
Bufflehead					2										2				
Oldsquaw					1										1				
Harlequin Duck					1										1				
Hooded Merganser													1		1				
Common Merganser					6					2					8				
Red-breasted Merganser					8										8				
Goshawk									1						1				
Sharp-shinned Hawk								1							1				
Cooper's Hawk						1		1					2		4				
Red-tailed Hawk		6	3	5	1	3	2			3	8		4		35				
Red-shouldered Hawk											1		1		2				
Rough-legged Hawk			1	1	1			1	1		2	1	1	1	10				
Bald Eagle			5								3		2		10				
Marsh Hawk		1										1			2				
Sparrow Hawk			1				1	4	3		1	2	1	2	15				
Ruffed Grouse							1	4		12	1				18				
Greater Prairie Chicken										46					46				
Bobwhite			1				1								2				
Ring-necked Pheasant		6	2	76	20	30	5	131	26	225	182	19	29	139	24	9	2	14	939
Gray Partridge															34				34
Virginia Rail											1								1
American Coot															4				4
Common Snipe											1			6					7
Herring Gull					195														195
Mourning Dove							2				18	6	11		45				82
Screech Owl			1								1								2
Great Horned Owl									1	1	4	1	3	2					12
Snowy Owl					1														1
Barred Owl						1	2				3	3	1	1					11
Short-eared Owl		2																	2
Belted Kingfisher		1	4			1					1	1			2				10
Yellow-shafted Flicker		1									2	1							4
Pileated Woodpecker	1	1			1		3	5		1		1	2	14	3		2		34
Red-bellied Woodpecker		1	9			13		1			1		10	12	1	1	18		67
Red-headed Woodpecker		1	5					1	1	1			3				16		28

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	HIB- BING	SE PAUL	ST. WATER	WHITE- ANOKA	DUL- UTH	ROCH- ESTER	ST. CLOUD	NE ST. PAUL	ST. CREEK	CEDAR NORTH	MPLS. WEST	MPLS. NIMROD	SEBEKA- AFTON	EXCEL- SIOR	NORTH- FIELD	ST. PAUL	WIN- ONA	MOOR- HEAD	TOTAL
Yellow-bellied Sapsucker			3															1	4
Hairy Woodpecker	1	9	4	1	9	11	5	25	1	3	4	2	15	48	7	5	23	6	179
Downy Woodpecker	9	16	5	1	37	20	5	32	1	6	12		27	44	6	12	17	2	252
Horned Lark			15												10		19		44
Gray Jay	4																		4
Blue Jay	26	34	61	40	11	58	19	119	47	93	35	21	113	197	12	19	189		1,094
Common Raven					3							6							9
Common Crow		6	4	10	1	13		244	4	42	19		92	43		17	30	1	526
Black-capped Chickadee	83	78	37	12	124	63	42	116	14	31	53	21	160	405	12	92	72	45	1,460
Boreal Chickadee	4				1														5
Tufted Titmouse		2	1			7		6		2	1		5	3		4	16		47
White-breasted Nuthatch	1	19	9	2	4	20	8	46	4	11	14	3	44	104	6	19	27	4	345
Red-breasted Nuthatch	4				2	1	5	1			1	1				15	1		31
Brown Creeper	4	2		1		1		4		4	1		3	9	1	6			36
Robin					1								3						4
Golden-crowned Kinglet																5			5
Bohemian Waxwing	17												100	29				150	296
Cedar Waxwing						24	36	8			5								73
Northern Shrike	1		1	1				4	1	3				4			1		16
Starling	2	84	225		737	237	29	89		342	134	6	200	376	24	110	147	36	2,778
House Sparrow	354	438	350	20	1835	249		862	50	870	716	33	1168	2073	24	200	1150	150	10,542
Eastern Meadowlark								1											1
Western Meadowlark														3	2				5
Redwinged Blackbird			2					11						10			176		199
Rusty Blackbird								34							1				35
Brewer's Blackbird	1													1					2
Common Grackle	7					8								7			1		23
Cardinal	29	100	3		73	3	37			12	10		97	128	6	11	148	2	659
Evening Grosbeak					158	10	8	45		40		7	6	31		58	37		400
Purple Finch					20	3				10	8		7	51		3			102
Pine Grosbeak	231				54		5			2	14	12		14		4		4	340
Common Redpoll	34					18	187	808	80	2	46	59	79	4				4	1,321
Pine Siskin						19													19
American Goldfinch		25				3		4	1	59	11		18	217			8		346
Slate-colored Junco	4	29	14	8		51	18	112	3	69	36		91	189	18	28	31	4	705
Oregon Junco		2				1		1			2		3	11		1	2		23
Tree Sparrow			112	6		84		29	30	18	3		254	161	48	3	45		793
White-throated Sparrow														2			1		3
Song Sparrow						1							1						2
Swamp Sparrow						1													1
Lapland Longspur															150				150
Snow Bunting	18				75			12			1	135	3					99	343
Total Individuals	798	918	975	253	3293	4197	402	2820	269	2194	1349	386	2736	4360	373	627	2281	556	28,835
Total Species	18	29	25	17	29	35	20	35	17	28	26	18	39	42	23	24	41	16	87

# DRAMA AT SILVER LAKE

by  
Ken Haag

A veil of steam hung close to the water surface and gently wavered as Charlie bid entry among the bobbing Mallards. His spouse wasn't around so his vagrant ways were showing, almost as surely as his brilliant, feathery cloak. Maybe his spouse had gone shopping at Johnsons bakery or maybe she was at the beauty parlor having her down done. Irregardless, Charlie was at his best leaving a dancing wake behind as he flitted about on this watery stage called Silver Lake.

An unusual production—Waterfowl in Wintertime, was once again playing an extended engagement at the open water theatre in Rochester, Minnesota. This has been a perennial show for a number of years now, and continually serves to amuse young and old ticket holders—tickets being a cob of corn, loaf of bread, sponge cake, popcorn, rolls, or crackers, for which the geese, ducks, and swans vie.

While some 3,000 Canada Geese hold court in this joyful refuge and even nest on an island thicket on the north east shore, the list of actors and extras include several hundred Mallards, flocks of Common Goldeneyes, Common Mergansers, Wood Ducks, a pair of Mute Swans, a barnyard goose, and a lone Blue Goose. This being our fourth seasonal visit to this poormans' Disneyland we gave way to auld lang syne and in choosing a would be "Oscar" nominee were swayed by our favorite supporting actor, Charlie for his part in a true-lived drama which unfurled in unprecedented sequence

...

It was 1960 when Carl Johnson was taking the Christmas bird count and discovered a strange hybrid among the familiar families of Silver Lake. It looked like a Mallard of sorts but didn't have the curl in the tail, nor did it portray the largeness, color, or stat-



ure of that bird. High power field glasses verified the probability of this hybrid. It was a startling observation that would stir a birders fancy with interrogation. Carl Johnson identified as near possible an unheard of cross between Charlie and his Mallard spouse. Unheard of because Charlie is a Wood Duck and Wood Ducks are less than half as big as Mallards and haven't been known to cross with even their nearest of kin — the mandarin duck of China. But this turn of events wasn't gleaned from a mother goose book. It was formulated after a long and spirited courtship between Charlie and his girl.

In March 1960, Art Skoglund, my wife and I were in Rochester observing the waterfowl antics with loaded cameras when we caught in our lens Charlie and his fiance openly romancing. They were so affectionate you couldn't separate them.

If Charlie had any old flames harbouring nearby, their flickering virtues must have died out as they watched a hen Mallard nipping the feathers of the beau brummel of birdland!

Whether this strange courtship, intact for three years, has set back natures pattern or whether another hybrid will develop, only time will tell. Charlie and his mate were both banded by Carl Johnson and their affection for one another evident at all times, is written on the winds of wonderment.

When you toss a piece of bread to the waiting bill of Charlie, or a Blue Goose, or to a Mute Swan, you realize that enjoying nature is far more than pulling a trigger. Mingling with wild-fowl in a world of space ships, push buttons and bombs is basking in fulfillment of beauty, and your heart will go . . . where the wild goose goes, back to Rochester and back to nature—  
*679 E. Jessamine Avenue, St. Paul, Minnesota.*

## THE CANADIAN LAKEHEAD

by  
A. E. Allin

The mean temperature of 37.7° for 1961 was one degree above the 30-year average. Total precipitation of 25.7" was well below the normal 30.1" and the snowfall of 43.9 was less than half the average 90.2". Fortunately this low precipitation will not have the serious effects that the drought has produced in Western Canada. We enjoyed a frost-free period of 110 days; the average is 100 days. The first fall frost came on September 16 but there were no killing frosts until the last week of September. We received 2206 hours of sunshine.

October was the sixth consecutive month with above-normal temperatures although the mean of 43° only slightly exceeded the normal 42.6°. Precipitation was normal. November was another fine month. The mean temperature of 29.2° contrasted favourably

with the usual 27.2°. Precipitation was the least since 1942. Both October and November were sunny. The December temperature was only 0.8° below the normal 22.3°. Precipitation was again sub-normal.

The first real snowfall came on November 21 but only 2" fell and fields were still bare on December 1. By the end of December we had received 12.5" of snow in contrast to the average 30". However, 5" of snow remained on the ground. Small lakes were frozen by November 10 and ice-fishing commenced about a week later. By December 26, the harbor was frozen about a mile from shore but by the end of the year no open water could be seen.

As noted previously, there is a very heavy crop of keys on the Manitoba Maples. This probably explains the

abundance of Evening Grosbeaks. One can scarcely travel a few blocks in the Lakehead cities without seeing a flock of these birds. The fruit crop on the Mountain Ash was very poor and was largely consumed in early fall by Robins, Starlings, and Cedar Waxwings. There is a heavy crop of fruit on the ornamental apple trees which the Starlings are now utilizing. Peculiarly, Pine Grosbeaks, which were first reported on November 6, shun the large-fruited varieties but have stripped a large tree in the same area which bears a fruit a little larger than that of the Mountain Ash. As soon as this tree was stripped of its fruit, Bohemian Waxwings which had been feeding on the tree also disappeared. A second smaller tree, a few feet away and well laden with similar small fruit is shunned by both these winter visitors! The Pine Grosbeaks are also feeding on the abundant samaras of Black Ash. Many have been seen feeding along the highways and railroads. No large flocks are present but numerous small groups are scattered throughout the cities and surrounding countryside.

*Ducks, Geese and Swans:* The fall migration of ducks was considered good. Not only was there an excellent crop of ducks when the season opened on September 15 but the migration from the north and west was heavy particularly in the case of the Lesser Scaup. There is a possibility ducks were pushed eastward due to drought conditions in the Canadian west. About 100 Black Ducks but only 3 Mallards remained in the local harbor on November 26. Common Goldeneyes remained in moderate numbers until the end of December when the harbor was frozen over. Mrs. Peruniak reported a Common Goldeneye and a Black Duck at Atikokan on December 27.

*Vultures, Eagles and Hawks:* No major hawk flight was reported in 1961. Mrs. Beckett saw a Pigeon Hawk in Fort William on November 9.

*Upland Birds:* We received no reports of either Spruce or Sharp-tailed Grouse. There were few observations of Gray Partridge and only one for the Ring-necked Pheasant. Ruffed Grouse were generally uncommon. We failed

to see a single bird on several trips of 50 to 100 miles, southwest of the Lakehead. There is reason to believe these birds were fairly common in a small pocket between Whitefish Lake and the Minnesota border.

*Cranes to American Coot:* On October 1, John Satter of Indianapolis saw three Sandhill Cranes some 25 miles northeast of Port Arthur. One bird was distinctly smaller than the others. These cranes were seen in an area not far from where we saw 2 Sandhill Cranes on September 6, 1941.

*Shorebirds, Gulls and Terns:* Three Black-bellied Plover and one American Golden Plover remained in Neebing Township until October 31. On November 5, we saw a Greater Yellowlegs at Cloud Bay. This is a record late date for this species. Mrs. Peruniak reported two Common Snipe at Atikokan on December 27 in the area where a snipe had spent the past two winters.

A year ago Herring Gulls left on December 24, the second year we had failed to record them on a Christmas census. This year 128 were seen, a figure well below the 862 and 669 seen in 1958 and 1959.

A Ring-billed Gull was reported on the 1947 census and two were counted in 1958 and 1959. We were surprised to find 12 on December 26, 1961. They were accompanied by a Glaucous Gull, previously seen only on the censuses of 1956 and 1958.

*Doves:* Two Mourning Doves were seen in Paipoonge Township on November 15 and T. Perrons found 3 in the same area on December 24. The doves were feeding along the railroad tracks.

*Owls:* A Great Horned Owl found injured near Oliver Lake on November 28 by Bert Smith belonged to the race *scalariventris* recently described by L. L. Snyder of the Royal Ontario Museum. Our resident Great Horned Owls are probably intermediate between *scalariventris* and *virginianus*, the form breeding throughout eastern Minnesota. We once observed the very white form *wapacuthu* northwest of



# R ROCHESTER

*land of wintering waterfowl*



The city of Rochester, especially Silver Lake is a popular wintering area for waterfowl. Three thousand a year winter in the downtown area of the city during the day. The city is also home to the beautiful Wood Duck. For the past 100 years, Rochester certainly provides Minnesota



... has become Minnesota's haven for wintering waterfowl. Canada Geese are the most concentrated there this winter. V's of these geese can be seen flying over the Mayo Clinic and the lake. The lake also provides winter homes for many Mallards, Common Goldeneyes, mergansers and two years ago a single Blue Goose has wintered on the lake and in 1961 a Snow Goose was Minnesota's winter bird watchers with a welcome change of pace. Photos by A. G. Skoglund, St. Paul.

Fort William in the late fall. A Snowy Owl was seen on November 5. Subsequently there have been many reports of these Arctic visitors in the Lakehead cities. How many individuals have been seen is impossible to determine but certainly several have been present most of the early winter. There have been many reports they preyed extensively on the semi-feral pigeons. Several Hawk-Owls were reported in November in the Black Sturgeon area, and in December near Marathon. None has been seen locally. A Great Gray Owl was shot near Pigeon River in early November.

*Jays to Brown Creepers:* Although there were numerous reports of Gray Jays west of the Lakehead throughout the fall, we felt from our own observations that they were scarce. We saw only two on the Trans-Canada Highway between Fort William and Sault Ste. Marie on October 3 and 4. None was seen on our Christmas census, the first of 22 census lists from which they had been absent. Blue Jays and Common Ravens are common winter residents but Common Crows are very uncommon.

Black-capped Chickadees have been seen more frequently than usual in the cities this winter. On the 1961 census, 108 were reported compared with 102 a year ago. We counted 125 and 126 in 1954 and 1955 but in the intervening years the count varied from 54 to 78. Boreal Chickadees are quite rare. Red-breasted Nuthatches are again scarce. Mrs. Peruniak reported a rarely-seen White-breasted Nuthatch at an Atikokan feeder on December 27.

*Wrens to Pipits:* Mrs. R. M. Beckett saw a Mockingbird in Fort William on October 2. Few Robins are wintering here. Only one was seen on the census although 25 were counted a year ago.

*Waxwings to Starlings:* Bohemian Waxwings appeared in Port Arthur in late October. A flock of 57 appeared in Fort William on November 23 and remained until December 21. No Cedar Waxwings have been seen. Starlings are present in much greater numbers than would be suspected on the basis

of our Christmas census. No Starlings were seen on the Atikokan census. Only 4 Northern Shrikes were reported in the early winter of 1961-62.

*Blackbirds:* Marion Smith reported a strange blackbird at her feeding station on December 26. It was a male Brewer's Blackbird, an unexpected winter visitor and probably the first Brewer's Blackbird ever reported on an Ontario Christmas census. A year ago a Brewer's Blackbird visited Mrs. Beckett's garden from December 2 to December 8. We saw a Brewer's Blackbird in Cook County on April 2, 1961.

*Grosbeaks to Snow Buntings:* The prevalence of the two grosbeaks was discussed above. Common Redpolls appeared in large numbers on October 30 and were common for a week. Subsequently only a few small flocks have been reported. Pine Siskins have been scarce since early fall; we saw 5 on November 18. No Purple Finches or crossbills have been reported this winter. A year ago Purple Finches were relatively common and both species of crossbills were present. Slate-colored Juncos were seen on November 5, 8 and 12. These birds winter this far north infrequently; they have been recorded on 6 of our 22 censuses. A Tree Sparrow was still present on November 18. These birds are rare winter residents. We saw one on the Christmas census in 1947. A belated White-crowned Sparrow fed at a Nipigon feeding station on November 8. October 29 and November 5 were late dates for Lapland Longspurs at Whitefish Lake.

On October 22 and 23 we drove from Chicago across Illinois to Central Iowa and north to Sandstone, Minnesota, without seeing a Snow Bunting. The following day we encountered Snow Buntings at Duluth and saw them regularly from there to Fort William. At first they occurred in twos and threes but the flocks increased in size as we drove northward and in Ontario several dozen birds were seen in most flocks. Snow Buntings were scarce in November and December. One was seen on December 26, the eighth occa-

ion the species has been seen on a local census.

The Thunder Bay Field Naturalists Club took its twenty-second Christmas census on December 26. Unfortunately only 16 members were able to participate; consequently we are certain the area was not adequately covered in the brief period between 9:00 a.m. when it became sufficiently light to see the first Starlings and 5:00 p.m. when it was again dark. A total of 21 species and 2401 individuals were reported. This is the smallest number of species reported since 1957 and the fewest individuals since 1953. In 1954 we saw 31 species and 4122 individuals and in 1958, 26 species and 5505 individuals. We have now recorded 62 species during these census periods.

Census Summary: Common Golden-eye, 6; Rock Dove, 532; Herring Gull, 128; Ring-billed Gull, 12; Glaucous Gull, 1; Snowy Owl, 3; Hairy Woodpecker, 2; Downy Woodpecker, 9; Blue Jay, 10; Common Raven, 96; Common Crow, 4; Black-capped Chickadee, 108; Boreal Chickadee, 2; Robin, 1; Northern Shrike, 1; Starling, 443; House Sparrow, 844; Brewer's Blackbird, 1; Evening Grosbeak, 93; Pine Grosbeak, 78; Common Redpoll, 27; Snow Bunting, 1.

Perhaps we give too much attention to the Common Raven which has become increasingly common in North-western Ontario in recent years. We have seen young Common Ravens and once found a recently occupied nest on a rocky cliffside of Blindfold Lake near Kenora. But we have never been fortunate to find an occupied nest of these birds. We envy Harold Mossop, present editor of Chickadee Notes which has appeared in The Winnipeg Free Press for 40 years. On March 4, 1961, Mossop watched a pair of Common Ravens build a nest on a granite cliff bordering Falcon Lake in south-eastern Manitoba. The male brought the nesting material. After each trip to the nest he flew to the top of a nearby Spruce tree where "he devoted the next few minutes to music". Mossop described his "song" as follows: "It

ranged from deep guttural croaks to loud, ringing calls each uttered two or three times. These were interspersed with a variety of those musical instrument sounds for which the raven is famous; high-pitched violin 'plinks' and lower toned 'plunks' of a bass fiddle. Also those cork-popping sounds, from small bottles to wooden kegs; this fellow had learned them all and seemed proud of his talents. Never before had we heard such a repertoire from one Common Raven. With the vertical stone cliff acting as a sounding board, the whole performance was clearly amplified; a perfect setting for a tape recorder."

J. W. Hardy (The Wilson Bulletin 73: (3):281) discussed Purple Martins nesting in crevices in city buildings in the western United States. He postulated that "the use of natural cavities still occurs in sparsely populated areas . . . such as northern Minnesota" although such use in the eastern United States "has not been reported since the early part of the 20th Century". For many years a small colony of Purple Martins has nested in the crevices of buildings in the business centre of Kenora, Ontario.

In the December, 1959, *Flicker*, Jansen reported the capture of a Groove-billed Ani in Big Stone County and referred to one found dead in 1958 in Lac Qui Parle County as well as the 1913 record for Goodhue County. On October 5, 1961, Mr. and Mrs. J. Murie and Mr. and Mrs. H. Field saw a bird which they believed was an ani below High Falls on the Ontario side of Pigeon River. As it perched in a tree at a distance of about 25 feet, they described it as a grackle-size bird, black in colour, with a long, loose tail and a parrot-like bill. Finally it dropped into a pile of brush and disappeared. Other naturalists visited the region and failed to rediscover the stranger. However, D. Storey learned that the proprietor of the souvenir stand had seen an unidentified bird in the area. When given Peterson's Field Guide, he emphatically stated that the bird he had seen was an ani. It is unfortunate that it was not captured as no ani has ever been

collected in Ontario, and the sight observation cannot be accepted as better than a hypothetical record. Moreover if we accept the fact it was an ani, we do not know the species although probabilities would favour the Groove-

billed Ani over the Smooth-billed Ani. The latter has not been recorded from the mid-west.—*Regional Laboratory, Ontario Department of Health, Fort William, Ontario.*

## THE WINTER SEASON

by

Ronald L. Huber

A fair portion of this season's material has already been covered in the 1961 Christmas census, elsewhere in this issue. Therefore I will try to cover those reports which are exclusive of the count period. Reports were received from 33 observers.

*Weather:* Although early December was rather mild, the remainder of the season was characterized by undulating temperatures with record-breaking cold spells and excessive snowfall. Open water throughout most of the state was reduced to a minimum by mid-December and remained so through January and February. The north shore was especially hard-hit in this respect.

### LOONS AND GREBES:

*Common Loon:* A. C. Rosenwinkel saw one on December 2 in St. Paul, Ramsey County. Jan Green observed one, in winter plumage, at Duluth, St. Louis County, on December 1.

*Red-necked Grebe:* One seen on February 19 at Duluth by Jan Green.

*Horned Grebe:* One seen at Pleasant Lake, Ramsey County on December 2 by A. C. Rosenwinkel.

### DUCKS AND SWANS:

*Whistling Swan:* P. B. Hofslund received a report that one swan (which could fly) was seen during the first week of January at Sand Lake, near Isabella, Lake County.

*Black Duck:* Jan Green reports 35 at Duluth on December 1. On December 16 she saw them at Two Harbors, Lake County, and on the same date, A. C. Rosenwinkel saw them in Ramsey County.

*Green-winged Teal:* One adult male was seen by Bob Janssen on February 4 at the Dakota-Hennepin County line just south of Minneapolis.

*Ring-necked Duck:* Jan Green reported one female at Duluth on December 3.

*Canvasback:* Jan Green reported one female at Duluth on December 1. Avifaunal Club members saw one adult male on the Dakota-Hennepin County line, just south of Minneapolis, throughout January and February.

*Greater Scaup:* One seen at Duluth on December 8 by Jan Green.

*Bufflehead:* This writer saw five on December 30 between Duluth, St. Louis County and Knife River, Lake County. Jan Green saw one at Duluth on December 1.

*Oldsquaw:* Jan Green reported them between Duluth and Two Harbors, during December and January.

*White-winged Scoter:* Four immatures were seen in Duluth harbor on December 10 by Jan Green.

*Harlequin Duck:* The male seen on the Christmas count at Duluth was seen again on January 6 by Avifaunal Club members and last seen on January 14 at Lester River, Duluth, by Jan Green.

*Ruddy Duck:* Six were seen at Pleasant Lake on December 2 by A. C. Rosenwinkel.

*Hooded Merganser:* Jan Green saw one at Duluth on December 1.

### HAWKS AND EAGLES:

*Goshawk:* A. C. Rosenwinkel saw one January 12 in Ramsey County. Bob Janssen and R. Oehlenschlager saw one near Nimrod, Wadena County on February 17.

*Sharp-shinned Hawk*: Gloria Peleaux saw one in Golden Valley, Hennepin County on January 28.

**Bald Eagle:**

December 2, one adult, Ramsey County Hall and Rosenwinkel

December 28, 10 adults, Washington County Hall and O. Charley

January 6, 2 adults, Cook County, Jan Green

January 6, 1 adult, Lake County, Jan Green

January 13, 2 adults, Washington County, D. Honetschlager

January 14, 1 immature, Lake County, Jan Green

January 24, one adult, St. Louis County, Margaret Brown

January 28, 3 adults, Wabasha County, R. Janssen

February 10, (adult ?), Lake County, Jerry Church

February 22, (adult ?) Washington County, D. Honetschlager

*Marsh Hawk*: John Hall saw one on December 6 in Ramsey County.

**GALLINACEOUS BIRDS:**

*Greater Prairie Chicken*: Bob Janssen, Brother Theodore and Richard Oehlenschlager saw 41 near Nimrod, on February 17.

*Sharp-tailed Grouse*: Several flocks observed near Baudette, Lake-of-the-Woods County, on December 9 by R. Huber and R. Oehlenschlager.

*Gray Partridge*: Mrs. B. L. Duckstad saw nine on January 15 at Fertile, Polk County.

**SHOREBIRDS AND GULLS:**

*Killdeer*: One seen January 6 by D. Honetschlager in Washington County.

*Glaucous Gull*: A second year bird was seen by R. Huber on December 30 in Lake Superior on the Lake-St. Louis County line. Five observations of adults and second year birds during January along the north shore of Lake Superior by Jan Green and Avifaunal Club members.

**OWLS:**

*Snowy Owl*: One reported by Bill Longley at the Carlos Avery Refuge, Anoka County, on December 19. Several present at Duluth throughout December and January, seen by Jan Green and Joel Bronoel. Ray Naddy saw one there on February 10.

*Hawk Owl*: One seen by Jan Green at Duluth on December 17 and 18.

*Short-eared Owl*: Mrs. H. Kroening saw one at Forest Lake, Washington County on January 2.

*Saw-Whet Owl*: On February 23, J. K. Bronoel found one in Duluth.

**WOODPECKERS**

**THROUGH NUTHATCHES:**

*Yellow-shafted Flicker*: One seen near Duluth on December 9 by Dennis Meyer.

*Horned Lark*: On February 4, A. C. Rosenwinkel saw a flock in Washington County.

*Gray Jay*: Latest report was February 9, Duluth, Jan Green.

*Black-billed Magpie*: On December 9, R. Huber and R. Oehlenschlager saw five between Washkish, Beltrami County, and Baudette. Oehlenschlager saw them on several occasions between December 18 and December 30 in Wadena County near Nimrod, and again on February 3.

*Boreal Chickadee*: Present throughout January at Encampment Forest, Lake County, seen by Myrtle Penner, and at Hibbing, St. Louis County, seen by Harriet Micensky.

*Red-breasted Nuthatch*: A. C. Rosenwinkel saw one at Lake Vadnais, Ramsey County on January 27. Myrtle Penner reports them present all December and January at Encampment Forest.

**ROBIN THROUGH BLACKBIRDS:**

*Robin*: Jan Green received scattered reports in the Duluth area from December 12 thru 31.

*Bohemian Waxwing*: Apparently one of the largest invasions in years. Mrs. J. M. Dahm of Winona, Winona County saw a flock of about 200 feeding on hack-berries between January 19 and 27. D. Honetschlager saw a flock in Mahtomedi, Washington County on February 17. R. F. Green and W. Ul-

vang saw a flock of 185 on December 30 near Duluth. By January 21, the only report at Duluth was a flock of nine seen by J. K. Bronoel.

*Common Grackle:* On January 2, A. C. Rosenwinkel saw six in Washington County. One was seen in Duluth on December 31 by Edna Fox.

#### SPARROWS:

*Evening Grosbeak:* On January 26, a flock of about 75 was seen by Mr. and Mrs. Bryan Southern on Lake Bemidji, Beltrami County. Mrs. B. L. Duckstad of Fertile, reported them on January 15. Mrs. J. M. Dahm, on January 27, reported that flocks of from 6 to 25 have been seen since mid-December at Winona. A. C. Rosenwinkel and many others saw them over most of the winter throughout Ramsey County and the Twin Cities area. Jan Green reports them as present all winter at Duluth with flocks of 30 to 60. F. Miller saw from 6-20 at Eveleth, St. Louis County, during all of December and January. Dean Honetschlager saw them regularly in Washington County between December 15 and February 28.

*Purple Finch:* Apparently much reduced since last winter. Reported only by Dean Honetschlager, a few all season in Washington County, and A. C. Rosenwinkel saw three at Lake Vadnais, on December 30. See also the 1961 Christmas census elsewhere in this issue.

*Pine Grosbeak:* Seen at Duluth and Hibbing in fairly large numbers during December and early January, but were reduced to very few in February. In the southern part of the state, they were seen in small numbers during December, but none were reported for January or February. Mrs. B. L. Duckstad of Fertile saw them on January 15.

*Common Redpoll:* Well represented on the Christmas Count. Dean Honetschlager saw a flock as late as February 28. On February 10, A. C. Rosenwinkel saw a small flock in Ramsey County. Flocks of from 6 to 40 were seen in the Duluth area by many observers during December and January.

*Hoary Redpoll:* On December 9, R. Huber and R. Oehlschlager collected a specimen 5 miles west of Kelliher, Beltrami County and saw another one two miles north of there. On January 6, members of Avifaunal Club saw two with a flock of Common Redpolls on Minnesota Point, Duluth.

*Fox Sparrow:* Harriet Micensky reported one at Hibbing, during first few days of December. On December 23, another was reported by J. Bero of Duluth.

*Lapland Longspur:* Mrs. Olin saw eight at Big Carnelian Lake, Washington County, no date given.

*Summary:* Mild weather during the first few days of December allowed some late migrants to linger, but these were generally gone by the time of the Christmas Census. Open water afforded a high incidence of various species of waterfowl, but during January and February a hard freeze-up over most of the state pushed these species out. Several species of winter finches and the Bohemian Waxwings made their expected invasions, but seemed to fluctuate in numbers in various parts of the state at various times.

Because of publication deadline, I would like to invite our readers to submit their reports no later than the fifteenth of the month preceding the month of publication. For instance, material for the June issue should be submitted by May 15. 3121 Georgia Ave. So., Minneapolis 26, Minn.

## NOTES OF INTEREST

WHICH DOWITCHER IS IT?—Ever since the Long-billed and Short-billed Dowitchers were separated as two distinct species, observers in Minnesota (and no doubt elsewhere) have pondered the question, "Which species is the common migrant through Minnesota, and how can one differentiate between the two?" Members of the Avifaunal Club were especially interested in this problem and took every opportunity to discuss it. Bill Peiper, our "shore-bird specialist," surveyed some of the literature and, on the basis of specimens taken in nearby states, hypothesized that the migration dates would probably differ, with the Long-billed arriving earlier in the spring and leaving later in the fall than the Short-billed. Some overlap could of course be expected.

Little use can be made of bill length, coloration or flank-markings, since these characters are hard to exact in the field. Pitelka's *Geographic variation and the species problem in the shore-bird genus Limnodromus* Univ. Calif. Publ. Zool., 50:1-108 (1950) showed that even statistically, using measurements and sex determinations, specimens could not always be identified with 100% accuracy. Dickerman (Flicker 33:32-33, 1961) elaborated further on this. If specimens in the hand are distinguished with some difficulty, imagine the futility of trying to separate them in the field by plumage alone!

We noticed that Peterson, in his Eastern Field Guide (1947), made vague reference to voice as a possible means of separating the two dowitchers, but with the reservation that, ". . . this needs further study and testing." In his new, revised Western Guide (1961), he is more authoritative regarding voice.

We decided to flush every dowitcher we saw in order to get the call-note. This proved to be very successful. In almost every case we were able to get an alarm-note. They either said "keek" (Long-billed) or "tu-tu-tu" (Short-billed), *but in no instance did a single bird utter both notes*. Identifications based on these call-notes also verified, to some extent, Bill Pieper's hypothesis of migration dates. Here are our records for 1961:

May	6	Salt Lake, Lac Qui Parle Co.,	25 Long-billed
May	21	Herman, Grant Co.,	8 Short-billed
May	27	Duluth, St. Louis Co.,	1 (species - ?)
Jul.	8	Norwood, Carver Co.,	3 (species - ?)
Jul.	23	New Sweden, Nicollet Co.,	5 Short-billed, 1 Long-billed, (3-species?)
Aug.	4	Salt Lake, Lac Qui Parle Co.,	4 (species - ?)
Oct.	1	Heron L., Jackson Co.,	12 Long-billed
Oct.	1	Windom, Cottonwood Co.,	38 Long-billed
Oct.	12	Salt Lake, Lac Qui Parle Co.,	1 Long-billed
Oct.	12	Lake Traverse, Traverse Co.,	4 Long-billed
Oct.	12	Elbow Lake, Grant Co.,	50 Long-billed

We would like to encourage our readers to try this method and to inform us of their results.—*Ronald L. Huber, 3121 Georgia Ave. So., Minneapolis 26, Minnesota.*

PINE GROSBEAK NESTING IN ST. LOUIS COUNTY—Realizing the rarity of Pine Grosbeak records occurring in the summer season in Minnesota I believe this one to be of extreme importance as it is the first record of nesting within the borders of the state.

The exact location of this record is Boulder Lake Reservoir Quadrangle, R. 15 W., T. 53 N., S. 11, NE  $\frac{1}{4}$  of the NW  $\frac{1}{4}$ , at Twin Lakes, 22 miles north of Duluth.

The area is predominately boreal forest interspersed with bogs, small clearings and brushy areas.

On August 13, 1960, at about 6:15 PM, I first saw the male parent singing from the top of a spruce tree. When I approached for a closer look I noticed the female acting very nervous about 6 feet from the top of the same tree from which the male sang. The female was carrying food when next I saw her. Then she disappeared into the dense crown of the same tree. It was then that I heard the faint cries of the young birds. When the female reappeared she no longer had the food which consisted of several moths.

After several minutes of searching I could see 4 rather large stubby-tailed juvenal Pine Grosbeaks hidden in the tree top. The female then returned with more food.

The young birds were just out of the nest which was very obvious by their hesitation to follow the female when she appeared with food. They could not yet fly.

During the entire period of observation, 45 minutes, the male continued to sing at the top of the tree.

*Gary C. Kuyava, 1611 North 7th Ave, East Duluth, Minnesota.*

\* \* \*

NESTING LECONTE'S SPARROWS IN SOUTH ST. LOUIS COUNTY—While searching the Cloquet Valley State Forest and the adjacent Superior National Forest for birds on July 29, 1961, the authors thought a very large field, for this region, would be worth exploring. Among the several bird species on the field, the most interesting was a population of Leconte's Sparrows. Five of the birds were collected. This small group makes up the first specimens collected from St. Louis County and is the first positive record of occurrence for the County in the past 10 years. One specimen was lost, but the four remaining were preserved and will be deposited in the Minnesota Museum of Natural History collection.

Two of the specimens were adult males with greatly enlarged testes measuring 9 x 6, 7 x 5; 9 x 6, 8 x 6 millimeters respectively. One was a female, probably an adult, with a very small ovary. The fourth specimen was a juvenile female in post juvenal molt.

On the basis of the juvenile bird and the two adult males with the enlarged testes we believe that the birds were part of a nesting population in the field.

At the time of discovery of these birds around noon a few birds were singing, a fact which undoubtedly helped us find them.

The exact location of the field can be found on the Brimson Quadrangle, R. 13 W., T. 56 N., S. 28., SW.  $\frac{1}{2}$  of the SE.  $\frac{1}{4}$ . The field is located in the Superior National Forest one mile north of the Cloquet Valley State Forest boundary. The field can be reached by leaving Duluth via the Rice Lake Road (State Aid Road No 4) and proceeding the 38 to 40 miles from downtown Duluth to the Cloquet Valley State Forest Ranger Station (Shiels). Upon reaching the ranger station a narrow maintenance road will be seen penetrating the forest to the right of the highway. This narrow road should be followed for about seven miles to a

large field to the left of the road. It is largely obscured by brush, but will be recognized by the old farmstead with large barn still standing on the west edge of the field. A green concrete block hunting shack is at the east edge of the field.

The area was revisited on August 5, 1961, when several more Leconte's Sparrows were seen in the same field. We revisited the area on August 17 and September 1 and 7 but Leconte's Sparrows were seen only on August 17.

Some small ticks collected from one of the Leconte's Sparrows were determined to be *Ixodes scapularis* larva by Dr. Edwin F. Cook of the University of Minnesota. Gary C. Kuyava, 1611 Nth 7th Ave. East, Duluth 5, Minnesota and Robert R. Cohen, 1215 East Ridge, Boulder, Colorado.

\* \* \*

WHITE-WINGED, SURF AND COMMON SCOTERS IN DULUTH—About the middle of October, 1961, after the major part of the hawk flight was over, I started bird watching on Minnesota Point a couple of times a week. There were many ducks in the harbor and most of them were concentrated in the cove just northwest of the landing dock at the Recreation Center. All observations were done using the 15x and 30x objectives of a binocular spotting scope. The first day on which I saw scoters I notified Dr. P. B. Hofslund who came and observed the ducks and confirmed my identification of two Surf Scoters but we could not find the two Common Scoters that I had also seen earlier that day—the rafts of ducks had moved further off shore and the light was much poorer than earlier that same day, making it more difficult to observe the ducks. However, the Surf Scoters had stayed near shore and were easily identified by both of us. On this day and on subsequent days when I observed scoters they were usually only about 200 to 500 feet from shore and when I made an identification as to species, they were never more than 1000 feet from shore. The conditions usually were favorable enough so that positive identification could be made using the spotting scope. If conditions were bad, no species identification was attempted. I told Gary Kuyava that these ducks were there and on October 28 he went down and saw all three species of scoter. The date on which trips to Minnesota Point were made the scoters seen are listed below. All individuals were in the juvenile/adult female plumage unless otherwise noted.

- Oct. 17—2 Surf Scoters, 2 Common Scoters
- Oct. 24—5 Surf Scoters (including 1 adult female), 6 Common Scoters
- Oct. 26—4 Surf Scoters (including 2 adult females), 2 Common Scoters, 2 White-winged Scoters
- Oct. 28—(observation by Gary C. Kuyava) — 4 Surf Scoters, 7 Common Scoters, 3 White-winged Scoters
- Oct. 30—7 Common Scoters
- Nov. 1—7 Common Scoters
- Nov. 5—3 Common Scoters
- Nov. 6—2 scoters sp.?.; conditions very poor for observation
- Nov. 9—no scoters; conditions good for observation
- Nov. 15—1 White-winged Scoter
- Nov. 20—no scoters; conditions fairly good for observation
- Nov. 25—no scoters; conditions good for observation
- Nov. 28—no scoters; conditions excellent for observation

Janet C. Green, 1923 Greysolon Road, Duluth 12, Minnesota

**BIRDS KILLED BY AN ELECTRIC FENCE**—A note on "Barn Swallows Killed by Electric Fence" by W. J. Breckenridge appeared in the December 1960 *Flicker*. As a result, Mr. Delmar Holdgrafer, a farmer living near Donnelly, Minnesota has sent several observations of birds killed by an electric fence. This fence, 155 rods (or 2,557 feet) encloses a windbreak where there are seedling trees and where sunflowers and sweet corn are also planted to attract birds. Within this area are three bird baths plus twelve bird houses. The fence is a "weedchopper type" of fence hooked to a 110 volt source, with a low and high peg, but is kept on the low peg. The fence is inspected every day. It was put up in 1953 but Mr. Holdgrafer never kept an accurate record of the number of birds killed until 1961. This year the fence was turned on on March 25. The first bird killed, a Common Grackle, was on July 6. During the summer season two Yellow-shafted Flickers, 11 small Flycatchers (probably Least), one Barn Swallow, one Yellow-headed Backbird, 34 Redwinged Backbirds (ten on one day—September 21), six Common Grackles and five House Sparrows, 48 birds in all were killed. The fence was turned off November 2.—*Harvey L. Gunderson, Museum of Natural History, University of Minnesota, Minneapolis 14, Minnesota.*

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**ANOTHER MINNESOTA TURKEY RECORD**—Two (wild) Turkeys were seen and flushed from a swamp area, typically used by Ring-necked Pheasants, adjacent to an oak woods located west of Northfield, Rice County, about 12 miles in an area found quite some distance from any farm. One Turkey flew when flushed for a distance well over 400 feet over the oak woods, across a highway and into another oak woods finally coming down to perch on a branch towards the top of a good sized oak tree where it could be easily observed with binoculars.

The four observers assume this to be a wild Turkey for two reasons, other than its location being a considerable distance from a farm: (1). (wild) Turkeys have recently been introduced into areas of Rice county by sportsmens clubs. (2). Normally a domestic Turkey would not and usually can not fly as well as this Turkey demonstrated.—*Orwin A. Rustad, 1134 E. Division, Faribault, Minnesota.*

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**PARTIAL ALBINO CLIFF SWALLOW**—On June 28, 1961 I was banding Cliff Swallows at the golf course bridge in Whitewater Sate Park, north of St. Charles, Minnesota in Winona County. One of the birds that was netted had much white in its feathers. The head had flecks of white in the otherwise dark bluish-black feathers. The back was mostly white with a few flecks of black feathers and the rump was all white. There were some white feathers on the side of the face. The under tail covert was grayish-brown. Under the bill there was a bit of rufous color and the forehead patch was normal. The wings were more normal, but a few of the feathers next to the body, on top of the wing, were white. The bird had a brood patch.—*Rev. Forest V. Strnad, Kasson, Minnesota.*

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**LATE SPRING AND EARLY FALL RECORD OF BOHEMIAN WAX-WINGS, 1961**—In Fennico-Scandia, Europe, the autumn of 1956 was characterized by a super-abundance of Rowan (*Sorbus aucuparia*) berries. In 1957 there was almost a total failure, followed in 1958 by an abundant crop, in 1959 by one that was moderately scare, and in 1960 by another exceedingly abundant crop.

Between these five years there were four separate invasions of Bohemian Waxwings. With these invasions into northern Europe there was a considerable extension of their breeding range (*British Birds*, 65:1-30).

The Mountain Ash (*Sorbus americana*) berry crop in 1960 was extremely abundant, but this was followed by almost a complete crop failure in 1961 in northern Minnesota. The winter of 1960-61 saw one of the heaviest Bohemian Waxwing invasions ever recorded in Duluth (*Flicker*, 33:54). The fall of 1961 saw an early return of the flocks, although by December hardly any were recorded in this area.

The pattern exhibited seems so similar to that experienced in northern Europe that the possibility of range extension should not be overlooked and during the next few breeding seasons we should be careful to examine breeding populations of waxwings. In this respect, a particularly late spring record and an early fall return of Bohemian Waxwings assumes more importance. A single adult Bohemian was seen with three Cedar Waxwings, on Minnesota Point, May 16, 1961, and two were seen at my home in Duluth on October 21, 1961. *P. B. Hofslund, Biology Dept., University of Minnesota, Duluth, Minnesota.*

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**BOHEMIAN WAXWINGS AT ALBERT LEA**—When I stopped in at the Bailey Electric Co. on December 16, 1961 Moreau Bailey hailed me to say that he had seen a flock of Bohemian Waxwings feeding on berries still remaining on some shrubbery in their yard. I assured Mr. Bailey that his birds were rarely seen here and that I had never had the good fortune to see any of this species.

On January 31, 1962 at 8:00 A.M. Mr. Bailey telephoned me that his yard was again full of Bohemian Waxwings. I immediately headed for the Bailey home about three miles northwest of Albert Lea. Before I got there I spotted the birds in Carl Johnston's yard just south of Baileys. From my car I watched them for about an hour. Most of them were busily feeding on the black berries of a buck-thorn hedge. Some of them were perching at rest in a small tree not over thirty feet from me. About thirty birds were in a group on the ground eating snow. There was about a quarter inch of new snow which the birds were scooping up with their beaks and gobbling down like a chicken eating potato peelings. Individual birds were constantly flying from the ground up to the hedge while others joined the group eating snow. I counted 102 birds but am sure that there were many more.

At this close range I could see the plumage markings very distinctly. The grayish body, bright brown under-tail coverts and the white patches on the wings. The birds kept up a constant buzzy chatter, "zreee, zreee, zreee." A lone House Sparrow among them seemed quite excited about the strange visitors but the waxwings paid no attention to him. When I left the Bailey home about 10 o'clock, all the Bohemian Waxwings had disappeared.—*Charles Flugum, R.R. No. 1, Albert Lea, Minnesota.*

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**OBSERVATIONS IN MARTIN AND WATONWAN COUNTIES—SANDHILL CRANE**—On May 1, 1961 one lone Sandhill Crane was observed in the NW¼ Section 23, Fraser Twp., Martin County by Research Biologist Maynard Nelson and myself. The bird was feeding in unplowed corn stubble and was first observed at 0600 and was still feeding in the same field at 0730. No trace of the bird was seen on May 2.

This is the first Sandhill Crane we have observed in this part of Minnesota.

## BOBWHITE

A male Bobwhite was heard whistling from 0800-1000 July 11, 1961 on the Madelia Research Center grounds. At 1102 the bird was sighted in an alfalfa field by Biologist Earl Kopischke and myself. This is the first confirmed record of the Bobwhite in recent years in this immediate vicinity.

## SNOWY OWL

Biologist Earl Kopischke and myself observed a Snowy Owl in the S½ Section 7, Fraser Twp., Martin County on December 22, 1961. The owl was sitting on the leeward side of a snow drifted fence line and allowed us to approach within 150 feet.

## OPOSSUM

An adult opossum was found dead (obviously a car-kill) along highway No. 60 two miles east of Madelia Research Center on November 6, 1961. While we have several recorded observations of opossums to the south in Martin County this is our first observation in Watonwan County. Two adult female opossums were live-trapped on our Fraser Twp. study area in Martin County during May-June 1961. Both of these opossum were carrying young in their pouches, litter size numbering 8 and 9.—*Robert A. Chesness, Game Biologist, Game Research Center, Madelia, Minnesota.*

\* \* \*

A NEW COUNTY RECORD FOR THE GRASSHOPPER MOUSE (*ONYCHOMYS LEUCOGASTER*) IN MINNESOTA — On 11 November 1961, four members of the Avifaunal Club were enroute to Lake Traverse for a day's birding. On the way we found a dead mouse on highway 27, one mile east of Herman, Grant County, Minnesota. The short, thick, fleshy tail, vaguely tipped with white, immediately revealed the identity of this rodent as the Grasshopper Mouse (*Onychomys leucogaster*). The head was badly crushed, A small flea was seen on the mouse but was subsequently lost.

Only nine specimens from six counties have previously been taken. The total county records to date are:

Parker's Prairie, Ottertail County, before 1900  
Brown's Valley, Traverse County, Aug. 3, 1885  
Lac Qui Parle County, Aug. 19 and 31, 1951  
Lake Benton, Lincoln County, Aug. 20 and 22, 1952  
Baker, Clay County ("*Flicker*" 28:126) 1954  
Kittson County, Oct. 9, 1955  
Herman, Grant County, Nov. 11, 1961

These records are all from the western border of the state.

The Grant County specimen, a female, was prepared as a study skin by Harvey L. Gunderson and deposited in the Minnesota Museum of Natural History collections. The measurements were: total length 149 mm, tail 36 mm, hind foot 22 mm., ear from notch 15 mm., and weight 32.6 gms. The stomach contained corn.

Apparently on the basis of non-hibernation in closely related forms, the Grasshopper Mouse is considered to be a non-hibernating mammal. The Grant County specimen was found well beyond the initial freeze-up, which lends more support to the idea that this species does not hibernate.—*Ronald L. Huber, 3121 Georgia Ave. S., Minneapolis 26, Minnesota.*

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1961 FALL HAWK MIGRATION, DULUTH—This fall was the 10th anniversary of tallying hawks in Duluth and the total number of hawks counted, which was greater than any previous year, was an impressive 32,625. This year,

also, more hours were spent at the lookout counting the hawks than in any previous year. However, this was not directly responsible for the large total since almost half the hawks we counted on one memorable day—September 15 when an estimated 15,600 hawks, 95% of them Broad-wings, were seen. The weather for the week before had been cloudy and rainy and few hawks had been moving. But when it cleared on the 15th, they came pouring through by the thousands, making counting them an exhausting and, at peak times, a very difficult task. Sixty percent of the Broad-wings counted this fall were recorded on that date. The weekend of September 23-24 also proved productive and 35% of the Broad-wing total was recorded then.

Three weeks in September, the 9th and 10th, 16th and 17th, and 23rd and 24th, had been designated as official counting days. P. B. Hofslund led observers from the Duluth Bird Club and the M. O. U. in recording hawks for about an eight hour period on each of those days. On each of the other days I counted hawks for a one to four hour period, usually in the morning. A total of 121 hours was accumulated and parts of 35 separate days were covered. The tallying started on September 9 and the last day on which time was spent on the hawk lookout was October 31.

The total number for the count period and the largest number seen on any single day are recorded below for each species.

	Total	Date of greatest number	Greatest number on single day	Hours observed on date in column two
Turkey Vulture	281	9/28	161	4
Goshawk	69	10/14	11	3
Sharp-shinned Hawk	5,980	10/6	786	4
Cooper's Hawk	74	10/6	22	4
Red-tailed Hawk	662	10/14	112	3
Red-shouldered Hawk	1	9/9	1	8
Broad-winged Hawk	23,642 <sup>1</sup> .	9/15	14,653 <sup>1</sup> .	8
Rough-legged Hawk	30	10/25	15	2
Golden Eagle	2	9/15 & 9/23	1	8
Bald Eagle	10	9/15	5	8
Marsh Hawk	426	9/15	128	8
Osprey	60	9/9	18	8
Peregrine Falcon	34	9/17	14	6 $\frac{2}{3}$
Pigeon Hawk	20	9/15 & 9/23	3	8
Sparrow Hawk	369	9/9	67	8
Unidentified	965	10/18	321 <sup>2</sup> .	3 $\frac{1}{3}$
Total	32,625			

1. Estimate in part.

2. Large Buteos, probably mostly Red-tails but flying too far away to be separated from Rough-legs.

*Janet C. Green, 1923 Greysolon Road, Duluth 12, Minnesota.*

## BOOK REVIEWS

*A Naturalist in Alaska* by Adolph Murie, 302 pages. Sketches by Olaus Murie. Devin-Adair Co., 23 East 26th St., New York 10, N. Y. Price \$6.50.

In a recent issue of "Life" magazine (December 22, 1961) the Murie brothers (Adolph and Olaus) were characterized as among the elite of the new naturalists (in contrast to John Muir and Thoreau of the past). This gives some indication of the stature of these brothers and probably no reader of "The Flicker" has not heard of them. Few readers may know that they grew up in Minnesota. Adolph, the author of *A Naturalist in Alaska* received his Ph. D. at the University of Michigan with a dissertation, "Following Fox Trails." For a few years he worked at the Museum of the University of Michigan and went on several expeditions to Guatemala. Later he joined the U.S. National Park Service as a biologist and has spent most of his lifetime working in the western and northern part of the North American continent. In 1923 he made his first trip to Alaska and has been there at irregular intervals since.

From April 1939 to August 1941 he made an intensive study (walking 1,700 miles in 1939) of the Dall's Sheep in Mt. McKinley National Park. There were some who believed the Timber Wolf was exterminating the Dall's Sheep. The result of this study was *The Wolves of Mt. McKinley* published in 1944 as Fauna Series No. 5 in the Fauna of the National Parks of the United States. As a study of the interrelationships between the larger mammals of an area it has become a classic.

The Dall's Sheep is one of the few wild animals for which a "life table" has been constructed. "Life tables" for human populations are the back bone of the life insurance business. From these one is able to determine length of life expectancy as well as the age composition of a group. Adolph Murie, by using the ring growth on the horns of the Dall's Sheep was able to determine age distribution among live ani-

mals as well as what age groups were most susceptible to predation.

In this book Murie has incorporated much material from this study as well as additional material from his numerous other trips.

In *A Naturalist in Alaska* there are 23 chapters, dealing mostly with the large species of mammals, such as the Grizzly Bear, Red Fox, Timber Wolf, Lynx, Dall's Sheep and Barren Ground Caribou. But there is also a chapter on the Toklat Vole (*Microtus miurus*) titled "The Alaska Haymouse." This little creature not only cures and stores hay above ground, but stores roots in "root-cellars." The underground burrows are a "series of cavities joined by narrow apertures" as an "anti-weasel device." There are two intriguing chapters called "Gulls and Mice" and "Cranes and Caribou" — I shall not reveal the plot. There is much information on the Bald Eagle, (less on the Golden Eagle), Raven, Canada Jay and Magpie. A chapter on "Wolf Home Life" does much to dispel the stories of Timber Wolves' ferocity toward each other such as the stories of their killing the old and crippled of their own kind.

A very contemporary chapter deals with "Why Teen-age Grizzlies Leave Home." There are touches of humor throughout the book. Of one chance encounter with a Grizzly Bear he wrote "I reversed my direction and matched his stride in, I hoped, a casual manner. Taking care that I did not give him the impression that I was fleeing, or that he was chasing me, but rather that we were out for a walk together and perhaps were going to the same blueberry patch!" At another time he surprised a Grizzly Bear in treeless country and described it thus, "I had only my hands for protection and nothing taller than a grass blade to climb."

There is, of course, a great deal of first hand information about Grizzly Bear, Red Fox, Timber Wolf, Lynx, Dall's Sheep and Barren Ground Caribou.

bou, mammals about which all too little is known. There is a discussion of "bear trees" and their use, a subject of much speculation in other literature about bears. Of great interest to me was that caches of food made by one species of a mammal became available to all species of animals, "thus we find that the caches, regardless of who makes them tend to serve the community." Also of interest was the habit among the animals of inspecting each other's den entrances for scraps of food; a Grizzly Bear inspecting a wolf or fox den; a wolf inspecting a fox den, even an eagle inspecting the entrance to a fox den; and even magpies and gulls stopping by for a look.

Adolph Murie's own strong feelings for wilderness and wildlife are also expressed throughout the book. In the opening paragraph he describes Alaska thus, "It is a land where the individual is not yet swamped by numbers." Of an imminent journey he wrote "But we chafed to be off on an all winter, dog team trip we had planned, a reconnaissance covering the country to the north." Br-r-r! In another place he wrote. "The animals all belong; they are original Alaskans. Alaska without caribou or ptarmigan would lack much of its character. Alaska full of transplanted elk and Chinese pheasants would no longer be Alaska." This is not only a book of sound natural history but also of sound conservation.

The addition of a map would have been helpful. To visualize the location of: the East Fork den of the Timber Wolves; Wonder Lake, where the bull caribou were photographed; or Sanctuary and Teklanika Canyons, where the Dall's Sheep spent part of their time; would have increased my vicarious enjoyment of the book.

There are photographs by the author and Charles Ott and pen and ink sketches by Adolph Murie's talented brother Olaus.

This is a thoroughly enjoyable book for anyone interested in natural history, conservation and Alaska, Although written for adults I am sure

that younger readers would enjoy it also.—Harvey L. Gunderson, *Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

*Alexander Wilson, Naturalist and Pioneer* by Robert Cantwell. 319 pages, 8 color illustrations. J. B. Lippincott Company, Philadelphia, Pa., 1961. \$15.

Mr. Cantwell's biography should further confirm Alexander Wilson as the "Father of American Ornithology." After reading this book one cannot but marvel at the extent to which the author researched the life and times of Alexander Wilson. Wilson began his career as a weaver and a poet in Scotland. His undertakings as a poet in Paisley eventually led to his undoing. He wrote a poem which criticized the poor working conditions in the Scottish weaving mills of the late 18th century. This poem was directed toward one of the wealthy mill owners and caused Wilson's arrest for libel. This arrest had a tremendous effect on Wilson's personal life and this coupled with his general dissatisfaction with conditions led to his immigration to America.

When Wilson arrived in America he was immediately impressed with the wilderness aspects of this new land and in particular the abundance of birds as compared with his native Scotland. Wilson attempted weaving again as a profession in the Philadelphia area but soon gave this up for school teaching. During this early period in America Wilson formulated his plans for the publication of *American Ornithology*. At this time Wilson became acquainted with William Bart-ram, the great naturalist, who was a great inspiration to him.

To complete such an undertaking as the *American Ornithology* was a difficult task in early America. It would require years of study, collecting, and travel. Wilson walked, rode horseback and traveled by boat to the far corners of the then settled parts of America. In the early 19th century he had seen more of America than any other person. One of his most success-

ful trips took him south from Pennsylvania through Virginia and the Carolinas where Catesby had studied birds fifty years before. In Georgia he met the noted bird student John Abbott.

On his trip west Wilson met the young Audubon in Kentucky. It is said that this meeting launched Audubon on his career of painting and studying the birds of America.

The first volume of *American Ornithology* was published in 1808 and the last volume, volume 9, was published by George Ord in 1813 a few months after Wilson's death. Thus in the short span of five years the first work on American birds was completed. Wilson spent these last years constantly working on these volumes, doing the writing of the text, seeing that the plates were colored correctly and going on further collecting trips to gather information for the volumes.

To the bird watcher of the 1960's this book brings to light an experience unknown, the discovery of new species of birds. This discovery and the passion for the American wilderness were the great achievements of Alexander Wilson.

Robert Cantwell states about his biography of Alexander Wilson, "If Wilson had been only a scientist and painter of wildlife, I doubt if I would have ventured to write this account of his life." To this reviewer herein lies the main criticism of this book. Mr. Cantwell appears to be better equipped to write of the historical and social aspects surrounding Wilson's life rather than the more important natural history associated with him. There are ornithological inaccuracies which appear to be attributable to the author and not Wilson. For example, on the black and white plate number 7 the author labels the birds the Carolina Parrot and the others contained on the plate as elusive flycatchers. The flycatchers are obviously warblers including the Wilson's Warbler! On page 94 the Blue-winged Teal is referred to as the first fall migrant and hunting of the bird in September is explained. In the next sentence the spring plum-

age is attributed to these fall birds. Again using the Blue-winged Teal as an example, the author states on page 94 that they were shot in vast numbers, the hunters approaching within twenty yards. On page 247 it is stated in contradiction that teal are a difficult bird to hunt.

The appendix to the book contains many records concerning Wilson's early life. It also contains the list of original subscribers to *American Ornithology*. This list contains background information on each of the subscribers and again shows the authors stress on historical information rather than natural history.

The eight full color reproductions of Wilson's paintings make this book a valuable addition to ones bird library.

Editor

*Bird Song* No. 12 Cambridge Monographs in Experimental Biology by W. H. Thorpe. New York: Cambridge University Press. 142 pp. Published Nov. 17, 1961. \$3.75.

The latest addition to the Cambridge monograph series is devoted to a study of bird vocalization. This book is not intended as a complete treatise on avian vocal communication but is directed rather to summarizing recent work using audio-spectrographic-analysis techniques. It emphasizes the studies of Thorpe, his associates, and other European workers who have worked mainly on the behavioral and neural mechanisms involved in the development of song. Review of recent studies by American investigators is casually covered.

This monograph can be recommended to students of ornithology of varying interests in varying degrees. For the serious investigator of animal sounds, the work of Thorpe and his co-workers is generally known, but this text provides a concise summary of progress and theories. To the advanced amateur or professional ornithologist in other fields of endeavor, this work provides an insight into the methods and results of an expanding allied sub-

ject. For the casual bird watcher the discussion of the biological significance of call-notes, song and sub song may make future sorties into the field more rewarding and enjoyable.

Following a few introductory notes on the method of diagramming and interpreting sound spectrograms, Thorpe discusses in the initial chapter evidence for considering bird vocalization as expressions of music and as language. He reviews the essential characteristics of music as often defined by others and notes the occurrence of these characters in bird song. With regard to bird song as language one finds great differences exhibited between avian vocalizations and human speech; however, it is concluded that . . . "human speech is unique only in the way in which it combines attributes which in themselves are not peculiar to man but are found also in more than one group of animals."

The body of the book comprising five chapters proceeds to discuss the biological significance of bird vocalization including types, functions, factors determining its expression, and development both in individuals and in historical reference. The definition and distinctiveness of song and call-notes offer some difficulties when defined strictly in musical or physical terms. We learn that functionally song is primarily controlled by sex hormones and is associated with the reproductive cycle; call-notes, however, appear to be primarily used in the coordination of non-reproductive phases of behavior between individuals of the species.

Students of animal learning will be most interested in chapter five which discusses the development of song in the individual. In the Chaffinch the song is apparently composed of innate and acquired components. Thorpe describes the essential features of these components along with his interpretation of how the two become integrated into the natural song characteristic of adult populations.

Students of taxonomy are aware of the limitations bird songs have as systematic characters. However, songs

can have some value, for instance, vocal quality may show subordinal or familial relationship. On the specific level, songs are highly characteristic as any birder well knows. This is reasonable since it is believed songs function as reproductive isolating mechanisms and, hence, tend to diverge between closely related sympatric species. When a species spreads geographically into new areas, its song may remain quite stable if there is no selective factor tending to alter it. Conveniently, although specific distinctiveness of song exists, there may be variations to indicate subspecific and local populations. Much work recording these local song variants is being conducted by the English workers. There is some evidence that such local differences *may* play a part in initiating as well as maintaining evolutionary divergences.

The concluding chapter discusses the vocalizing and auditory apparatus in birds. An interesting, though at present unanswerable, question arises from a consideration of the vocal abilities of talking birds. These faculties appear not to be used in the wild, yet the capabilities exist. Why? A consideration of the auditory faculties in birds suggests no great differences in tone perception compared to man or fish. Yet, the physiological mechanisms involved are dissimilar. The question arises, what is the minimal neural mechanism required to perform these functions?

The illustrations consist almost entirely of diagrammatic representations of sound spectrograms. With one exception, I feel, the reader will not find these of much aid in following the text. The exception is the discussion of development of song (chapter five). In any case, because this book relies quite heavily on studies of the Chaffinch song and call-notes, I think a full description and annotation of the natural adult Chaffinch song should be included in the introductory remarks on the illustrations. A simple fold-out sheet with the sound spectrogram of the full song and some of the important elemental call-notes would

be convenient for the reader who is asked throughout the text to compare other songs with the "huit", "tupe", "chink", or "slur" elements of the Chaffinch call-note or song. Fortunately for the average reader, the text is interesting, informative and lucid, and may be read without reference to the illustrations with no loss of clarity.

*Eugene LeFebvre, Research Associate, Museum of Natural History, University of Minnesota, Minneapolis 14, Minnesota.*

*The Book of Bird Life: A Study of Birds in Their Native Haunts* by Arthur A. Allen. Second edition. D. Van Nostrand Company Inc. Princeton, New Jersey, 1961, 396 pp. color photos and illustrated in black and white. \$9.75.

The name Arthur A. Allen is known to almost every amateur ornithologist who has read books about his hobby. The second edition of Dr. Allen's *The Book of Bird Life* continues the reputation of the first edition as the best general introduction to ornithology available.

There are two additions to this book which are very beneficial. The first is the chapter on ethology, the study of the patterns of bird behavior. The chapter introduces a field seldom investigated by the amateur and should certainly help to make the hobby of birdwatching more interesting and rewarding.

The second valuable addition is a series of 76 black and white drawings by Dr. William C. Dilger showing the physical differences distinguishing one bird family from another.

In all there are 19 chapters and 250 illustrations dealing with history, classification, distribution, behavior, migration and courtship. The last half of the book deals with Bird Walks, Attracting Birds, Bird Nests, Learning Bird Songs and Birds as Pets. It can

be seen from this listing that the text is very comprehensive and the amateur can obtain information on almost any subject concerning birds.

To this reviewer one of the most valuable portions of Dr. Allen's books are the lists of suggested readings. These lists should certainly stimulate the reader to further study and reading.

Concerning the illustrations in the book the black and white drawings are excellent and add much to the text. However the addition of the color plates has done little to enhance the book. The color illustrations of the warblers are poorly printed and out of register which certainly detracts from the book. The placement of the color illustrations within the text also leaves much to be desired.

The author uses certain common names which will confuse the amateur. In referring to the American Widgeon he uses both Baldpate and Widgeon, the Dunlin as both Red-back and Dunlin and he uses Holboell's instead of Red-necked Grebe.

One comment by the author cannot go unnoticed by this reviewer. On page 265 Dr. Allen states "it will not be many generations before all idle lands have reverted to the state, making a vast chain of sanctuaries and shooting-ground and public forests and public recreation-grounds such as the world has never known, and birds and game will be more plentiful than when Columbus discovered this fair country." This certainly sounds like wishful thinking and it implies that with little or no effort on our part birds are destined for abundance in our population boom. I hope Dr. Allen is right

In spite of the rather minor criticisms this book should rank next to Peterson's Field Guides on the amateur birdwatchers book shelf.

Editor

THE FLICKER

# *The Flicker*

VOLUME 34

JUNE 1962

NUMBER 2



PUBLISHED QUARTERLY BY  
**THE MINNESOTA ORNITHOLOGISTS' UNION**

PERMANENT ADDRESS  
MUSEUM OF NATURAL HISTORY  
UNIVERSITY OF MINNESOTA  
MINNEAPOLIS, MINNESOTA

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## THE FLICKER

Organ of the *Minnesota Ornithologists' Union*. Published quarterly in March, June, September, and December. *The Flicker* is sent to all members not in arrears for dues. Dues for members: Active, \$3.00, Sustaining, \$5.00; Life, \$50; Patron, \$100 or more. All articles and communications for publications should be sent to the editor. Subscriptions, memberships, and requests for back issues should be sent to the treasurer.

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### FRONT COVER

Nesting Cape May Warbler, Lake County, Minnesota July 1961. Photo by Betty D. Cottrille.

## THE PRESIDENT'S PAGE

On Saturday, May 19th I had the privilege of standing on the shore of one of our prairie lakes in western Minnesota, Salt Lake in Lac Qui Parle County, during our "Big Day" of the M.O.U. For the first time in my life I saw American Avocets and Marbled Godwits. I began to wonder how long such sights would be available to my generation and whether or not my grandchildren would get to see such birds. Or, would we let these small lakes be drained before we get around to preserving more of them for future generations to enjoy.

What could our Minnesota Ornithologists' Union do alone or in cooperation with other conservation groups to preserve such beauty spots? Would this be a challenge big enough for us to undertake or too big for us so that we would become discouraged.

If some of the farmers in the area decided to drain their land the whole lake would be gone in the matter of a few days or weeks. Could our M.O.U. undertake such a project as a memorial to Mrs. C. E. Peterson of Madison and with the help of local citizens in that area purchase this land to be set aside forever as a refuge for shore birds and water birds?

We have been looking for a project in our organization that would stimulate our membership to greater activity. Could this be the project that would unite our group into a great moving force for conservation and enjoyment of all the natural resources?

Let's think about it! Let's talk about it with other interested persons and then if we are interested bring it before our membership at the December paper session and business meeting for some positive action.

*Rev. Forest V. Strnad*

# A SEARCH FOR NESTING CAPE MAY WARBLERS

by Betty Darling Cottrille

Photographing warblers at the nest can lead to exciting adventures. This proved to be the case when Eliot Porter of Santa Fe, New Mexico, together with Dr. and Mrs. W. Powell Cottrille of Jackson, Michigan, set out to photograph Cape May Warblers in the spring of 1961. The search began in Ontario, Canada, and ended in Lake County near Ely, Minnesota.

The Canadian Life Zone seems to have the peculiar requirements for the home life of the Cape May Warbler. According to Bent (1953) the breeding range of this warbler is the Province of Quebec and the Maritime Provinces. The reference also states that westward extension of the range coincides with local infestation of spruce budworms. So it was that Kendeigh (1947) studying an area near Nipigon in Ontario calculated a density of 28 pairs of this warbler per 100 acres in the spruce-fir forest infested with budworms. Later, Stewart and Aldrich (1951) found almost identical densities in northern Maine under similar conditions of budworm infestation.

The area near Nipigon was worked by us June 13-16 with no success; extensive lumbering operations were evident and the forest had been cut over leaving no great stands of conifers. Since the nesting season was advancing and we were far from our goal, we abandoned Ontario on June 17 and rushed to the Arrowhead country near Ely, Minnesota, where Dr. W. J. Breckenridge, Dr. P. B. Hofslund, and others told us Cape May Warblers had been reported during the supposed nesting season.

Once there, it didn't take long to observe the presence of budworms in the forest; a little closer look revealed heavy infestation of the spruce and balsam. The bird population was far beyond our expectations and included

substantial number of the warblers we were seeking. Since this was not primarily a scientific expedition, there was no accurate count made of pairs of Cape May Warblers, but in the two sections we worked we estimated 8-10 singing males. It was an exceedingly dry season — we were told there had been no rain since mid-May, and it was possible to work in bogs in low boots; stream beds were only moist in some cases, and the ground cover in the woods was like powder. Temperatures averaged in the high 80's.

We confined our work to the easiest accessible area from our headquarters on County Road 16, T 62 N, R 11 W, Sections 4 and 33. As in the case of most field trips, we were late for the nesting of some species, early for others and just in time for many. Male Cape Mays were advertising their presence in the topmost branches of the tallest birches and spruce; and from the long periods of incessant singing we felt certain that we were on the ground early enough. For eight days we watched and waited for a male to leave his singing perch or for a female to reveal her presence. After six days we noted a marked decrease in frequency of singing and we spent more time enlarging our circles in an effort to determine territories for the particular males under observation. On the ninth day, in an area where we heard only an occasional song, I discovered a female gathering budworms in the low branches of a spruce. She was not very shy, but when a male appeared, they quickly vanished. This was at the edge of a typical black spruce, sphagnum, leather-leaf bog, and although it was fairly open and the trees comparatively low, it was not easy to follow the birds. When the male engaged a Tennessee Warbler in battle we knew we must be close to the nest, and the three of us closed ranks. By mid-afternoon the fol-

lowing day the nest was located three and one-half feet from the top of a 23.5 foot black spruce. The lowest nest previously recorded was 35 feet from the ground (Bent); this one at 20 feet seemed low in comparison. The nest contained eight small young three or four days old.

The greater part of five days we confined our efforts to this small area during which time the nest was either under observation or being photographed by one of us. In two ways these Cape Mays differed from many warblers we have observed at the nest: the parents were remarkably silent as they tended their young (with so many young to feed it seemed to us there was little time for singing), and the female did no brooding between feedings.

During the time we explored these two sections and engaged in our search for the nest of the Cape May Warbler in particular, we found numerous nests which I list as follows:

BLACK-BILLED CUCKOO 25 June, 2 eggs.

YELLOW-BELLIED SAPSUCKER 19 June, small young.

YELLOW-BELLIED FLYCATCHER 30 June, 3 eggs; 1 July, 2 young, 1 egg.

BLACK-CAPPED CHICKADEE 19 June, young well developed

BOREAL CHICKADEE 19 June, young well developed

SWAINSON'S THRUSH 28 June, 2 eggs - (29 June, female incubating 3 eggs)

VEERY (1) 20 June, 4 eggs. (2) 20 June, 4 young. (3) 20 June, 3 young, 1 egg.

CEDAR WAXWING (1) 19 June, 4 eggs. (2) 21 June, nest building. (3) 23 June, 3 eggs.

TENNESSEE WARBLER (1) 18 June, 5 eggs; 23 June, eggs hatched; young fledged in 9 days.

(2) 19 June, 6 eggs; 22 June, eggs hatched.

(3) 19 June, 6 eggs; 26 June, eggs hatched.

(4) 22 June, 3 eggs (female incubating)

(5) 26 June, 4 young half grown

Note: Four of these nests were in typical sphagnum hump situations, one was in grass on higher ground. In nests No. 1 and No. 2 the female alone tended the young although the males were singing in the vicinity.

NASHVILLE WARBLER (1) 18 June, 5 eggs, 19 June, 6 eggs.

(2) 20 June, 5 eggs; 23 June, eggs hatched.

(3) 20 June, 6 eggs.

(4) 20 June, young.

(5) 25 June, young; fledged 1 July.

PARULA WARBLER 20 June, female incubating.

CAPE MAY WARBLER Lake County, T 62 N, R 11 W, Sec. 33. 26 June, 8 young 3 or 4 days old 1 July, young fledged; nest collected.

CHESTNUT-SIDED WARBLER

(1) 20 June, 4 eggs.

(2) 21 June, 2 eggs.

OVENBIRD (1) 20 June, 5 eggs. (2) 20 June, 5 eggs.

(3) 21 June, 3 eggs.

(4) 23 June, tiny young.

NORTHERN WATERTHRUSH

21 June, 5 tiny young; 23 June, nest robbed.

Note: This nest was found well concealed in the bank of a dried up stream (T 62 N, R 11 W, Sec. 4). The presence of Gray Jays in the area gave us cause to suspect they had taken the small young birds. Our observations were cut short by this catastrophe but positive identification was possible from our pictures. The nest was collected.

MOURNING WARBLER 29 June, nest completed.

AMERICAN REDSTART 19 June, female incubating.

ROSE-BREASTED GROSBEAK 22 June, nest just completed; 26 June, 4 eggs.

SLATE-COLORED JUNCO (1) 20 June, 4 eggs

(2) 27 June, 3 eggs; 29 June, 5 eggs.

CHIPPING SPARROW (1) 19 June,  
4 young.  
(2) 21 June, 3 tiny young.  
(3) 25 June, 4 eggs.

WHITE-THROATED SPARROW 21  
June, 4 young fledging.

SWAMP SPARROW 25 June, nest  
completed; 30 June, 5 eggs.

SONG SPARROW 22 June, 4 tiny  
young.

There were comparatively few  
Brown-headed Cowbirds in this area  
and we thought it remarkable that in

all these nests there was not one in-  
stance of parasitism by them.—6075  
*Brown's Lake Road, Jackson, Michigan*

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## HINCKLEY AREA BIRDING

by Harold A. Toms

"Listen! Did you hear that?" I asked  
Dottie early one morning while rub-  
bing the sleep from my eyes. It was  
September 11, 1960, shortly after  
our moving to Hinckly, Minnesota from  
Pennsylvania.

She hadn't. My rudely arousing her  
patient soul from a sweet sleep was  
the first sound she had heard. She  
listened. Finally she heard it.

"What is it?" she asked.

"A Western Meadowlark!" I jubi-  
lantly exclaimed.

During my ten years of bird watch-  
ing, I've never lost the thrill of dis-  
covery since identifying a Tufted Tit-  
mouse by his clearly whistled, "Peter!  
Peter!" This was our first new bird in  
our new home here in the Midwest, and  
it was to me as a welcome serenade  
from our feathered friends of Minne-  
sota. It had been a dry season from the  
time we arrive here, so we hadn't seen  
many birds of any description.

We had recognized our *Sturnella*  
*neglecta's* morning reveille from hav-  
ing listened previously to a recording  
of his song. We felt we were at least  
on the borders of the West, because  
of having heard a Western meadow-  
lark.

Not long afterward, here in Hinckley  
we were thrilled to hear the familiar  
whistled, "You can't see me," of a *Stur-*  
*nella magna*, - an Eastern Meadowlark,  
long one of my favorite birds. So, con-  
trary to the poet's assertion, East and  
West do meet—here in Hinckley, at  
least.

From the northeast bedroom of our  
home on the eastern edge of town, dur-  
ing the winter of 1960-61 we often  
heard, even on nights when the mer-  
cury dipped to below zero, the dis-  
tinctive hoots of a Great Horned Owl.  
One night he was so close that we con-  
cluded he was perched atop the tele-  
vision antenna on our next door  
neighbor's house. At least, after we  
directed the beam of our flashlight in  
that direction there was no more hoot-  
ing. From time to time on going out-  
side just before retiring, we could hear  
the distinct booming notes of a Horn-  
ed Owl, probably at least half a mile  
away or more in the woods to the east  
of Hinckley. Then often we would hear  
the answering call of his mate in high-  
er pitch from a somewhat different  
direction.

On April 16, 1961 we were surprised  
and thrilled when a half dozen Fox  
Sparrows visited us, picking up food  
spilled from our feeder by Evening



Evening Grosbeaks — Hinckley, Minnesota

Grosbeaks. For two days they were our guests, then they passed on.

Six days later we identified a number of Brewer's Blackbirds, feeding with Common Grackles and Brown-headed Cowbirds in a pasture several miles east of Pine City. This was our first sight record of Brewer's Blackbirds. We are still looking for Yellow-headed Blackbirds.

On May 18, with the aid of my trusty 8x40 Bushnell binoculars, we identified several Clay-colored Sparrows, about a mile east of Hinckley in a brushy meadow on the north bank of the Grindstone River. Two days later we discovered a Savannah Sparrow on a fence post at the eastern edge of our Hinckley church lawn.

May 20 also netted us three new ducks: American Widgeon, Shoveler, and Blue-winged Teal, on a pond east of the Hinckley memorial cemetery. Since we had not lived in lake country during the 15 years prior to our coming to Minnesota, we have appreciated the opportunity to study water birds.

On May 21 we chalked up two more firsts: Bank Swallows and Rough-winged Swallows, five miles east of Hinckley, just beyond Kettle River on Route 48. The same day or shortly thereafter we saw all the other members of the swift-swallow-martin family common to the east. That afternoon we saw an elusive pair of Palm Warblers about 6 miles west of Hinckley.

We discovered a Yellow-throated Vireo on May 30th at North Star camp, near Brainerd's airport. The familiar Red-eyed and Warbling Vireos were also nesting there.

During the first six days of June on a wilderness canoe trip up to Knife Lake, northeast of Ely, we saw and heard our first Common Loons. We could approach only so near, then they would dive to elude us and our motorized craft. It was the height of the warbler season there. On Friday morning, June 2, arose about six o'clock, after several hours of hearing the pattering of rain on my tent and feeling tiny

splashes of it on my face. With boots, binoculars, Petersen's bird guide and rain coat, I spent several hours of searching for birds. One veteran camper was making a fire in the rain, while another had gone out fishing. I spent almost an hour searching for an elusive Mourning Warbler hidden in the area of several small evergreens, during an almost constant rain, sometimes light and gentle, sometimes quite heavy. I really worked for that addition to my life list!

On September 25 we saw a large flock of Snow Geese on, and winging over, a small lake between St. Cloud and Hutchinson.

We have had from 30 to 40 Evening Grosbeaks at our feeder here in Hinckley this winter. Three Black-capped Chickadees also come regularly to dine on our sunflower seeds.

To my boys, Danny 12 and Teddy 11, goes the honor of discovering a Pine Grosbeak in the large ash-leaved maple tree in front of our house on January 28, 1962—a first sight record for the three of us. We have all seen small flocks of them since, between Barnum and Duluth. One day recently, Dottie saw one at our bird feeder for a brief moment, but the Evening Grosbeaks scared him away.

Large flocks of Snow Buntings frequently fly up from the side of the road as we travel through the country. On March 10, in covering my circuit of Rock Creek, Mora, and Isle, Teddy and I saw no less than a dozen flocks of Snow Buntings, comprising an estimated total of 700 of these elusive sprites.

Occasionally we see an individual or small flocks of Horned Larks, a bird we had not seen for several years. On March 14, Dottie and I saw a flock of about 40 Horned Larks a few miles east of Sandstone, the largest flock we have observed. Sometimes a solitary Horned Lark will be startled by our automobile headlights at night, and fly up in front of our Rambler station wagon. Come to think, I guess I'd better half my rambling for this time.—*Hinckley, Minnesota.*

# THE GENUS *OPORORNIS*

by P. B. Hofslund

Huxley's "new systematics" with its discarding of the typological concept of a species in favor of a biological definition has led to a renewed interest in the study of the life histories of birds. It has brought about the realization that we know very little about most of our common birds.

There have been many leaders in this new movement. Certainly Ernst Mayr's "Systematics and the Origin of Species" has provided impetus; John Emlen and his students and associates at the University of Wisconsin have given direction through their behavioral studies; and the tremendous outpouring of important studies from staff, students, and associates of Cornell University has shown how important such studies can be to our understanding of not only taxonomy *pre se*, but to the evolution of the animal kingdom.

Van Tyne and Berger (1959:266) stated that the breeding behavior of less than 10 of the 119 species of Wood Warblers is known even moderately well. With the aid of a Graduate School Grant-in-Aid, I had the opportunity to work on the compilation of reference material for a proposed monograph of the family. The more I read, the more I became convinced that the term "moderately" was much too generous, being applicable to no more than two or three species, not ten. The 1961 Brewster Medal was awarded to Harold Mayfield for the publication of his "The Kirtland's Warbler", the only book devoted to a single Parulid. This excellent work resulted from at least 26 years of study, and yet it is surprisingly incomplete. For instance, in the 26 years not one entire breeding season has been observed.

The purpose of writing this article is not the usual one of imparting new information, but rather to discuss what is not known about an interesting group of birds that has a particular

place in Minnesota ornithology. I chose the genus *Oporornis* to illustrate my points, because of my interest in the genus and, as I mentioned earlier, because much of what is known about the group comes from work done in Minnesota. Among the earliest and best descriptions of the Connecticut Warbler's (*Oporornis agilis*) nest were those of Huff (1929) and Kilgore and Breckenridge (1929) on nests found in Minnesota. The first life history study done on the Mourning Warbler *Oporornis philadelphia* resulted from work at Itasca Park by Cox (1960). The first reported incubation period also came from a Minnesota bird (Hofslund, 1954), and among the first known hybrids between the Mourning Warbler and MacGillivray's Warbler (*Oporornis tolmiei*) were two specimens taken in Minnesota (Peterson, 1958). Even the Kentucky Warbler (*Oporornis formosus*) has shown up in Minnesota in one of its northernmost advances.

Although fairly abundant in many areas of its range, the Genus *Oporornis* is poorly known, both taxonomically and ecologically. Only the Mourning Warbler has had any special study given to its life history, the others being known from fragmentary observations. That these fragmentary observations are insufficient. I think can be shown by examining some of the similarities and dissimilarities between the four species and then by asking ourselves certain questions.

Morphologically, the four species are much alike. The females and immatures of *tolmiei*, *philadelphia*, and *agilis* are difficult to separate in the hand and almost impossible in the field. The males, on the other hand, while difficult in at least three of the species, can be separated reasonably well by features of the head region:

Species	Hood	Bib	Eyering
<i>tolmiei</i>	Gray	Black	Incom.
<i>agilis</i>	Gray	None	Comp.

<i>philadelphia</i>	Gray	Black	None
<i>formosus</i>	None	None	None

The songs of the four species are sufficiently distinct so that a trained observer can distinguish the four species. However, I might point out that the Mourning Warbler in North-eastern Minnesota sounds to me more like the MacGillivray's Warbler than it does like the Mourning Warblers of the east.

The breeding habitat for each species is so similar that, when a range of overlap occurs, competition for breeding space could take place between each of the four species.

The nest, the observed habits, and possibly the general migration patterns are quite similar.

If they are so similar, what keeps these species so isolated from each other that they are able to maintain their species identity? Stein (1958) gave strong evidence that song served effectively to isolate even morphologically identical species. Marler (Lanyon and Tovolga, 1960) pointed out that if there is the slightest degree of competition with other species, selection may shift in favor of a degree of resemblance between their songs". Sibley (1950, 1954, 1957, 1958, 1959), Sibley and Short (1959a, b), and Sibley and West (1958, 1959) have demonstrated quite conclusively that great differences in plumage characteristics are not sufficient to isolate species when they establish zones of contact.

Our present knowledge of the distribution of the Genus *Oporornis* shows a rough division of the species into a separate area for each member of the species: a western form, *tolmiei*; a southern form, *formosus*; an eastern form, *philadelphia*; and a north-central form, *agilis*. Only the Mourning Warbler's range is so extensive that it overlaps any of the other species to any extent. There is a great zone of sympatry between *agilis* and *philadelphia* as one can see by the accompanying map. There are also narrow zones of sympatry between *formosus* and *philadelphia*, *tolmiei* and *philadelphia*, and

*tolmiei* and *agilis*. On the basis of our present knowledge, one can only speculate as to why this has happened. One guess might be that these birds as one species were found over the range that four species now cover. This species was isolated into four distinct areas, possibly by such a natural phenomenon as the heavy forestation that followed the glaciers. Lumbering, with the accompanying fires and massive clearing plus the natural succession of brush and open deciduous woods, again opened up natural breeding grounds for the members of the genus, which during their period of isolation had developed the morphological characters which we now use to separate them into their respective species. Will this advance, and it seems to be quite rapid in all cases with the possible exception of the Connecticut Warbler, bring about large sympatric zones and in these zones will there be a merging of the genes so that what we now consider as specific differences will be relegated to a subspecific character? I believe that at least in the case of *philadelphia* and *tolmiei* this is true.

The evidence for considering the Mourning and MacGillivray's Warblers as conspecific is inconclusive, but consider these points: (1) morphologically they are so similar that in the field only the males can be recognized with any degree of assurance, and this by means of two dots of white, one above and one below the eye of *tolmiei*; (2) the songs in the area near the zone of sympatry are quite similar; (3) the two specimens of *tolmiei* taken in Minnesota by Peterson (*opcit*) had characteristics of both *tolmiei* and *philadelphia*; and (4) Phillips in his study of the races of *tolmiei* (1947) pointed out the doubtful distinction of species between it and *philadelphia*. It does not seem unlikely that a thorough study of these two species through their zones of overlap would provide more evidence in this direction.

There is no evidence at all for this trend in the other species. The species *agilis* and *philadelphia* apparently maintain their isolation, although these are close enough in morphological fea-

tures that it would take a much closer study than has been given to them to detect hybridization effects. The Kentucky Warbler is just beginning to extend its range into the areas where other Oporornids are established.

Three possibilities exist for populations that have been separated by a physical barrier which has later broken down and allowed them to again reunite: if the period of time has not been long enough to establish intrinsic barriers against hybridization, they will most likely reunite into one species; if the time of separation has not been long enough to develop intrinsic barriers, but has been long enough so that there is some selection against the hybrids, they will preserve their identity as separate species and possibly diverge even more; and the third possibility, time has been long enough so that intrinsic barriers have set in and the species distinction will be maintained. (For a fascinating discussion of these points see Sibley, 1957). From what we know about the Genus *Oporornis*, it looks like one that would allow us to get in on the "ground floor" to show the effect of such a barrier breakdown on an entire genus.

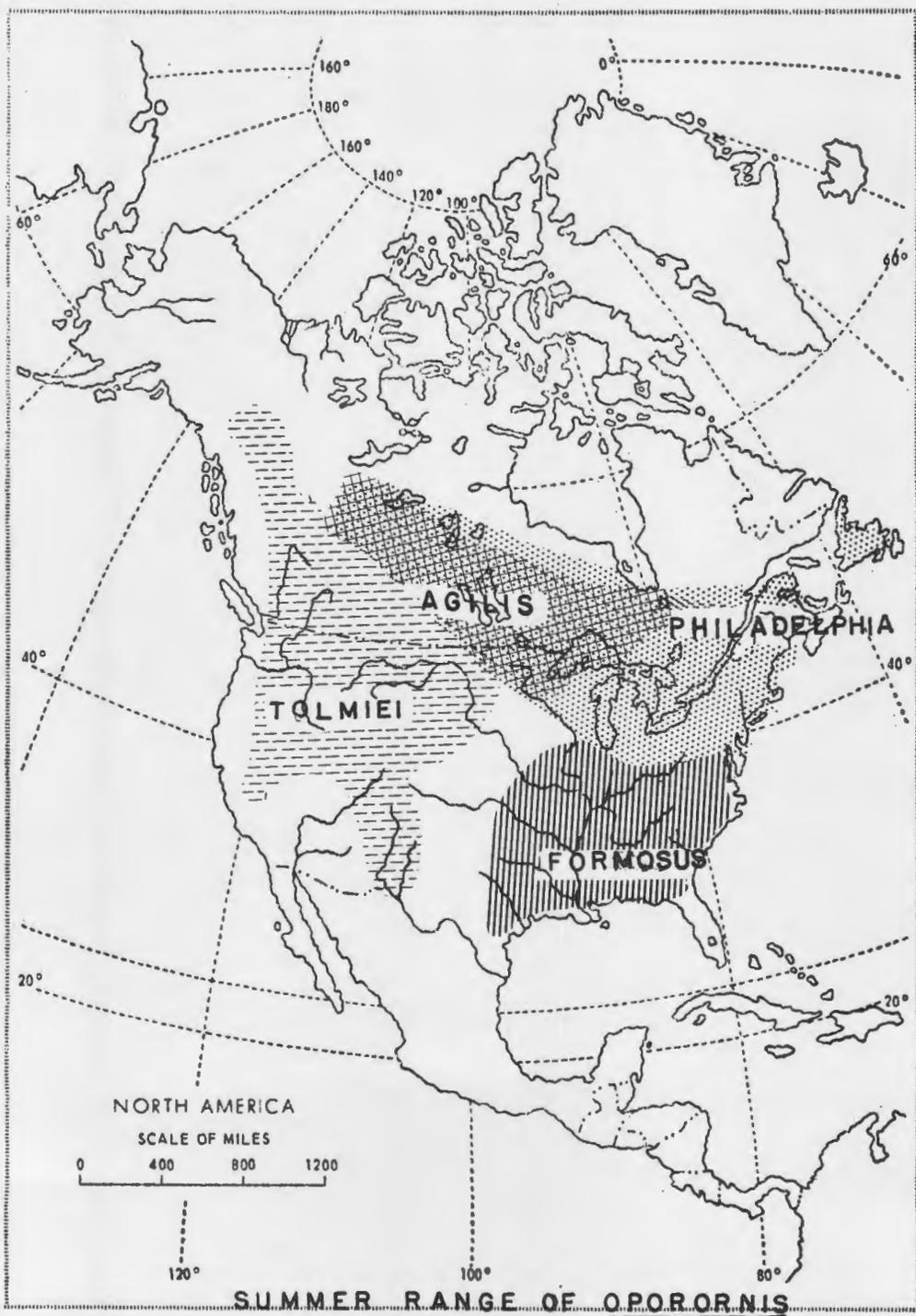
It seems to me that there are three approaches that are of primary importance to the problem. First, we must find out more about the life histories of each species. Perhaps this should be pushed one step farther and we should say that there is a definite need for more knowledge about the life histories of the ground-nesting warblers that compete with members of the genus. The Yellowthroat, *Geothlypis trichas*, is very similar in actions, voice, habitat, nest, and nesting site to the Mourning Warbler. Secondly, I feel that acoustic evidence of relationship has not been used as a taxonomic tool to the degree it deserves. This may be of particular importance when we consider the Oporornids as it seems, at least superficially, to be of primary importance in keeping certain members of the genus apart. Thirdly, of course, there is the matter of collecting in the zones of sympatry and studying previous collections that have been

made. There is still little known of the distinction between hybrid and individual differences, at least in this genus.

I hope that this article has stimulated readers of *The Flicker* to observe and note more carefully the members of this interesting Parulid family and to take up a hobby, the study of bird life histories, that can be not only enjoyable, but can be profitable to the science of ornithology. Let me hasten to add that it need not be a rare bird to be important and you do not have to be a professional to do such a study successfully. Margaret Nice was a housewife when she did her monumental work on the Song Sparrow; Lawrence Walkinshaw, world authority on cranes and the Prothonotary Warbler, is a dentist; perhaps the most intensive study given to a single species of bird is being done by a lawyer; and this year's winner of the Brewster Medal, Harold Mayfield, is an industrialist. Any professional ornithologist would be happy to give guidance and criticism to a person who shows sincere interest in and ability to do research in this field.

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## COMPARATIVE TRAP VULNERABILITY OF THE CHICKADEE AND THE SLATE-COLORED JUNCO

by Howard Young

Cognizance of the reactions of individuals to the experience of being trapped is essential for logical interpretation of any capture - recapture data. Several studies of trap reaction have been made for mammals (Tanaka 1952a, b; Geis 1955; Young, Nees, and Emlen 1952). For birds, investigations have been made by Borror (1948) on the White-throated Sparrow, and by Young (1948) on the Cardinal.

Most trapping stations capture a variety of species of birds. The number of individuals captured of the different species will depend on such things as trap type, location of traps, bait, general abundance of the species in the region, and the response of the species to the traps. In some cases the effect

of a given factor will be obvious, thus one would not expect to catch any thrushes when the traps were baited with corn. Where it is desired to make comparative studies of species by means of trap data, these factors must be considered.

In the present case, scratch-feed was uniformly used as bait, the traps (10) were all of the single-cell Potter type, permanently fixed in one position. Since these variables were held constant, and since both Slate-colored Juncos, and Black-capped Chickadees, were captured regularly, some information on their comparative trappability is available.

Traps were set for 70 days during the period Jan. 29, 1958 to April 21, 1958, and for 103 days during the period from Nov. 3, 1958 to April 3,

1959. The same location, in a local cemetery, was used each year.

Preliminary statistical studies (Young, 1961) indicated that both species were trapped in a random fashion.

No real comparison can be made on the basic data — the number of individuals captured for each species. No good information is available on their comparative abundance in the region of trapping (both were "common"), nor on any aspects of their movements in and out of the trapping area.

The following discussion therefore applies to those fractions of each population which were vulnerable to trapping. All trapped birds were individually marked with government bands, and with colored leg bands and correspondingly painted feathers, so that each could be recognized at a distance. The area about the traps (approximately 200 yards radius) was routinely searched for these marked birds, so in many cases it was possible to show that a particular bird was present in the area on a given day, but did not re-enter the traps.

By means of these observations, plus the trapping data, it was possible to compute a known exposure to traps for a number of individuals from each species. This of course is a minimum estimate, since some individuals may have eluded observation while still present in the region of the traps. However, there was no evidence that marked individuals of one species were more difficult to sight than those of the other, and for the purposes of this paper the data are sufficient to allow comparison. Table 1 summarizes the information gained in this manner.

A considerable higher proportion of the juncos repeated than of the chickadees, and the difference is statistically significant ( $X^2 = 9.586$ ,  $P 2\%$ ). As a group then the juncos appeared to be more vulnerable to re-trapping than the chickadee.

However, it will be noted that those chickadees which did repeat appeared to be recaptured more frequently than

the juncos which repeated. Since the individual birds had varying known periods of exposure to traps, it was necessary to convert this information by dividing the number of repeats by the known days of exposure. This is expressed in the table as "Average Recaptures Per Day of Exposure."

When this is accomplished we see that the values for the chickadee and junco are similar. There is no statistically significant difference between them ( $t=1.00$ ,  $P 30\%$ ). Thus the frequency of repeats among those juncos and chickadees which were recaptured appears to be much the same.

Another way in which we can compare re-trap vulnerability is to observe the number of days which elapse between the original capture and the first repeat. Presumably those individuals which had acquired some "trap-shyness" would take longer to repeat than those which had not.

This information is also given in the table, and here we find that the average time elapsed is very similar, only .3 day difference; again a statistically insignificant difference.

The conclusions then appear to be that although the junco population contained a distinctly larger proportion of individuals susceptible to re-trapping, the repeat pattern of individuals from both species which were recaptured was very similar.

The significance of such a situation in reference to various mark and release methods of population, such as the "Lincoln Index," is obvious. If one were attempting to estimate and compare local populations of juncos and chickadees, it is clear that a problem of bias would be faced. Unless corrections for such bias can be logically made, as attempted by Tanaka (1952b), or randomness in trapping can be demonstrated, the use of such indices in the study of native animal populations is of limited use.

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TABLE I

Trap Reaction Data on the Junco and the Chickadee

Species	Number Captured	Number Recaptured		Total Recaptures	No. Ave. Recaps.		
		No.	%		Per Day of Exposure	Ave. Days To First Recapture	%
JUNCO	54	33	61	82	2.9	.078	7.7
CHICKADEE	44	17	39	62	3.6	.122	7.4

*Wisconsin State College, LaCrosse, Wisconsin*

A RETRACTION

The author of "Pine Grosbeak Nesting in St. Louis County," *Flicker* 34:1 p.26. wishes to retract this article from the record, it being more a record of enthusiasm and imagination than factual observation—*Gary C. Kuyava, Duluth, Minnesota.*

# THE SPRING SEASON

by  
Ronald L. Huber

*Weather:* Unusual and extreme weather conditions, over the whole nation in general, brought about one of the most unusual spring migrations ever witnessed in Minnesota. Many observers afield in many parts of the state uncovered many uncommon Minnesota transients from the south, east and west.

March was cold and snow-laden with ne wrecord low temperatures and sustained below-zero periods.

April presented undulating temperatures, with alternate cold and warm periods. The first wave of early migrants in early April looked promising, but the nice weather did not hold out. A snow-storm in mid-April, with new record low temperatures for that period, temporarily halted migration. By the last third of April, warm weather and seventy-degree temperatures prevailed. The second wave of early migrants moved through slightly late and almost simultaneously with the first wave of late migrants. The latter were somewhat early because of the extremely warm weather (such thermosensitive creatures as the tiger beetles, Mourning Cloak, Tiger Swallowtail and Spring Agaristid butterflies were active by late April and early May) and strong southerly winds. These southerly winds brought with them many ornithological surprises, as the reader will soon discover. The second wave of later migrants also moved in early (the Black-billed Cuckoo and Connecticut Warbler, both very late migrants were in the Twin City area by mid-May).

## LOONS AND GREBES:

*Common Loon:* April 15 Winona, Winona Co., Mrs. J. M. Dahm; April 21 Duluth, St. Louis Co., Robert Ulvang; on all Minneapolis lakes by third week in April.

*Red-necked Grebe:* April 9 Duluth, Robert Ulvang; April 18 Minneapolis, Bob

Janssen; by May 12 this species was on all Minneapolis lakes.

*Eared Grebe:* April 28 Swan Lake, Nicolett Co., Bob Janssen; May 27 Salt Lake, Lac Qui Parle Co., Avifaunal Club.

*Western Grebe:* April 30, Winona, Hiawatha Valley Bird Club.

## PELICANS:

*White Pelican:* April 21 Rice Lake, Hennepin Co., Avifaunal Club; May 2 Co-kato, Wright Co., 400 seen by Mrs. Warren Christopher.

## HERONS, EGRETS, ETC.:

*Little Blue Heron:* One adult seen by Brother Theodore at Dunroven, Washington Co., April 23. Third record for state.

*Common Egret:* April 21 Weaver, Wabasha Co., Mrs. J. M. Dahm; April 21 Swan Lake, Nicollet Co., Avifaunal Club; May 12 Washington Co., A. C. Rosenwinkel; May 12 Lac Qui Parle Co., Avifaunal Club.

*Cattle Egret:* One in non-breeding plumage seen 3 miles east of Vasa, Goodhue Co., on May 13 by Vincent Heig.

*Yellow-crowned Night Heron:* May 14 Frontenac, Goodhue Co., Mr. and Mrs. Boyd Lien; May 15 La Crescent, Houston Co., W. R. Pieper and R. Huber.

*Least Bittern:* May 27, Swan Lake, Nicollet Co., Avifaunal Club.

*Glossy Ibis:* Two were seen at Frontenac, Goodhue Co., on May 13 by Jo Herz, Lester Badger and others. What may have been the same two birds were seen again on May 19 near Bellingham, Lac Qui Parle Co. by Jan Green and Mr. and Mrs. Jerome Pel-eaux. These are the second and third "post-Roberts" records for Minnesota.

## DUCKS, GEESE AND SWANS

*Whistling Swan:* April 1 Weaver, Wabasha Co., Mrs. J. M. Dahm saw about 1200; April 4 near Clara City, Chippewa Co., Mrs. Paul G. Kief say 12; April 4

Dakota Co., A.C. Rosenwinkel saw 40; April 7 Washington Co., Dean Honetschlager saw 20; April 10 Duluth, Janet Green; April 15 near Big Stone Lake, Lowry Elliott saw at least 520; April 23 near Mankato, Blue Earth Co., Mrs. Allan saw 65.

*White-fronted Goose*: April 15 Lowry Elliott saw 46 at Swartz's slough, South Dakota, a few miles from the Lac Qui Parle Co., Minnesota line.

*Blue and Snow Geese*: May 12 Salt Lake Lac Qui Parle Co., Avifaunal Club saw a small flock.

*Gadwall*: April 16 Winona, Hiawatha Valley Bird Club; April 21 Duluth, Janet C. Green; April 21 Nicollet Co., Avifaunal Club.

*Pintail*: April 7 Dakota Co., A. C. Rosenwinkel; April 7 Winona, Hiawatha Valley Bird Club; April 8 Hennepin Co., Frank Kelley; April 12 Duluth, Janet C. Green.

*Shoveler*: April 8 Hennepin Co., Frank Kelley; April 10 Winona Hiawatha Valley Bird Club; April 12 Duluth, Janet C. Green; April 28 Sibley Co., A. C. Rosenwinkel.

*Greater Scaup*: March 31 Duluth, John G. Hale; April 16 Winona, Hiawatha Valley Bird Club; April 21 Duluth, Jan Green reports 2500.

*Common Scoter*: Janet C. Green saw a pair at Duluth on May 16 at very close range. The birds were on the harbor side of Minnesota Point.

*White-winged Scoter*: Seen at Duluth between April 30 and May 31 by Janet C. Green. Largest groups were on May 12 and 24, when 25 birds of this species were present.

*Surf Scoter*: Two were seen on May 24 at Duluth by Janet C. Green. The two were again seen on May 26 by P.B. Hofslund.

#### **HAWKS, VULTURES AND EAGLES:**

*Turkey Vulture*: April 9 Duluth, John G. Hale; May 5 near Red Wing, Goodhue Co., and again near Hastings, Dakota Co., by Bob Janssen and Brother Theodore.

*Red-shouldered Hawk*: March 27 Washington Co., Dean Honetschlager; March 31 Hennepin Co., Bob Janssen; April 19 Hibbing, St. Louis Co. Harriet Micensky.

*Broad-winged Hawk*: March 28 Washington Co., Dean Honetschlager; April 6 Duluth, Robert Ulvang; April 23 Winona, Hiawatha Valley Bird Club.

*Swainson's Hawk*: April 12 Duluth, Janet C. Green; April 28 Blue Mounds State Park, Rock Co., Avifaunal Club; April 29 Claremont, Dodge Co., Bob Janssen; May 16 Cannon Falls, Goodhue Co., W. R. Pieper and R. Huber.

*Bald Eagle*: St. Louis Co.: March 28 adult Janet C. Green; April 1-7 adult and 3 immature Janet C. Green; April 25 adult Janet C. Green.

Hennepin Co.: March 27 adult R. Huber March 31 adult Bob Janssen; April 7 immature Bob Janssen.

Anoka Co.: May 19 adult A. C. Rosenwinkel

*Osprey*: April 21 Duluth, Nels Hervi; April 28 Lac Qui Parle Co., Avifaunal Club; May 1 Winona, Hiawatha Valley Bird Club; May 4 Duluth, Janet C. Green.

*Peregrine Falcon*: April 7 Minneapolis, Bob Janssen; April 28 Lake Benton, Lincoln Co., Avifaunal Club; April 29 Heron Lake, Jackson Co., Avifaunal Club; May 24 Duluth, Janet C. Green.

*Pigeon Hawk*: April 9 Duluth, Anne K. Arndt; May 5 Goodhue Co., Avifaunal Club.

*Greater Prairie Chicken*: May 30 booming just south of Waubun, but in Becker Co., also many were flushed from a field between Felton and Ulen, Clay Co., on the same day, Avifaunal Club.

*Gray Partridge*: April 28 Leota, Nobles Co., Avifaunal Club; May 12 near Hutchinson, McCleod Co. and near Watson, Chippewa Co., Avifaunal Club.

#### **RAILS:**

*Virginia Rail*: May 24 Winona, Hiawatha Valley Bird Club; May 20 Hennepin Co., R. Huber and R. Glassel; May 27 Swan Lake, Nicollet Co., one heard, Avifaunal Club; May 30 one flushed in Becker Co., Avifaunal Club.

*Yellow Rail*: One captured and banded on May 30 in Becker Co., just south of Waubun, Mahnomon Co. Six others heard ticking in sedge meadow. Avifaunal Club.

## GREAT BLUE HERON

This fellow doesn't have a Diners Club credit card, but he is served his own fishy menu on whatever slough or stream he decides to patronize. The lake in this case happened to be Frog Lake, in Western Minnesota, where this spooky Great Blue Heron eats bullheads all summer long. His rapier thrusts, with his razor sharp bill are so accurate he seldom goes hungry. Ernest Strubbe, Alberta, Minnesota has observed many Blue Herons on Frog Lake and he states that "on many occasions the heron beats the fish on the ground until it is tenderized to suit his pallet." Ken Haag, St. Paul, Minnesota.





JUNE, 1962

## SHOREBIRDS:

*Piping Plover*: April 28 Gaylord, Sibley Co., Bob Janssen; May 6 Duluth, first arrival there, seen by Janet C. Green; last seen at Duluth on May 27, Janet C. Green.

*American Golden Plover*: April 28 Lake Benton, Lincoln Co., Avifaunal Club; April 28 Sibley Co., A. C. Rosenwinkel; April 29 Windom, Cottonwood Co., Avifaunal Club; May 5 Dodge Co., Avifaunal Club; May 11 Duluth, Janet C. Green; May 12 and 27, Lac Qui Parle Co., Avifaunal Club.

*Black-bellied Plover*: May 24 Duluth, Janet C. Green; May 30 Duluth, P. B. Hofslund saw about 20.

*Ruddy Turnstone*: May 12 and 27, Salt Lake, Lac Qui Parle Co., Avifaunal Club; May 24 Duluth, Janet C. Green; May 31 Duluth, P. B. Hofslund saw about 75.

*American Woodcock*: March 31 Bass Ponds, Hennepin Co., Bob Janssen and Ray Gassel flushed one out of the snow; April 4 Duluth, John G. Hale.

*Upland Plover*: April 28 Sibley Co., A. C. Rosenwinkel; April 28 Madison, Lac Qui Parle Co., Avifaunal Club; April 29 Jackson Co., Avifaunal Club; May 30 Becker, Mahnomen and Clay Counties, common, breeding, Avifaunal Club. *Whimbrel*: Janet C. Green saw three on Minnesota Point, Duluth on May 24. Last seen there on May 31.

*Willet*: April 28 Salt Lake, Avifaunal Club; seen there again by same group on May 12 and 27, displaying some sort of courtship flight; most unusual record was at **Duluth** on April 30, seen by Janet C. Green.

*Knot*: May 24 Duluth, Minnesota Point, Janet C. Green.

*White-rumped Sandpiper*: May 12 (many) and 27 (few), Salt Lake, Lac Qui Parle Co., Avifaunal Club; May 26 two at Duluth, R. Huber and R. Gassel; May 31 Duluth, two, Janet C. Green.

*Dunlin*: May 24 Duluth, P. B. Hofslund saw about 100; May 12 and 27, Salt Lake, Lac Qui Parle Co., spring and fall plumages, Avifaunal Club.

*Short-billed Dowitcher*: May 16 Frontenac, Goodhue Co., R. Huber and W. R. Pieper saw and heard one, spring plumage, call note *tu-tu* instead of the

usual three syllables.

*Long-billed Dowitcher*: April 28 Salt Lake, Lac Qui Parle Co., six in spring plumage, call note was *keek*, Avifaunal Club

*Dowitcher, species undetermined*: April 29 near Windom, Cottonwood Co., no call-notes heard, Avifaunal Club; May 11 Duluth, Janet C. Green.

*Marbled Godwit*: April 29, near Windom, on Jackson/Cottonwood Co. line, Avifaunal Club; May 12 Salt Lake, Avifaunal Club; May 30 Becker, Clay and Mahnomen Counties, common, breeding, Avifaunal Club.

*Hudsonian Godwit*: April 28, Salt Lake, 3 gray, 1 red, Avifaunal Club; May 12 Salt Lake, 4 gray, Avifaunal Club; May 15 Duluth, Janet C. Green; May 24 Duluth, P. B. Hofslund.

*American Avocet*: April 28 Salt Lake, about 20, Avifaunal Club; April 28 near **Gaylord, Sibley Co.**, Bob Janssen; May 12 Salt Lake, behaved as if nesting, Avifaunal Club; May 19 Salt Lake, probably nesting, various M.O.U. members; May 19 **Frontenac, Goodhue Co.**, Avifaunal Club..

## JAEGERS, GULLS AND TERNS:

*Long-tailed Jaeger*: Richard Oehlenschlager saw one, an adult, flying down the Crow Wing River, 4 miles east of Nimrod, Wadena Co., on April 21. He observed very little white in the primaries, no twist in the central retrices (which were about six inches long) and a marked contrast between the back and the black crown patch.

*Glaucous Gull*: Last seen at Duluth on April 17, Janet C. Green.

*Franklin's Gull*: Many seen throughout the southern and western parts of the state during spring. Most unusual record was on April 30 at **Duluth**, seen by Janet C. Green. (First record for Duluth?)

*Great Black-backed Gull*: One adult seen in a flock of sitting adult and immature Herring Gulls on April 30 at Duluth by Janet C. Green.

## OWLS:

*Barn Owl*: On April 28, Glen Keller captured one in his barn, about 2 miles northeast of Mantorville, Dodge Co. On April 29 Bob Janssen released the bird.

*Screech Owl*: May 5, Claremont, Dodge Co., on nest with eggs, Avifaunal Club.  
*Snowy Owl*: Janet C. Green saw them at Duluth as late as April 1.  
*Long-eared Owl*: March 28 Washington Co., Dean Honetschlager; April 14 Dakota Co., Bob Janssen; May 15 Duluth, found dead, Janet C. Green; May 16 La Crescent, Houston Co., W. R. Pieper and R. Huber.  
*Short-eared Owl*: April 16 Duluth, John G. Hale; April 28 Madison, Lac Qui Parle Co., Avifaunal Club.  
*Saw-whet Owl*: April 13 Cloquet Forest Research Station, Gordon Gullion.

#### GOATSUCKERS THROUGH WOODPECKERS:

*Whip-poor-will*: May 12 Winona, Hiawatha Valley Bird Club; May 23 Washington Co., Dean Honetschlager.  
*Ruby-throated Hummingbird*: May 14 Washington Co., Dean Honetschlager; May 16 Duluth, Janet C. Green; May 23 Winona, Hiawatha Valley Bird Club.  
*Yellow-shafted Flicker*: March 20 Winona, Hiawatha Valley Bird Club; March 28 Washington Co., Dean Honetschlager; April 7 Hennepin Co., Frank Kelley; April 10 Two Harbors, Lake Co., Dr. Church; May 1 Duluth, P. B. Hofslund saw about 50.  
*Yellow-bellied Sapsucker*: March 23 Minnetonka Mills, Hennepin Co., R. Ruber; April 9 Duluth, Robert Ulvang; April 3 Ramsey Co., A. C. Rosenwinkel; April 10 Washington Co., Dean Honetschlager.

#### FLYCATCHERS:

*Western Kingbird*: May 12 Chippewa Co., Avifaunal Club; May 24 Duluth, P. B. Hofslund and Janet C. Green; June 2 Encampment Forest, Lake Co., John Pratt.  
*Yellow-bellied Flycatcher*: May 16 Minneapolis, W. R. Pieper and Mr. and Mrs. E. D. Swedenborg; May 18 Ramsey Co., A. C. Rosenwinkel; May 27 Rock Co., Avifaunal Club.  
*Eastern Wood Pewee*: May 14 Duluth, Janet C. Green; May 17 Washington Co., Dean Honetschlager; May 19 Ramsey Co., A. C. Rosenwinkel; May 19 Winona, Hiawatha Valley Bird Club;  
*Olive-sided Flycatcher*: May 15 Minneapolis, W. R. Pieper and R. Huber; May

25 Ramsey Co., A. C. Rosenwinkel; May 27 Rock Co., Avifaunal Club.

#### SWALLOWS THROUGH WRENS:

*Cliff Swallow*: May 5 Mantorville, Dodge Co., Avifaunal Club; May 7 Duluth, Janet C. Green; May 11 Winona, Hiawatha Valley Bird Club.  
*Purple Martin*: April 11 Ramsey Co., A. C. Rosenwinkel; April 15 Winona, Hiawatha Valley Bird Club; April 24 Duluth, Janet C. Green.  
*Common Raven*: April 24 Duluth, P. B. Hofslund; April 26 O'Brien State Park, along St. Croix River, Washington Co., Ward D. Tanner, Jr.  
*House Wren*: April 28 Sibley Co., A. C. Rosenwinkel; April 29 Heron Lake, Jackson Co., Avifaunal Club; May 2 Winona, Hiawatha Valley Bird Club; May 14 Duluth; Janet C. Green.  
*Winter Wren*: March 31 Hennepin Co., Bob Janssen; April 2 Washington Co., Dean Honetschlager; April 17 Ramsey Co., A. C. Rosenwinkel; April 19 Cloquet Forest Research Station, Gordon Gullion; May 26 Duluth, P. B. Hofslund.  
*Long-billed Marsh Wren*: May 12 Salt Lake, Lac Qui Parle Co., Avifaunal Club; May 27 Duluth, Janet C. Green; May 27 Swan Lake, Nicollet Co., Avifaunal Club.  
*Short-billed Marsh Wren*: May 15 Duluth, Janet C. Green; May 27 Lincoln Co., Avifaunal Club; May 30 Becker, Mahnomen and Clay Counties, Avifaunal Club.

#### MIMIC THRUSHES THROUGH SHRIKES:

*Mockingbird*: May 3 and 5 St. Paul, Ramsey Co., Vincent Heig, bird remained in area for about a week; May 19 east of Rosemount, Dakota Co., Avifaunal Club.  
*Wood Thrush*: May 11 Winona, Hiawatha Valley Bird Club; May 11 Washington Co., Dean Honetschlager; May 12 Goodhue Co., A. C. Rosenwinkel; May 15 and 29 Duluth, P. B. Hofslund.  
*Hermit Thrush*: April 12 Ramsey Co., A. C. Rosenwinkel; April 20 Cloquet Forest Research Station, Gordon Gullion; May 15 Duluth, Janet C. Green.  
*Veery*: May 8 Ramsey Co., A. C. Rosenwinkel; May 11 Duluth, Janet C. Green.  
*Eastern Bluebird*: March 27, Washington Co., Dean Honetschlager; March 30

Winona, Hiawatha Valley Bird Club; April 12 Washington Co., Mrs. Allan; April 17 Cloquet Forest Research Station, Gordon Gullion; April 25 Hibbing, Harriet Micensky.

*Blue-gray Gnatcatcher*: May 16 Vasa, Goodhue Co., pair buiding nest out of cobwebs, W. R. Pieper and R. Huber; May 20 Washington Co., Dean Honetschlager.

*Water Pipit*: April 28 near Jasper, Rock Co., Avifaunal Club; May 12 Salt Lake, Lac Qui Parle Co., Avifaunal Club.

*Sprague's Pipit*: May 30 between Felton and Ulen, Clay Co., two singing males, Avifaunal Club.

*Bohemian Waxwing*: Mrs. Paul G. Kief of Montevideo, Lac Qui Parle Co., reports an invasion there all winter up until the last week of March; March 20 Hibbing, Harriet Micensky; April 17 Ramsey Co., A. C. Rosenwinkel; April Duluth, P. B. Hofslund.

*Cedar Waxwing*: April 17 Two Harbors, Lake Co., Dr. Church; May 11 Duluth, Janet C. Green; May 25 Minneapolis, Bob Janssen.

*Northern Shrike*: Last report April 18 Hibbing, Harriet Micensky.

*Loggerhead Shrike*: April 14 Shakopee, Scott Co., Bob Janssen; April 28 Ivanhoe, Lincoln Co., Avifaunal Club; May 30 south of Felton, Clay Co., five nestlings banded, R. Huber.

#### VIREOS AND WARBLERS:

*Bell's Vireo*: May 16 several seen and heard at Reno, Houston Co., and one seen at Vasa, Goodhue Co., W. R. Pieper and R. Huber.

*Yellow-throated Vireo*: May 12 Goodhue Co., A. C. Rosenwinkel; May 15 Washington Co., Dean Honetschlager; May 17 Minneapolis, Bob Janssen.

*Solitary Vireo*: May 3 Duluth, P. B. Hofslund; May 5 Mantorville, Dodge Co., Avifaunal Club; May 12 Goodhue Co., A. C. Rosenwinkel.

*Philadelphia Vireo*: May 12 Goodhue Co., A. C. Rosenwinkel; May 13 Hennepin Co., Bob Janssen; May 13 St. Paul, R. Grant; May 15 Duluth, P. B. Hofslund; May 16 May Winona, Hiawatha Valley Bird Club.

*Prothonotary Warbler*: May 11 Winona, Hiawatha Valley Bird Club; May 16 Reno, Houston Co., W. R. Pieper and R. Huber.

*Worm-eating Warbler*: On April 27 Dr. W. J. Breckenridge saw one in his yard in Brooklyn Park, Hennepin Co. Several observers saw it between then and April 30 when he collected the specimen. This is the first specimen for Minnesota; and there are only 3 or 4 other reliable records of its occurrence here. *Golden-winged Warbler*: May 12 Goodhue Co., A. C. Rosenwinkel; May 13 Hennepin Co., W. R. Pieper and R. Huber; May 20 Washington Co., Dean Honetschlager.

*Blue-winged Warbler*: May 5 Vasa, Goodhue Co, Bob Janssen; May 12 Frontenac, Goodhue Co., A. C. Rosenwinkel.

*Parula Warbler*: May 12 Goodhue Co., A. C. Rosenwinkel; May 13 Minneapolis, W. R. Pieper and R. Huber; May 15 Duluth, P. B. Hofslund.

*Cape-May Warbler*: May 10 Duluth, P. B. Hofslund; May 12 Washington Co., Dean Honetschlager.

*Black-throated Blue Warbler*: May 22 Duluth, P. B. Hofslund.

*Black-throated Green Warbler*: May 5 Frontenac, Goodhue Co., Bob Janssen; May 12 Goodhue Co., A. C. Rosenwinkel; May 13 Minneapolis, W. R. Pieper; May 14 Duluth, John Green.

*Cerulean Warbler*: May 4 Hennepin Co., Bob Janssen; May 16 Vasa, Goodhue Co., several seen and heard, W. R. Pieper and R. Huber.

*Blackburnian Warbler*: May 11 Duluth, Janet C. Green; May 12 Goodhue Co., A. C. Rosenwinkel; May 13 Minneapolis, W. R. Pieper.

*Pine Warbler*: May 16 Duluth, Janet C. Green; May 18 Ramsey Co., A. C. Rosenwinkel; May 26 Graham Lake, Carlton Co., Ray Glassel and A. Huber.

*Louisiana Waterthrush*: May 1 Ramsey Co., and May 12 Goodhue Co., A. C. Rosenwinkel; May 1 and 15 Minneapolis, R. Huber.

*Connecticut Warbler*: May 15 Minneapolis, R. Huber and W. R. Pieper; May 24 Minneapolis, W. R. Pieper saw three, May 25 Ramsey Co., A. C. Rosenwinkel; May 30 Duluth, Janet C. Green; May 27 first arrival at Hibbing, Harriet Micensky; she reports that they are very active as of June 6.

*Hooded Warbler*: June 2, Lake Jane, Washington Co., Jane Olyphant mist-

netted and banded an adult male; second record for Minnesota.

*Canada Warbler*: May 15 Minneapolis, W. R. Pieper; May 22 Duluth, P. B. Hofslund; May 24 Ramsey Co., A. C. Roisenwinkel.

#### **BLACKBIRDS, ORIOLES AND TANAGER:**

*Bobolink*: May 5 Washington Co., Dean Honetschlager; May 5 Claremont, Dodge Co., Avifaunal Club; May 30 very common in Becker, Mahnomen and Clay Counties, Avifaunal Club.

*Orchard Oriole*: May 16 Reno, Houston Co., R. Huber; May 19 Wacouta, Goodhue Co., Avifaunal Club.

*Scarlet Tanager*: May 12 Ramsey Co., A. C. Rosenwinkel; May 13 Minneapolis, W. R. Pieper; May 14 Duluth, John Green; May 15 Washington Co., Dean Honetschlager; May 18 Goodhue Co., A. C. Rosenwinkel

#### **SPARROWS AND FINCHES:**

*Dickcissel*: May 20 Eden Prairie, Hennepin Co., Bob Janssen; May 26 East Union, Carver Co., Bob Janssen; May 27 numerous throughout southwestern Minnesota, Avifaunal Club.

*Evening Grosbeak*; Mrs. Paul G. Kief reports several in Montevideo, Chipewa Co., from February 17 until April 2. Mrs. Lee E. Payne of Willmar, Kandiyohi Co., reports that a flock spent all of March at her feeder. Mrs. Allan had them at her feeder in Ramsey Co., until May 12. Ray Naddy saw them at Duluth as late as May 31.

*Purple Finch*: Scattered sparsely over eastern Minnesota during most of winter and spring. Jane Olyphant of Lake Jane, Washington Co., reports a large concentration of them from the last week of March until the first week of May. During the first three weeks of that period, she trapped and banded over 1000 of them.

*Red Crossbill*: April 5 thru 20, Encampment Forest, Lake Co., Myrtle E. Penner.

*Lark Bunting*: May 12, one adult male was seen and heard singing on a telephone wire 3 miles west of Dawson, Lac Qui Parle Co., Avifaunal Club.

*Grasshopper Sparrow*: April 28 Lac Qui Parle Co., Avifaunal Club; May 30 Becker, Mahnomen and Clay Counties,

Avifaunal Club.

*Leonte's Sparrow*: April 24 Hennepin Co., Bob Janssen; May 12 T. S. Roberts' Sanctuary, Minneapolis, E. D. Swedenborg; May 12 Salt Lake, Lac Qui Parle Co., Avifaunal Club; May 15 Duluth, Janet C. Green; May 30 Becker, Mahnomen Counties, Avifaunal Club.

*Henslow's Sparrow*: May 16 Winona, several seen and heard in alfalfa fields. One "singing" male approached to within 15 feet. W. R. Pieper and R. Huber. *Sharp-tailed Sparrow*: Several seen and heard by Avifaunal Club on May 30 in Becker and Mahnomen Counties

*Vesper Sparrow*: Arrived about as usual. One very early arrival seen on March 31 in Sibley Co., Bob Janssen.

*Lark Sparrow*: May 16 Winona, Hiawatha Valley Bird Club; May 20 Barden Sand Dunes, Scott Co., Bob Janssen.

*Clay-colored Sparrow*: April 24 Hennepin Co., Bob Janssen; May 8 Washington Co., Dean Honetschlager; May 12 Lac Qui Parle Co., Avifaunal Club; May 12 Goodhue Co., A. C. Rosenwinkel; May 14 Duluth, Janet C. Green.

*Field Sparrow*: April 17 Winona, Hiawatha Valley Bird Club; April 21 Rice Lake, Hennepin Co., Bob Janssen; May 14 Washington Co., Dean Honetschlager.

*Harris' Sparrow*: April 28 Lac Qui Parle Co., Avifaunal Club; May 5 Frontenac, Goodhue Co., Bob Janssen; May 7 Duluth, Janet C. Green; May 13 Washington Co., Dean Honetschlager.

*White-crowned Sparrow*: April 23 Washington Co., Dean Honetschlager; April 27 Hennepin Co., Bob Janssen; April 28 Beaver Creek, Rock Co., Avifaunal Club; May 5 Duluth, P. B. Hofslund; May 12 Goodhue Co., A. C. Rosenwinkel.

*Lincoln's Sparrow*: April 27 Hennepin Co, Bob Janssen; April 28 near Madison, Lac Qui Parle Co., Avifaunal Club; May 11 Ramsey Co., one seen and heard singing, W. R. Pieper; May 12 Duluth, P. B. Hofslund; May 12 Goodhue Co., A. C. Rosenwinkel.

*Lapland Longspur*: April 28 near Tyler, Lincoln Co., one female or winter plumage male seen by Avifaunal Club; May 15 Duluth, Janet C. Green found one dead. Where are the longspurs this

year?

*Chestnut-collared Longspur*: At least two singing males were seen between Felton and Ulen, Clay Co., on May 30 by Avifaunal Club.

*Snow Bunting*: Last report May 10 Duluth, P. B. Hofslund.

**SUMMARY**: The unusual weather conditions influenced spring migration in several ways:

- a) early or later arrival dates than usual, but not necessarily to a significant degree.

- b) a number of unusual species only rarely encountered in our state showed up, and,

- c) some regular species turned up in unusual places; Duluth was particularly affected in this respect.

Approximately 275 species were seen during the period covered by this report (March 1 to June 2); 128 species are treated here. We had some response from observers in the western part of the state, but more would be welcome. 3121 Georgia Ave. So., Minneapolis 26, Minnesota.

## THE CANADIAN LAKEHEAD

by A. E. Allin

The winter of 1961-62 at the Canadian Lakehead was severe with generally sub-normal temperatures. The snowfall however was much below average. The temperature for December of 21.5° was only 0.8° below normal but it was 6° below average for both January and February when the mean temperatures were 0.9° and 3.4° respectively. Some relief from the severe cold was experienced in March when the mean temperature exceeded the average of 20.5° by 3.9°. Only during February was precipitation greater than normal. The 26.9 inch snowfall more than doubled the average of 12.8" for that month. To the end of March we had received a total of 58.3" of snow compared with a long-term average of 80".

As a consequence of the severe winter, Lake Superior was nearly, if not completely, frozen over by the third week in February. This is a very unusual occurrence which must have markedly effected the wintering ducks which are chiefly Common Goldeneyes and Old-squaws. The former became unusually common on all open stretches of the local rivers. On March 18, we counted 45 on a small spring pond of the Dorion Fish Hatchery. Sufficient food was evidently available to adequately support this unexpected population. Old-squaws seem to shun

these fast waters. Probably they moved further from shore as open water became reduced but despite their ability to dive to great depths their food supply may have become limited before they were finally forced to leave Lake Superior. Many single Old-squaws were reported alighting on bare stretches of the highways which they may have mistaken for open leads of water. We have noted the same phenomenon during two previous winters when ice on Lake Superior was abnormally extensive.

Although the snowfall was much below average, it was sufficient to cover the weeds so that seeds were not available for wintering seed-eaters. This, combined with a poor crop of cones on the conifers, and a near-failure crop of fruit on the Mountain Ash, had its effect on our usual winter residents. Common Redpolls and Pine Siskins were very scarce and neither species of crossbill was reported. Particularly, Pine Grosbeaks were fairly common and many wintering flocks of Bohemian Waxwings were reported.

Secondary foods may have been important, but we suspect the Pine Grosbeaks and Bohemian Waxwings were mainly dependent on the abundant fruit of the flowering apple trees. An excellent seed crop on the Manitoba Maples attracted and held great num-

bers of Evening Grosbeaks but these nomads were probably dependent on the sunflower seeds at the feeding stations in the late winter.

Other winter visitors were generally scarce. Northern Shrikes were uncommon; individuals were seen on November 1, December 23, February 3, April 22, and on a few other occasions for which dates were not given. Hawk-Owls were reported in November and again in late December east of the Lakehead to Marathon but none was reported locally. There was a heavy flight in Eastern Ontario at least as far south as Lake Ontario. There was a heavy flight however of Snowy Owls. The first was reported on November 5. During the winter it was frequently possible to see at least three in a day in Fort William. Their chief prey appeared to be feral Rock Doves.

Resident species generally were present in their usual numbers. I felt Gray Jays were scarce; late in the fall there were reports of major movements of these birds to the west of the Lakehead. Common Ravens were present in their usual numbers. Mrs. Knowles reported 52 flying steadily in one direction on the late afternoon of January 21. They were probably proceeding to a roost. On March 11, groups of 6 and 7 Common Ravens were seen soaring lazily over the grain elevators apparently riding the up-drafts as they do along the cliffs. Shortly afterwards they diminished in numbers as they returned to their breeding grounds and as Common Crows and Herring Gulls returned, to replace them as scavengers on our streets, lanes, and highways.

Red-breasted Nuthatches were again very scarce. Mrs. Peruniak reported a White-breasted Nuthatch throughout the winter at Atikokan. S. Robb saw one near Fort William in January. We saw one on April 22 in Chippewa Park. Boreal Chickadees were scarce but Black-capped Chickadees were unusually common.

Few winter visitors were reported. We saw a Glaucous Gull in Port Arthur on December 26. Mrs. Laura Howe reported a Black-billed Magpie at Dry-

den in December. This undesirable species is evidently extending its range into extreme Western Ontario.

Numbers of species which we ordinarily consider as summer residents were reported during the winter months. A mixed flock of Mallards and Black Ducks wintered at the Dorin Fish Hatchery competing with the Common Goldeneyes for the food available in the spring-fed ponds. Mrs. Peruniak reported a Black Duck at Atikokan in mid-winter. A Common Snipe was seen at the Atikokan dam for the third consecutive winter. The Pigeon Hawk is evidently an occasional winter resident. These little falcons were reported on November 8 and 9, January 21 and 26, and on February 14 at Fort William. Mourning Doves were seen on November 19, and T. Perrons saw two feeding along railroad tracks on January 20, near Fort William.

Marion Smith reported a Brewer's Blackbird at her feeding station in December. It survived the severe winter and was still present in mid-April. A year ago, Redwinged Blackbirds spent the winter along the Kaministiquia River. On March 11, we saw four in the same area feeding with Pine Grosbeaks! In view of the date and since two were females we felt these birds had wintered here. Few Robins wintered in the area. One was seen on our Christmas Census and M. Smith saw 12 in Fort William on January 17.

A year ago, Purple Finches wintered locally in numbers. This year two were seen in Fort William on January 12 and two on February 4 in Port Arthur. In the previous *Flücker* we recorded the presence of a White-crowned Sparrow at Nipigon on November 8. There was an unconfirmed report of a Harris' Sparrow at Stanley in December. Mrs. Atkinson reported a Fox Sparrow spent the winter at Dorion. She also saw a few Slate-colored Juncos there throughout the winter. Ki Zeroski reported a large flock of these birds at Geraldton on December 24 and 25.

The immigration of the first summer residents overlapped the emigration of our winter residents. The last Pine

Grosbeaks were reported at Kakabeka Falls on April 1 where we saw them feeding, probably on the buds of a tamarack, and on April 2 in Fort William, feeding on small apples. Snowy Owls were reported on April 1, 5, and 7 but none were seen subsequently. Common Ravens had generally moved from the Lakehead to their breeding grounds by the end of March. The Allins saw a very late Northern Shrike at Chippewa Park on April 22.

It is always difficult to recognize the first migrants from those birds which winter here in small numbers. Likely Snow Buntings and Common Redpolls are the first species to move northward. This year both species were very scarce. A few small flocks of both species were seen in March. The frequently abundant flocks of Common Redpolls usually seen in late March were completely lacking in 1962. There is no doubt however that Common Crows moved into the area on March 22, followed by Common Herring Gulls 3 days later.

For the next four weeks, migration was greatly delayed at the Lakehead although more migrants were reported in Manitoba in "Chickadee Notes" than were recorded for the corresponding weeks of 1961. Some untoward weather conditions effected the northward flight along Lake Superior which did not effect the movement up the Great Plains. Sparrow Hawks seen on March 31 and April 1 by the Allins were a week earlier than this species had previously been recorded. K. Denis reported a Marsh Hawk on April 2. Slate-colored Juncos were seen on April 4 by Mrs. Knowles. Among these common migrants she identified an Oregon Junco. An early Killdeer and Robins were seen on April 5. Common Mergansers, Ring-billed Gulls, Black Ducks, Pigeon Hawks, Mallards, Western Meadowlarks had appeared in that order by April 18. The following day Pintails moved in, and we were fortunate to see a pair of Canvasbacks, a species rarely seen locally.

On April 20, we drove to Lutzen. Thunder Bay was still frozen except

for small patches of open water at the mouths of the rivers. Hills were covered with snow and the forest floors were still white until we had left the Reserve country of Northeastern Minnesota. Then fields became bare and the streams were in mild flood condition. No ice could be seen on Lake Superior although great ice fields still persisted at the eastern end of the Lake. Yet, on the 100 mile drive, we saw few migrants. A pair of Wood Ducks south of Fort William was unexpected. A few Robins, Common Crows, and Sparrow Hawks, and a single Slate-colored Junco were the only roadside birds. Few ducks were seen on the lake but we identified a few Common Goldeneyes and Old-squaws. A pair of Hooded Mergansers fed at the mouth of the Cascade River. Two pair of these beautiful ducks, a pair of Black Ducks, and a pair of Mallards occupied a small slough north of Grand Marais. As we approached Grand Marais in Cook County, Dorothy pointed out two Sandhill Cranes. These were an unexpected observation although Mrs. Knowles had seen one the previous day in Paimpooze Township where a small group lingered in late April, 1961.

There had been no evidence of a major migration movement as we drove south but a change was evident as we returned in the late afternoon. At Mineral Center we saw a small flock of Rusty Blackbirds. Across the border in Ontario, more flocks of blackbirds were seen and among them we identified Common Grackles, Redwinged Blackbirds and Brown-headed Cowbirds. The next day was dull and by noon we had the first heavy rainfall of the season. But those participating in a field trip of the Thunder Bay Field Naturalists Club were rewarded by seeing 41 species of birds—as many as we had recorded previously in 1962. There were major movements of both species of kinglets, of Tree Sparrows, and Slate-colored Juncos. Twelve species of ducks were identified including Wood Ducks and Common Scoters. Migration had finally begun in earnest.—*Regional Laboratory, Ontario Department of Health, Fort William, Ontario.*

# INTERRUPTED MIGRATION

by Jerome Schotzko

The florescent lights of main street reflected off the low cloud formations and cast an erie glow over the town. The "peep", "peep" of many small, excited birds aroused my curiosity and I turned down main street under the lights. Hundreds of small birds, flying about excitedly and crashing into the store windows, made the whole street come alive.

The town was Paynesville, Minnesota, at 3:00 A.M. on the morning of September 12, 1961. The weather had been unusual for several days. It was fairly warm for the time of year, but a low ceiling of gray clouds hung just above the rooftops and a very strong wind blew out of the south. However, there had been little or no precipitation for several days.

On checking the birds more closely, I found that they were so exhausted and excited that they were easily captured. Under nearly every store awning there were 50 to 75 birds fluttering about. Many were lying dead or unconscious on the sidewalk, apparently from collisions with the plate glass windows. A street cleaner was sweeping the sidewalks, and his wheelbarrow contained over 200 dead and unconscious birds. From this collection I later identified all of the birds as Warblers and made positive identification of the following species: Ovenbird, Yellowthroat, Nashville, Connecticut, Yellow, Magnolia, Bay-breasted, Mourning, Myrtle, Palm and Canada Warblers. Many more of the birds were immatures which I was not able to identify or were species with which I was not familiar.

Most of the birds which were flying about were quite weak but also very excited. They were constantly making

sounds while flying and did not rest for more than a few seconds at a time. Small flocks of 40 to 50 were moving up and down the street, stopping under a store awning every few seconds, only to fly on again. They were not frightened by my presence and the flocks flew so close at times that I could have hit them with my arms. Even the birds which were fluttering beneath the awnings did not appear more excited when I tried to capture them, but just continued in their confused state. The birds did not seem hungry — at least they were not searching for food, but were merely confused and bewildered. In all, I estimated that there were over 4,000 birds in an area less than three blocks long.

The following morning the only evidence of the Warbler invasion was an occasional dead bird on the sidewalk. All of the birds had completely disappeared from the area sometime before sunrise.

Redwood Falls, Minnesota, about 70 miles southwest of Paynesville, reported a similar occurrence, also on the morning of September 12.

What was the cause of this interruption in migration? Was it the low ceiling and the strong south wind that forced the warblers down or was it the flow of the florescent lights that drew them to the town?

During this same weather period, kills of small birds from collisions with radio towers increased greatly. This is evidence that the weather may have been a major factor in bringing about this variation of bird migration.—*Sleepy Eye, Minnesota.*

## NOTES OF INTEREST

CAPE MAY WARBLER AT ST. CLOUD—An unusual visitor, later identified as a Cap May Warbler, was noted on our feeding tray at St. Cloud by Betty Partch on November 28, 1961. The bird returned to feed on suet on the 29th, and was caught alive in a small Have-A-Heart trap on the 30th at 1:45 p.m. It was banded and placed in a dry aquarium (to prevent damage from hitting against wire) where it proceeded to hop around vigorously and eat suet and small live nematode worms ordinarily used to feed tropical fish.

The bird was displayed at the M.O.U. meeting at the Museum of Natural History on December 2, where the identification was verified.

The following day, December 3, was foggy at St. Cloud when the warbler was released. The bird continued to stay in our yard, sometimes on the feeding tray, sometimes on the ground or in the trees or even searching in the dry leaves under a children's playhouse.

The warbler was last seen in the yard on December 4, the day a cold front passed.

The following temperatures at the St. Cloud airport are an indication of the weather existing at the time:

Date	Maximum	Minimum
November 28,	37	23
29	33	26
30	37	25
December 1,	36	27
2	36	31
3	44	35
4	42	17
5	36	14

*Max Partch, State College, St. Cloud, Minnesota.*

\* \* \*

ANOTHER ANCIENT MURRELET FOUND IN MINNESOTA—On January 18, 1962, Warden William Morris and Warden Supervisor William Juberian submitted a bird to me for identification. After checking several bird books, I determined that the bird was an Ancient Murrelet. The wardens had obtained the frozen carcass of the bird from Mr. Al J. Krueger, Sheriff of Crow Wing County. Mr. Krueger had found the bird alive while he was fishing on November 14, 1961 on the south end of Pelican Lake in Crow Wing County. The exact location is Government Lot. No. 2, Section 36, Township 136, Range 28. When Mr. Krueger first saw the bird it was swimming around in small circles. Picking it up, he saw that it had a small speck of blood inside the wing; he thought perhaps that a duck hunter had shot it.

Dr. Dwain Warner, who verified my identification of the bird as an Ancient Murrelet, reported later that it was a male in good plumage, but very thin and contained no observable fat deposits. It weighed 148.4 grams. No sign of injury could be found when the bird was skinned, nor were any lead shots seen. The intestinal tract and associated organs had deteriorated, and it was not possible to check them for parasites or disease.

The first report of an Ancient Murrelet in Minnesota is given by Dr. T. S. Roberts in "The Birds of Minnesota." This first specimen was taken at Hook Lake, McLeod County, on November 5, 1905 by W. B. Hopper of Hutchinson. A

second bird of this species was reported by Mary Lupient in the "Seasonal Report" of the December, 1950 issue of *The Flicker*. This specimen was caught in a bullhead net at Cutfoot-Sioux Lake on November 22, 1950. It was sent in by Mr. Larry Dibble and is in the Museum collection.

It would be interesting to know if all three of these specimens of the Ancient Murrelet reached Minnesota from the Pacific Northwest. Perhaps a check of the bird records of various states and provinces between Minnesota and the Pacific Northwest might show that an erratic movement of Ancient Murrelets took place during November, 1905, November, 1950 and November, 1961.—*Arnold B. Erickson, Minnesota Division of Game and Fish, St. Paul, Minnesota.*

\* \* \*

**HARLEQUIN DUCK SEEN AT DULUTH**—Seeing a Harlequin Duck at Duluth has been considered by local bird-watchers a wild dream but this possibility is frequently mentioned probably because the duck is so handsome and seeing it would indeed be a thrill. On December 30, 1961, while checking Lake Superior for ducks during the Audubon Christmas Count, my husband and I were rewarded with just that thrill. We first spotted it by the entrance to the ship canal under the Aerial Bridge and saw it again an hour and a half later two miles away to the north along the shore of Lake Superior. During the next few days it was seen in either one of these two locations by the following experienced observers: Ron Huber, Robert Cohen, Ray and Rosalie Naddy, W. R. Pieper, Harding Huber, P. B. Hofslund, Gary Kuyava and Ole Finseth. The bird was close to shore, usually in the company of some Common Goldeneyes, and it was possible for all these people to get a good view of it; a few people took pictures but with the exception of some that my husband, John C. Green, took (definitely identifiable as a Harlequin Duck but not very good pictures) none have been developed as yet. The bird was a male with a complete plumage of the adult with the exception of the white markings on the wing (tertials) and on the back (scapulars). These white markings were seen on the right side of this duck but no white markings were seen on the left side. This asymmetry was noted by me every time I saw the duck (eight different occasions including once when it was only about 30 feet away in the ship canal). Once while the bird was feeding, Ron Huber and I timed a series of 13 dives with the following results: longest dive was 25 seconds, shortest 10 seconds with a mean of 20.1 seconds; periods between dives ranged from 5 to 15 seconds with a mean of 7.8 seconds. Lake Superior at Duluth began to freeze up on the 6th and 7th of January and by the 14th had frozen along the shore to Lester River (six miles from the ship canal). The Harlequin Duck was seen near the edge of the ice on that date by members of the Duluth Bird Club but was not seen again after that.—*Janet C. Green, 1923 Greysolon Road, Duluth, Minnesota.*

\* \* \*

**GOLDEN EAGLE IN LYON COUNTY.** On February 27, 1962, Kieth Harmon, Area Game Manager, and I observed an immature golden eagle in western Lyon County, Minnesota. The bird was first seen circling a state owned wetland area in Island Lake township and then moved west into Lincoln County. We were able to come close enough via 8 x 30 binoculars to definitely observe the white flash in the wing and the white tail with broad, dark terminal band that identifies the juvenile of this species. We followed the bird by car for approximately

3 miles until the inaccessibility of the area forced us to stop. The eagle was last seen as it dropped into a wooded section along the Yellow Medicine River in eastern Lincoln County—*Jerome Janeck, Asst. Area Game Manager, Box 111, Marshall, Minnesota.*

\* \* \*

**YELLOW-CROWNED NIGHT HERON IN OLMSTED COUNTY.**—On the afternoon of April 15, 1962, we were canoeing along a small tributary of the Root River just outside the village of Stewartville, when we flushed a heron as we went around a bend of the creek. It was the size and shape of a Black-crowned Night Heron, but as it flew, we noticed that the upperparts were all bluish gray, with no black on the back. The bird lit in a tree a short distance away, and we got out of the canoe. By crawling on the muddy shore back of some small bushes we were able to get within about 100 feet of the heron. Though we had no field glasses at the time, we could clearly see the yellowish-white crown and the black markings on the side of the head, with a white spot in the back. It was clearly a Yellow-crowned Night Heron.—*Alden and Danny Risser, Stewartville, Minnesota.*

\* \* \*

**MOURNING DOVE NEST WITH THREE EGGS**—My banding records show that on June 10th, 1960 I banded three nestling Mourning Doves, which were approximately nine days of age, at the Kasson Cemetery. The nest was in a blue spruce, five feet from the ground on the northeast side of the tree. The tree itself was about nine feet tall. The nest was about 18 inches from the trunk.

When I checked the nest the first time it contained three eggs. The second time I checked the nest, probably about nine days later, it contained two nestlings and an egg. I almost threw the egg out, thinking it was infertile. Imagine my surprise when I checked the nest the third time, on June 10th to discover three nestling Mourning Doves all about the same size and very active. I banded all three birds with bands: 633-04945, 46, and 47.—*Forest V. Strnad, Kasson, Minnesota.*

\* \* \*

**NORTHFIELD AREA BIRDING**—The 1961-62 winter season was severe with more snow and cold weather than is usually experienced. Despite this fact, more than the expected number of "wintering" birds were observed. Meadowlarks were frequently observed along the roadways, and a Robin was a rather regular visitor to the feeding station, although he seemed to prefer the apples clinging to the flowering crab tree. Seven Mourning Doves wintered in a large weed area and were seen regularly.

On December 13 a large flock of Horned Larks and a smaller flock of Lapland Longspurs were seen near Castle Rock, Minnesota. On December 16 five large flocks of Snow Buntings were observed between Northfield and New Prague. Throughout the remainder of December and January Snow Buntings were repeatedly seen. Tufted Titmice were daily visitors to a feeding station on the outskirts of town, and a Rusty Blackbird was observed along the open water of the Cannon River during the Christmas census period.

Pine Siskins were first observed on January 6 and were abundant for several weeks thereafter. A single Snowy Owl was noted about four miles east of Northfield on January 8.

One of the interesting notes of the season was the spotting of a pair of Wild Turkeys a few miles west of Northfield. It was later learned that these birds, with others, had been liberated a couple of years earlier and some had been successful in nesting.

Evening Grosbeaks were first noted on January 5 and thereafter until mid-April. One flock of eight was seen daily at the feeder and represented the same individuals throughout this period. In mid-January both Cedar and Bohemian Waxwings became abundant, and flocks of fifty or more roamed the town stripping the crab apple trees bare. They remained until late in March. In mid-January the Purple Finches also became conspicuous and devoured pounds of sun flower seeds before deserting the feeders near the end of April. Three Pine Grosbeaks were observed on February 8, February 10, and again on March 13.

The first flight of Robins appeared March 21 and the main influx about a week later. The Common Grackles descended in a horde on March 24. The last week of March saw a few ducks on the temporary ponds—Wood Duck, Mallard, Common Merganser. April was slow to open, and nearly all species seemed to be tardy. Song Sparrows, Fox Sparrows, Eastern Bluebirds, and a larger than usual number of Whistling Swans were noted the first week of April. It was not until after the middle of the month that the weather warmed and the real migration seemed to take form.—*G. N. Rysgaard, Northfield, Minnesota.*

\* \* \*

**WORM-EATING WARBLER IN HENNEPIN COUNTY, MINNESOTA**—A Worm-eating Warbler, was identified in the two-acre tract of hardwoods at my home on the west bank of the Mississippi River in Brooklyn Park, Hennepin County, Minnesota on Saturday, April 28, 1962. The bird spent most of its time feeding about among the leaves on the ground much like an Ovenbird but it hopped instead of walking as does the Ovenbird. Occasionally it would fly up 25 or 30 feet in the 60 foot trees when disturbed but it preferred to be on the ground where it associated closely with an Orange-crowned Warbler whose choice of this level seemed a bit unusual. It remained in the area through Sunday and Monday, April 29 and 30, during which time several ardent bird watchers had a chance to see it. It was a solitary individual considerably north of its normal nesting range, and, since no specimen of this species had ever been taken in Minnesota, I finally decided to collect the bird. It appeared normal and in good adult plumage; the region of sex organs was shot damaged, so the sex was not determinable with certainty. This is now specimen No. 17835 in the Museum of Natural History, University of Minnesota.—*W. J. Breckenridge, Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

\* \* \*

**ANOTHER BARN OWL RECORD FOR DODGE COUNTY**—On April 28, 1962 I received a call from Forest Strnad of Kasson that a Barn Owl had been captured in a barn near Mantorville, Dodge County. On April 29 I visited the Carl Keller farm about two miles northeast of Mantorville. Mr. Keller told me that he had heard a noise in his barn on the morning of April 28. Upon investigating he found an owl with his foot caught in a chicken wire barrier above his milk shed. Mr. Keller captured the owl and placed the bird in a cage in his garage. When I arrived at noon on the 29th the owl appeared to be in poor condition and we decided to release the bird. When released, the bird flew into a large blue spruce tree in the farmyard. The owl was then chased by Blue Jays to a grove of smaller pines. I then flushed the bird from this grove and it flew across an open field to the Andrist farm across the road. The owl landed in a dense area of another blue spruce and stayed in this tree until I left the area a half hour later. The Andrist farm is the same one where a Barn Owl was found in 1960. (Flicker Volume 32, No. 3, September 1960, page 101). Attempts were made to find the owl later in the week but were not successful. To the date of this writing (June 1) the owl has not been seen again in this area.—*Robert B. Janssen, 1817 West 59th Street, Minneapolis 19, Minnesota.*

# THE HIAWATHA VALLEY BIRD CLUB OF WINONA

by F. Gerald Daley

In spring of 1961, the late Dr. M. M. Zeches was laboring to extract an impacted wisdom tooth from a relatively inaccessible part of a patient's jaw. As he worked, he told the patient of his country home and of his garden and of the birds that visited him. Of special interest to him were the birds that he and Mrs. Zeches had recently watched from their windows. They were crested and had yellow bands on their tails.

Through the wads of cotton came the muffled words, "Cedar Waxwings," and a new relationship began to form between the doctor and his patient. F. Gerald Daley. At each subsequent visit, the conversation concerned itself less and less with dentistry and more and more with birds; and more and more with the doctor's deep-seated dream of establishing a bird club in Winona.

Soon after, the two men presented their new-born plan to Dr. M. H. Doner, who is a well known authority on entomology and herpetology as well as being an ardent enthusiast in many of the other fields of the natural sciences. Dr. Doner suggested that an "organizational meeting" be held, in order to determine whether or not there was enough local interest to justify further action. There was. A large number of people attended this meeting, and appointed temporary officers who made arrangements for future meetings.

The Winona Park-Recreation Board allowed the newly-formed group to use the Lake Park Lodge for its monthly meetings. The Winona Daily News personnel expressed their willingness to accept and print notices of meetings, and encouraged the new club to keep the press informed as to all activities planned and engaged in.

With this kind of local support, the club proceeded to organize. A constitution committee was established. A constitution was drawn up and adopted.

The Hiawatha Valley Bird Club of Winona was in existence. In addition to the standard officers and an executive board of directors, the constitution provided for a number of committees.

Most active of these committee chairmen is Mr. Francis Voelker, field trip chairman. At each meeting, Fran Voelker makes a suggestion to the club, as to where and when the monthly field trip should occur. Before each trip, he is very likely to make a preliminary run on the area, by himself, to determine which roads should be used, where cars can be safely parked and so forth. His efficiency was best demonstrated this past December, when he supervised the club's first Christmas Count, in such a manner as to help the group to tally-up more than forty species of birds. Of more importance to the club was the fact that each of the almost thirty participants had the fun of being in a "party" that added to the list at least one or two species seen by no other party on that day. All of the participants "got action."

Working closely with Fran Voelker is Mr. Bill Jacobs, blue-bird trail committee chairman. They and their helpers waded through hip-high snowdrifts, during the last months of winter, in a successful attempt to get about 100 Eastern Bluebird nesting boxes (which the members had assembled from pre-cut pieces of wood at a previous meeting, instead of having a more conventional-type program) installed in time to weather a bit before the first Eastern Bluebirds would arrive.

Mr. Carl Lipsohn serves the club in the capacity of publicity chairman, and he engineered the club's participation in National Wildlife Week activities. The club sponsored displays in several store windows around town.

Mrs. Lipsohn is also active in club management. She is presently chair-

man of both the social committee and the conservation committee. It is rumored that she is presently planning a sort of birthday party for the club, to celebrate the end of its first year of birding.

The conservation committee was active in the past year, in expressing its desire to keep Winona's Agagghming Park, a natural and undeveloped city park in the river bottoms, in its present "wilderness" state. Plans had been made for the leasing of these lands to private individuals for the purpose of establishing summer cottages.

An education committee has recently been organized. It is composed of all of the teachers in the group and is headed up by Mrs. Harvey Gordon. This group will serve as an advisory board to guide the club in the activities that are of interest to our younger members and friends.

Incidentally, one of the most active members in the organization is Mr. Stephen Sauer, age twelve, who announced at a meeting a few months ago, that he organized a junior affiliate-type group of birders, consisting of about one dozen fellows and girls who were welcomed by the club that night and have been actively birding, under Stevie's leadership, ever since. As a matter of fact, often, after one of their field trips, Stevie will call the club president and advise him of the birds that they have seen. Occasionally, this gives the club president, F. Gerald Daley, an opportunity to activate the telephoning committee, which is run by Mrs. James Robb. At any time that any person sees an unusual bird, or for any other reason feels that the club members should be quickly notified, all they have to do is to get the information to Mrs. Robb. In a matter of minutes, she is able to contact her several assistants, and they in turn each call five or ten other members, thereby letting everyone in the club know about, say, the Western Grebe that was seen on Lake Winona.

Another way in which Stevie contributes to the club is in assisting Mrs. Sanford S. Tyler, club secretary, in the

compilation of a club scrapbook. In addition to recording all of the proceedings of the regular club meetings and the executive board meetings, and in addition to handling the club's correspondence, Mrs. Tyler has made a "scrapbook" record of all of the clubs activities, in connection with her duties as club historian.

The monthly postcards are sent to members and friends by the membership committee chairman, Mrs. F. Gerald Daley, who also helps her husband to plan programs and the business meetings. Cooperating with the membership committee is Miss Louisa Farnner, acting treasurer in the absence of the club treasurer, Mrs. Lelia Wilkins.

Mr. Martin Hollingsworth, vice-president, and Mrs. Hollingsworth, introduced the group to a new "wrinkle" in birding, by initiating interest in the sport of "lunar counting", by watching the moon, using standard 20-power scopes, to watch the silhouettes of migrating birds as they pass overhead during the night.

Data gathered from activities such as these, and from the attempts that club members have made to find local hawk migration routes, and television tower kills, are kept by Dr. M. H. Doner, executive board member and special projects committee chairman.

With the above-mentioned committee chairmen, working with the club officers to handle the "workings" of the club, by using the ideas and help offered by the better than fifty active members, there is little doubt but what the activities of the Hiawatha Valley Bird Club of Winona will continue to run smoothly.

The unit of this club which is chiefly responsible for the efficient organization and development of this club is the executive board of directors. This is the group that "goes into a huddle" at any time that the club is faced with a problem that merits more time and attention than can be given at a regular meeting. This group currently consists of, in addition to the club presi-

dent and vice-president, Dr. M. H. Doner, Mr. J. Milton Dahm, Mr. Carl Lipsohn, Mr. Sanford S. Tyler and Mrs. William Jacobs. These are the "behind

the scenes" personnel whose influence tends to keep the club moving progressively forward.—507½ E. Sanborn St., Winona, Minnesota.

## BOOK REVIEW

**BIRDS of the WORLD** by Oliver L. Austin, Jr. 316 pages with 300 color illustrations by Arthur Singer. Golden Press, New York, 1961. First edition \$14.95, later printings \$17.50.

For the reader and collector of ornithological literature, "Birds of the World" is certainly a book that will make a valuable addition to their library. With the large number of works being published on birds, this book should be at the top of the list. The price of \$17.50 for the work seems small when one sees the beautiful illustrations and the well prepared text.

"Birds of the World" is intended for the general reading public. This book offers the reader the best look at the divisions of the birds of the world and familiarizes us with many strange families of birds. Range maps in color are a valuable addition to the text and give a geographical location to the families.

The color illustrations by Arthur Singer should certainly rank with the greatest ever, including Audubon. They are alive with action and most interest-

ing are the beautiful habitat situations into which the birds are placed. Many of the illustrations are painted from difficult angles, such as the Great Black-Backed Gull on page 131. The only complaint that this reviewer could have about the illustrations is the one of the Tree Swallow on page 216. The color is poor and looks more like a Violet - green Swallow. The placement of the illustrations within the text is a welcome innovation. Placed among the text and not as full page plates, in most instances, enhance this book a great deal.

Mr. Austin's most outstanding achievement is his ability to write about birds on a world-wide basis and make it of interest to the general reader. Thus the book has great appeal from the amateur to the professional.

In summary, this book will provide the reader with a fresh look at familiar birds and open a whole new world of birds. The author and especially the artist are to be congratulated on a very impressive work.

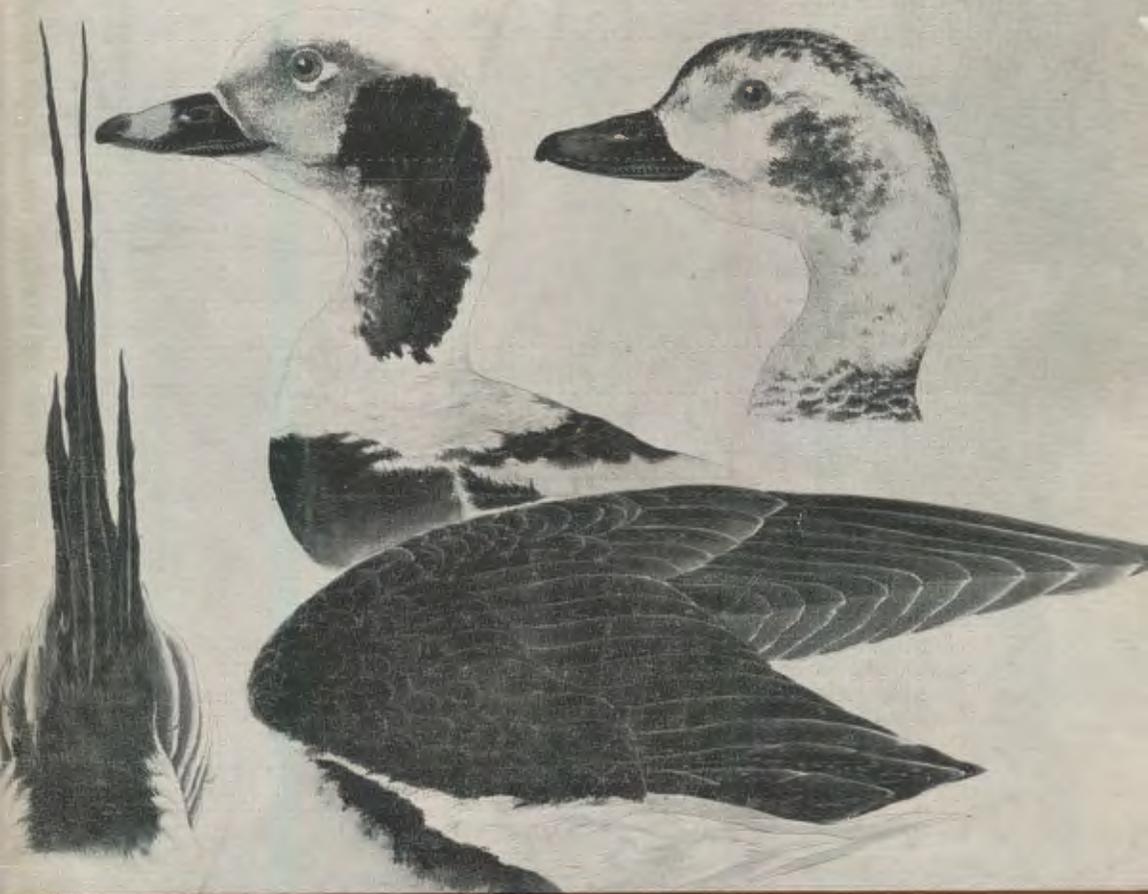
Editor

# The Flicker

VOLUME 34

SEPTEMBER, 1962

NUMBER 3



PUBLISHED QUARTERLY BY  
**THE MINNESOTA ORNITHOLOGISTS' UNION**

PERMANENT ADDRESS  
MUSEUM OF NATURAL HISTORY  
UNIVERSITY OF MINNESOTA  
MINNEAPOLIS, MINNESOTA

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## THE FLICKER

Organ of the *Minnesota Ornithologists' Union*. Published quarterly in March, June, September, and December. *The Flicker* is sent to all members not in arrears for dues. Dues for members: Active, \$3.00, Sustaining, \$5.00; Life, \$50; Patron, \$100 or more. All articles and communications for publications should be sent to the editor. Subscriptions, memberships, and requests for back issues should be sent to the treasurer.

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### FRONT COVER

Photograph of a painting of the Oldsquaw done by Kako Morita. Male - left, Female- right

## PRESIDENT'S PAGE

There is a wonderful feeling of exhilaration which accompanies that of lonesomeness when you move from a familiar place to a totally new one. This was our experience as we moved the last of June from Kasson to our new home in Chisholm, where we will now be serving the Methodist congregations at Chisholm and Buhl.

For several years I have known people in the Iron Range area by name and through correspondence but have never had the privilege of meeting them personally. The first week-end we were here we met Mrs. Oscar McCracken, a good birder from Hibbing. On the fourth of July we drove up to Cook to meet Edwin Woolverton, a bander. We were delighted to find him on an island in Lake Vermillion where he is a caretaker for a private lodge. Later in the summer we met Miss Ruth Erickson of Parkville and her roommate, Miss Mary June Walcott. During most of the year these ladies teach school at Royal Oak, Michigan. Amidst their busy activities they have found time this past year to take up banding in Michigan and Canada, and during the summer have been doing some banding in the Virginia area. For many years I have heard of Miss Vera Barrows of Virginia, a strong force in that bird club when it was active. It was nice to be able to meet her this summer at the Erickson home.

As I have been meeting many new people this summer I have had the opportunity to inquire about their interest in a bird club here on the Iron Range. I don't know what the future will bring in regard to an organized club but there seems to be enough interest already to pursue the possibility of getting a number of interested persons together in an informal group to talk about organizing such a club. Several strong 4-H clubs in the area offer the possibility of having a number of youth in the group. Such a group might include persons from Hibbing to Virginia and the surrounding area. During the winter months we may be able to do something toward getting these interested persons together.

In the meantime I would appreciate it if members of the M.O.U. and other interested birders would write to me indicating their interest in such a club. This group could include a wider interest than birds if there is a desire for an Iron Range Naturalists' Club.

In moving to a new habitat we naturally wondered what birds we would find in the area and going through our yard. Without making many jaunts into the field we have been delighted to band twenty-five species of birds in this area, fourteen of these in our own back yard. Highlights of the summer have been the nest of Yellow Warblers in the yard next door; the Pine Siskins, a new species for my life list of banding; the American Bittern which I banded at the St. Louis County Fair, Hibbing and which was later released; the Common Nighthawk caught early one morning in a net in our back yard, and the two Gray Jays, which we saw in Itasca Park in August.

Longyear Lake, within the city of Chisholm, offers much promise. This Spring there was a flock of Whistling Swans which stayed quite a while and two birds stayed until the last of May and local residents thought they were going to nest. The middle of August I saw several species of shorebirds on the swimming beach, but the sand was so hard I couldn't get the poles into the ground to set up my nets.

Altogether it looks like a good place to be, bird-wise, and I hope many new persons in this area may become interested in the M.O.U. and its program in the next few years.

*Forest V. Strnad*

## 9TH ANNUAL M. O. U. WINTER MEETING

ON SATURDAY, DECEMBER 1, 1962 THE MINNESOTA ORNITHOLOGISTS' UNION WILL HOLD ITS ANNUAL WINTER MEETING AND PAPER SESSION. THE MEETING WILL BE HELD AT THE MUSEUM OF NATURAL HISTORY ON THE MAIN CAMPUS OF THE UNIVERSITY OF MINNESOTA. REGISTRATION WILL BEGIN AT 8:45 AM WITH THE PROGRAM BEGINNING AT 9:30.

THIS YEAR'S PROGRAM IS BEING PLANNED BY YOUR VICE PRESIDENT, MRS. JANET C. GREEN OF DULUTH. THE THEME OF THE YEAR'S MEETING WILL BE THE IDENTIFICATION, MIGRATION AND DISTRIBUTION OF MINNESOTA BIRDS. THIS TYPE OF PROGRAM SHOULD PROVE TO BE OF GREAT INTEREST TO ALL PEOPLE INTERESTED IN BIRDS. SPEAKERS WILL BE DRAWN FROM THE MEMBERSHIP OF THE M. O. U., THE UNIVERSITY, THE MINNESOTA CONSERVATION DEPARTMENT AND OTHER RELATED GROUPS. ANYONE INTERESTED IN PRESENTING A PAPER SHOULD SEND THIS INFORMATION TO MRS. GREEN AT 1923 GREYSOLON ROAD, DULUTH, MINNESOTA.

DESPITE AN EXCELLENT PROGRAM IN 1961, THE MEETING WAS VERY POORLY ATTENDED. THIS YEAR WE PLAN ON PUBLICIZING OUR MOST INTERESTING PROGRAM IN THE NEWSPAPERS AND ON RADIO AND TELEVISION. WE ASK THAT YOU URGE YOUR FRIENDS TO JOIN WITH US IN MAKING THIS YEAR'S PROGRAM A SUCCESS.

A PROGRAM OF THE DAY'S EVENTS WILL BE MAILED TO ALL MEMBERS AND INTERESTED GROUPS IN NOVEMBER.

# OBITUARY – FATHER ADELARD THUENTE

## 1910-1962

The passing of Father Adelard Thuente, 51, on April 15, 1962 was a deep shock to his many friends and former students. He was born at Festina, Iowa but spent most of his early life at Hoven, South Dakota. His association with St. Johns in Collegeville, Minnesota dates from his entry to the preparatory there in 1926. Fr. Adelard had been associated with the M.O.U. for a number of years. He was its president in 1950-51 and twice the spring meetings were held on the St. Johns campus.

Although his biological interests were primarily in botany he kept up an active interest in birds and always welcomed any bird enthusiasts to the campus. This still rather primitive Maple-Basswood habitat has provided many "firsts" for bird students from the St. Cloud area. One of his special interests in birds was the collection of mounted birds obtained some time during his early years at St. Johns from the taxidermist J. D. Allen of Mandan, North Dakota. He was particularly proud of a few rare species in this collection which includes, among others, a Passenger Pigeon, and a Whooping Crane.

He had tremendously variable interests and capacities. His scientific interests ranged from doing electrophoresis studies on the blood of local vertebrates (which he was engaged in when I first met him) to deciphering mathematical games. During the past year he and several students had been working on studies of radiation biology. During the past three summers he had attended the National Science Conferences. He was also well known in athletic circles as he was faculty representative for several years to the MIAC athletic conference.

I knew Father Adelard for only the past four years but during this time had come to consider him a close friend and adviser. One trip which I was privileged to take with him stands out in my memory. This was to a meeting in Colorado in August of 1961 during which we saw much new country together and some new birds. In particular I remember pointing out what to him was a new bird species. This was a Clark's Nutcracker which we were finally able to get a close look at in Rocky Mountain National Park. We at St. Johns deeply regret the early passing of this versatile biologist. — *Edmund A. Hibbard, Biology Department, St. Johns University, Collegeville, Minnesota*

## ANNOTATED LIST OF BIRDS SEEN IN THE VICINITY OF LAKE SAGANAGA, ONTARIO

by R. A. Grant

The following list records birds seen by L. K. Grant, M. A. Mays, and the writer during two canoe trips — June 24 to July 3, 1961 and June 19 to 26, 1962 — through the lakes north and northeast of Lake Saganaga at the terminus of the Gunflint Trail in the Quetico-Superior wilderness region of Minnesota and Ontario. The list in-

cludes all species observed with indications in each instance as to relative abundance and evidence of breeding. We attempted as far as possible to avoid counting the same individuals twice in any one day. For example, if in the course of a morning's trip across country on foot, we recorded five male Cape May Warblers in a budworm-

wrecked grove and four of the species on returning through that grove later in the day, we omitted the later group from the day's list.

The itineraries of the two trips were planned with a view to avoiding the main routes used by fishermen and vacationers. In this we were successful for we saw no other parties except during the brief periods spent crossing Lake Saganaga and Northern Light Lake at the beginning and end of each trip. We also looked for an area with some signs of spruce budworm infestation knowing that in such an area we might expect unusual concentrations of breeding Cape May, Bay-breasted and Tennessee Warblers (Kendeigh, 1947). About half the time on each trip was spent on Cannibal Lake, a very small lake surrounded by a varied climax forest (including two budworm devastated groves), and located 17 miles NNE of the Gunflint trailhead. Although the area covered was almost entirely in Ontario, our routes took us no farther than fifteen miles from the Minnesota line and birds seen may reasonably be taken as typical of what one would find on the Minnesota side of the line. See, for example, Mrs. Cottrille's article on breeding birds near Ely (*Flicker*, June 1962). The two trips covered eighteen days but as several days were spent making time on open water we recorded very few small birds on five or six of the days and this fact should be taken to modify the following notes of frequency.

The weather in 1961 was unusually dry. In 1962 there was at least an average amount of precipitation. Nights were uniformly cool (45°-60°), days moderate (65°-80°).

*Common Loon*: 2 to 14 individuals in the hunting territory of a pair recorded every day. The smaller lakes (less than 100 acres), although not used for breeding, were usually included from a larger lake nearby. Adult with one small downy young on its back under the wings June 25, 1961. Nest with two eggs June 26, 1961 and June 19, 1962. (this was one nest, used two successive years).

*Great Blue Heron*: seen on fifteen out of eighteen days, up to five in one day.

*Black Duck*: seen ten out of eighteen days, up to five in one day. June 25, 1961 - female with eight downy young. July 1, 1961 - two broods of half-grown young. June 19, 1962 - female with seven downy young. The typical situation was on a quiet bay or large beaver pond.

*Ring-necked Duck*: seen on one day, a pair on a small lake.

*Common Goldeneye*: seen once: June 25, 1962, a female with six downy young on a large beaver pond.

*Bufflehead*: seen once: June 19, 1962, a male on Lake Saganaga.

*Hooded Merganser*: seen once: June 20, 1962, a female circled us in flight for twenty minutes calling repeatedly as we fished in a small bay on Plummes Lake.

*Merganser (species?)*: females which I identified as Red-breasted Mergansers were seen fifteen out of eighteen days, up to eight in one day. The half-dozen or so which were observed at close range appeared to have the indistinct graduation of red into white on the neck which marks the species but as Roberts and others concur in finding only the Common Merganser on these inland lakes in the breeding season I am led to doubt my identification and would appreciate observations from others. June 24, 1961, females with broods of two and eight downy young. June 26, 1962, female with eight downy young.

*Turkey Vulture*: seen five out of eighteen days, up to five in one day.

*Sharp-shinned Hawk*: seen twice, a single bird on each of two separate days.

*Red-tailed Hawk*: one mature bird seen on three days in the same area, in each case being chased by one or both of a pair of Broad-winged Hawks.

*Red-shouldered Hawk*: observed one in flight at the north end of Mowe Lake June 26, 1961 for ten minutes at ranges down to less than 100 yards. This individual was harrying a perched adult Bald Eagle. I am thoroughly familiar with this species having studied it at the nest in several successive

years. The characteristic silhouette, narrow white tail bands, and wing-windows were clearly visible. The following day we observed two soaring over the high dry ridge north of the fire tower at Plummes Lake (one mile from the point of the previous day's observation). The fire-watcher, whose knowledge of birds was limited, said that he saw the pair over the ridge regularly.

*Broad-winged Hawk*: seen thirteen out of eighteen days, one to three in a day. One individual, distinguished by its profile in flight, was so dark underneath as to show no markings. Observed carrying mammalian prey three times (once in the beak and twice in talons).

*Bald Eagle*: seen six out of eighteen days, two pairs in 1961 (Mowe and Sagonagons Lakes), two pairs and one immature in 1962 (Mowe and Northern Light Lakes). We saw only one nest (not checked for occupancy).

*Osprey*: seen once on each of five days at widely separated points.

*Pigeon Hawk*: seen on three days: July 2, 1961 on L. Sagonagons a pair actively defended an empty but freshly built nest 35' up in a small tamarack tree on an islet. There was no sign that the nest had ever had eggs or young in it. Individual birds were seen on July 3, 1961 (L. Saganaga) and June 26, 1962 (Northern Light Lake). We saw none at all on the twenty-odd smaller lakes we passed through.

*Spruce Grouse*: three were seen in 1961, one each on June 25, 28, and 29. The last was accompanied by 8 to 10 one-quarter-grown young, which were able to flutter into the lower boughs of the surrounding spruce trees. We photographed this bird from about 15 feet and when I attempted to get closer it flew straight at me, passing so close that I ducked. This bird, although browner than the clearly marked males seen on June 25 and 28, had very distinct red erectile combs over the eyes. Drs. Walter J. Breckenridge and Dwain W. Warner, who very kindly read this list in manuscript, point out that the male of this species is not known to tend or defend the young. I assume that the bird was a female with un-

usually prominent combs.

*Ruffed Grouse*: seen four out of ten days in 1961; none observed in 1962. June 24, 1961: brood of ten very small young; July, 1 1961: brood of 6-8 half-grown young, both broods able to flutter up to low boughs for concealment.

*Spotted Sandpiper*: seen on six days, up to four per day. Apparently present where shores were sandy, or offered shelving ledges.

*Herring Gull*: seen fifteen out of eighteen days, up to fifteen in one day. June 26, 1961 - two half-grown chicks. June 19, 1962 - two small chicks. We found two empty nests on a tree-less ledge in Mowe Lake.

*Black-billed Cuckoo*: seen twice in 1961, a pair and a single bird.

*Barred Owl*: one heard calling June 23, 1962 at Cannibal Lake.

*Owl (species?)*: June 24, 1962, Cannibal Lake. At seven A.M. and at four P.M. we heard a repeated soft bell-like call, much like the descriptions of the Boreal Owl call in Bent (1938) except that it was given in pairs at intervals of about one second.

*Chimney Swift*: single individuals seen June 27 and 29, and July 3, 1961, all occasions being some miles from the nearest cabin.

*Belted Kingfisher*: seen on four days, no more than two per day.

*Yellow-shafted Flicker*: the most conspicuous woodpecker. Seen on all but two days, up to five per day.

*Pileated Woodpecker*: seen eleven out of eighteen days, up to three per day.

*Yellow-bellied Sapsucker*: seen on six days, up to three in a day.

*Hairy Woodpecker*: seen on two days, one each day.

*Downy Woodpecker*: seen on two days only, a total of four individuals.

*Black-backed-three-toed Woodpecker*: seen only once, June 24, 1962, at Cannibal Lake. We avoided the recent burns where this and the Northern Three-toed Woodpecker might have been more common.

*Eastern Kingbird*: one seen on an islet in Northern Light Lake, June 26, 1962.

*Trail's Flycatcher*: seen on three days, up to four in a day. We heard

only the two-syllabled "fitz-bew" call.

*Least Flycatcher*: present in all but the wettest situations, ten out of eighteen days, up to fifteen in a day.

*Eastern Wood Pewee*: seen or heard on six days, one or two on each day.

*Olive-sided Flycatcher*: seen on two days in 1961, in each case a single individual.

*Tree Swallow*: seen ten out of eighteen days, up to twelve in a day. There were pairs or small colonies wherever beaver had killed a number of trees by flooding. Observed bringing food to nest hole June 26, 1961 and June 20, 1962.

*Gray Jay*: seen nine out of eighteen days, up to six in a day. We saw two family groups with young in the immature plumage.

*Blue Jay*: observed eleven out of eighteen days: a much noisier bird than the preceding but we saw and heard no more than two in any one day.

*Common Raven*: seen on eleven days, up to twelve in a day. We twice saw what appeared to be family parties of six or seven birds.

*Common Crow*: seen on nine days, up to six in a day.

*Black-capped Chickadee*: seen on eleven days, up to four in a day.

*Boreal Chickadee*: seen on four days, up to three in a day.

*Red-breasted Nuthatch*: seen thirteen days, up to seven in a day. Seen feeding young in nest hole June 23, 1962.

*Brown Creeper*: seen on four days, up to two in a day.

*Winter Wren*: seen or heard on five days, up to two in a day.

*Short-billed Marsh Wren*: seen on two days in half-silted beaver ponds, a small colony on each occasion.

*Hermit Thrush*: heard on three days toward evening, in each instance a single individual.

*Swainson's Thrush*: seen or heard on twelve days, up to ten in a day..

*Veery*: seen once and heard on six days, no more than two per day.

*Golden-crowned Kinglet*: seen on eight days, up to five in one day.

*Ruby-crowned Kinglet*: seen only once, June 2, 1962, when three individ-

uals were seen in interspecific conflict with two Golden-crowned Kinglets near the ground in a spruce-sphagnum bog.

*Cedar Waxwing*: seen on eight days, up to thirteen in a day but no more than seven in a flock.

*Solitary Vireo*: seen on two days, a pair and a single individual.

*Red-eyed Vireo*: seen on two days, a pair and a single individual.

*Tennessee Warbler*: seen on ten days, up to eighteen in a day. This was the commonest warbler; it was seen nearly as commonly on dry ridges in mixed stands as in wet coniferous stands, and over much of the forest the population level appeared to approach one pair for every two or three acres. Males sang right through the day from conspicuous perches well up - but not at the very top of both conifers and deciduous trees. They fed in aspen and birch quite as much as in spruce and balsam, moved about constantly and fairly quickly, and while feeding uttered a conspicuous loud chip. Males were never very hard to locate, did not skulk, and seemed to make no attempt at concealment. Females about the nest chipped agitatedly but tended to keep out of sight. The species was as abundant in 1962 as it had been in 1961. June 28, 1961 - nest with six young, flight feathers just starting, typical situation. June 23, 1962 - nest with six eggs almost ready to hatch, this nest was on a dry hillside in a windfall opening and was imbedded in leaves beneath a fallen spruce trunk. The female sat very close and, as she could see only in one direction, I was able to catch her by clapping my hat over the nest from behind. We examined her in the hand and released her, taking one egg to determine the stage of incubation.

*Nashville Warbler*: seen on two days, a single individual each time.

*Parula Warbler*: seen or heard on six days, but no more than two on any one day. We found this species four times in dense spruce-sphagnum bogs and twice on the margins of silted beaver ponds where the dead trees were festooned with usnea.

*Magnolia Warbler*: seen on six days,

up to four in a day. It appeared to be confined to the dry mixed deciduous and coniferous forest.

*Cape May Warbler*: seen on ten days, up to thirteen in a day. Abundant in suitable habitat but noticeably more restricted in distribution than either the Tennessee or the Bay-breasted Warblers. We found it only in nearly pure spruce-balsam stands. In these, however, and particularly in one budworm-wrecked stand at Cannibal Lake, it was sometimes possible to count four singing males from one vantage point. In 1961 I estimated that six pairs were present in one small wrecked grove of eight acres. Mrs. Cottrell (1962) estimated 8 - 10 singing males "in two sections" (1280 acres?) at Ely, Minnesota and Kendeigh (1947) found 28 pairs per 100 acres near Lake Nipigon, Ontario. We were able to determine the extent of one territory very precisely as in both years a pair occupied the one and one-quarter acre islet on which we camped at Cannibal Lake. The female was seen only three or four times but the male sang right through the day and was seen or heard whenever we were at the camp-site. At no time did either bird descend below ten feet. Most of the time they were in the top third of the black spruce trees which covered the islet (that is, 35 to 50 feet above ground). The male usually sang from points of concealment in dense tufts of spruce twigs and it was rarely possible to glimpse him except when he moved from one tree to another. This held true for almost all the Cape Mays which we saw: they are confirmed skulkers, and appear briefly, if at all, only to dive back into the heart of the spruce. On only two occasions did we see a Cape May mount to the highest sprig of a spruce and there sing in plain view, a habit recorded by Brewster (Griscom, 1938). On all other occasions they kept well hidden while singing, and, when seen, were invariably moving about quickly, constantly, and nervously - quite unlike the Tennessee and Bay-breasted Warblers. (It is worth noting, as an indication of the extraordinary density of breeding birds around Cannibal Lake, that this

one and one-quarter acres islet, located about 100 feet from shore, carried pairs of four other species: Chipping Sparrow, Song Sparrow, Swamp Sparrow and Purple Finch, and was regularly visited by Gray Jays, Evening Grosbeaks, Pine Siskins, Yellow-shafted Flickers and a Pileated Woodpecker.) There was a very noticeable drop in numbers of Cape May Warblers from 1961 to 1962, when we recorded less than half as many individuals, no more than eight per day, and but two pairs in the grove censused in 1961. As both the Tennessee and Bay-breasted Warblers were abundant in 1962 I am at a loss to account for this decline in Cape Mays. There was some evidence that the budworm infestation had nearly run its course at Cannibal Lake: in two severely affected groves there were not above a half-dozen standing trees per acre while the ground was a nearly impenetrable maze of fallen and half-rotten spruce and balsam trunks. Kendeigh (1947) suggests that when a budworm outbreak is over Cape May, Bay-breasted, and Tennessee Warblers are likely to retreat very rapidly to their normal range and it may well be that this retreat is already in progress around Cannibal Lake.

*Myrtle Warbler*: seen on four days, no more than four in one day.

*Black-throated Green Warbler*: one seen on each of two days.

*Blackburnian Warbler*: seen on four days, up to four in a day, usually in a dry jack pine situation.

*Chestnut-sided Warbler*: seen on five days but no more than two on any one day. This species was confined to the infrequent openings. We found individuals singing in alder thickets over water on three occasions.

*Bay-breasted Warbler*: not observed at all in 1961 although we searched many suitable habitats - including budworm-infested groves. In 1962 on the other hand we found it abundant in a variety of habitats around Cannibal Lake, observing it on three days, up to twelve males in a day. We found the species in pure coniferous bogs but also in stands of birch and aspen and, most abundantly, in upland mixed

groves. It was not, however, uniformly common in all such stands, but seemed to be concentrated, on no discernible principle, in certain sizeable tracts of timber which we had passed by in 1961. We found it, for example, common in one infested grove but absent from another which appeared to be in exactly the same stage of demolition (very few standing trees), abundant in the mature mixed woods along one dry ridge but absent from another such ridge. The males sang with great regularity throughout the day. Singing perches were conspicuous and were usually about two-thirds of the way up a mature tree, oftener than not an aspen. They were more sluggish in their movements than Cape Mays, often maintaining the same perch for a minute or two. They were observed foraging in deciduous trees more often than in conifers and were invariably seen in the upper half of a tree although rarely in the topmost twigs. I estimated that the density of the species, in the areas where it was most abundant, approached or perhaps exceeded one male per acre. Females of this species were not especially retiring - we observed several foraging with no more attempt at concealment than the males.

*Pine Warbler*: seen once, three individuals singing in a budworm-wrecked grove.

*Ovenbird*: seen or heard on twelve days, up to eight in a day.

*Northern Waterthrush*: seen on two days along stream courses. We found a pair and a single bird on each occasion.

*Connecticut Warbler*: seen once, June 29, 1961, at Cannibal Lake: I watched a pair for perhaps twenty minutes in an alder clump bordering on a brush and sphagnum opening. The male sang repeatedly from several low perches; the female was seen briefly two or three times. I could not find the nest nor could I find the bird the following day.

*Yellowthroat*: seen on two days, in each case a pair.

*Canada Warbler*: one male seen in a birch-aspen grove.

*Redwinged Blackbird*: seen on six

days, up to ten in a day. Not found away from the few and scattered cat-tail marshes of the area.

*Common Grackle*: seen on five days, up to eight in a day. Found only in cedar and alder thickets along lake shores. June 20, 1962, nest with five eggs 18 inches above water in the fork of an alder.

*Scarlet Tanager*: one seen on each of two days.

*Rose-breasted Grosbeak*: one male seen.

*Evening Grosbeak*: In 1961 we saw from four to fifteen every day, invariably around openings. In 1962 we saw a small flock at the trail-head on Lake Saganaga, and only one bird thereafter.

*Purple Finch*: seen on six days, up to four in a day.

*Pine Siskin*: seen on six days, up to four in a day.

*American Goldfinch*: seen on two days, one male each time.

*Red Crossbill*: one flock of five seen in 1961.

*Savannah Sparrow*: seen once, two individuals in an extensive grassy marsh.

*Slate-colored Junco*: seen on eight days in 1961, up to five per day, but not at all in 1962.

*Chipping Sparrow*: seen every day, in all but the wettest and openest situations, up to fifteen per day. One nearly-fledged young fell from a nest over our camp-site June 29, 1961, was picked up uninjured, and found to have a maggot encysted under its eye. We removed the maggot and during the next two days observed this bird being fed on the ground by the parents.

*White-throated Sparrow*: seen or heard on twelve days, up to twelve in one day, most commonly in spruce bogs but also on dry hillsides.

*Lincoln's Sparrow*: carefully observed on three days, a total of four individuals, in each case in wet brushy situations.

*Swamp Sparrow*: seen on five days, up to seven in a day, confined to situations where beaver ponds or inlets graded off into grass tussocks. June 24, 1962, nest with three nearly fledged

young, 10 inches above the water in a grass tussock.

*Song Sparrow*: seen on thirteen days, up to ten per day, in open brushy lake or stream margins. June 23, 1962, young being fed out of nest.

Altogether we recorded 86 species of birds. We also saw the following mammals: Moose - three (a young bull, a cow, and a yearling), Deer - two, Beaver - nine seen (heard almost every night), Mink - one, Red Squirrel - two, Chipmunk - two. All the portage trails were churned up by Moose and Deer tracks, and we once found Bobcat tracks. One windy night on Term Lake (June 30, 1961) we were entertained for a full hour by a chorus of dog-like howls which appeared to come from a point some distance away to the south and the following day, in the course of a two mile portage over the tussocks and black mud of nearly dry beaver ponds, we found large fresh (wolf?) tracks in the muck around each of several beaver lodges. Curiously, we saw no porcupines and found no evidence of their presence. We found two garter snakes and five species of batrachians (all abundant).

#### *Discussion*

There are a number of fascinating problems connected with budworm outbreaks and the warblers associated with these outbreaks. Since the numbers of Tennessee and Bay-breasted Warblers appeared to hold up from 1961 to 1962 (assuming the latter species to have been present although overlooked in 1961), while those of Cape May Warblers declined, it may be that the incursions of these three species correlate in different ways with spruce budworm outbreaks, and that, for example, Tennessee and Bay-breasted Warblers are able to adapt, at least temporarily, to the cessation of an infestation by moving into adjacent areas and finding other food, while the Cape May Warbler, beyond its normal breeding range, is so closely tied to the budworm as to disappear with it. Brewster's notes (Griscom, 1938) on the course of the invasion at Lake Umbagog in Maine in the 1870's offer no very precise time-table, nor

can I find information of this point elsewhere.

Obviously my few data are insufficient bases for concluding anything on the question which in fact I pose only in the hope that someone living in Ely, and close by the area reported on by Mrs. Cottrille, may take it upon themselves to census the population of these warblers over the next few years. When three species, closely related but from varying ecological niches and with different feeding habits, suddenly move hundreds of miles beyond their normal breeding range in response to an insect outbreak, supersaturate an area, breed successfully for years, and then vanish, — what is the curve of their ascent and decline in numbers? — which arrives first? — which leaves last? — which, if any, adapts to the cessation of the outbreak and remains? — are there relict populations remaining years after the main horde has passed? — if so, what, if any, changes do such populations reveal in their feeding habits over the main breeding centers for the species?

In Roberts (1936) and in unpublished field notes on file at the Minnesota Museum of Natural History (e.g. Swedenborg, 1939) we find scattered records to suggest that a few pairs of Tennessee and Bay-breasted Warblers breed in northern Minnesota, and perhaps even some Cape May Warblers as well. Do these pairs gradually increase in response to a sudden bounty of food or must we visualize a moving center of supersaturated warbler populations — its focus around Lake Nipigon in 1945, around Saganaga in the late 1950's (presuming it is now on the decline there), around Ely in 1962, and so on westward until the insects run out of trees and the birds run out of insects? Elton (1942) and Lack (1954) can offer some instructive parallels in their accounts of "invasions," as can Brooks (1942) on "birds" at the extremities of their ranges," but here, truly, is a chance for someone to formulate these problems afresh on the basis of data collected from a whole cycle of sudden increase and decline right on our doorstep.

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## STORM DAMAGE TO A HERON ROOKERY

by George N. Rysgaard

On May 12, 1962, during the night hours, a severe wind and hail storm struck parts of southern Rice County. Hail stones examined measured up to  $8\frac{3}{4}$  inches in circumference and some were reported to measure up to  $9\frac{1}{2}$  inches in their longest circumference. (See photos). In the General Shields Lake area considerable damage was done to cars and summer cottages.

Four days later Orwin Rustad and I visited the island rookery at General Shields Lake to assess the damage done to the nesting colonies of Great Blue Herons and Common Egrets. As we approached the island, we could see approximately two dozen herons gathered on the sand spit that forms the western end of the island. A quick view with the field glasses gave the tragic answer. These individuals had broken wings and were congregated here attempting to capture food.

We beached the boat and scouted the point where 24 Great Blue Herons and 2 Common Egrets crowded together at the water's edge. Occasionally, one or another would attempt to fly and would fall forward into the water. The majority seemed to sense their helplessness and simply moved to one side or the other as we approached or stood their ground with beak poised. Several were captured to examine their wounds. On the narrow channel between the point and the mainland quite a number of birds were observed as they swam laboriously with the use of one wing. Many had already reached the opposite shore and were wandering about the wooded flats.

A walking survey of the main portion of the island was made, and a great many more crippled birds were found. Some lay where they had fallen because damage to both legs and



Hail Stones — General Shields Lake — May 12, 1962



SEPTEMBER, 1962

wings prevented them from doing otherwise. A number had gathered around a small pond in the center of the island. No young birds were found, and most of the egg fragments on the ground appeared to be fragments of normal hatches, although 8 to 10 eggs ready to hatch were found smashed on the ground. Presumably, most of the clutches had hatched before the time of the storm. Although no young were found on the ground, undoubtedly many of the nests contained dead young. Many of the dead adults found were found in groups of three to five; the significance of this is not known. A sudden storm cut short our survey, although the entire island was covered once over quickly.

In total we noted 46 dead Great Blue Herons, 10 dead Common Egrets, 71 crippled Great Blue Herons, and 7 crippled Common Egrets. No Black-crowned Night Herons or Double-crested Cormorants were observed. Of the injured birds, 68 had broken wings only while 3 had broken wing and legs, 4 had broken legs only, and 3 had head injuries.

During the 1961 nesting season the

rookery was censused by Forest Strnad who reported finding 629 nests of which number 30 were occupied by Common Egrets. Using these figures as applicable to the 1962 nesting season, it must be estimated that one-third of the breeding Common Egrets and one-eighth of the adult Great Blue Herons nesting here were killed or will succumb to their injuries. This figure is probably much too conservative. Inasmuch as this storm occurred at night, about 9 p.m., all birds were at the colony. Otherwise, considering the localized nature of the storm, many birds would probably have escaped. There is no way of evaluating the toll of the newly hatched young, but the mortality was undoubtedly great.

The rookery was revisited on May 19 with Dr. Warner and members of his ornithology class from the Museum of Natural History. Quite a number of the crippled birds were captured. Those with less serious injuries were returned alive to the Como Zoo, while the others were destroyed. Measurement data were taken from all specimens not too badly damaged. *Northfield, Minnesota.*

## THE SUMMER SEASON

by Ronald L. Huber

*Weather:* Practically every weekend through the summer months was marred by rain...as those campers among us will recall. The summer as a whole was cooler than usual, with only a few periods where temperatures reached ninety degrees or more. During many nights, the temperatures dropped below fifty degrees, even in the southern part of the state. While the rains flooded some areas to reduce nesting waterbird populations from their usual numbers (Swan Lake, Nicollet County; Heron Lake, Jackson County; Upper and Lower Rice Lakes, Clearwater County, to list a few), many new, temporary potholes were formed in northwestern Minnesota, and some

that had gone dry during the past four years' drought were replenished.

Monarch butterflies started their southward migration during the first week of August. On August 12, James Muggli of Roscoe, Minnesota reported a "roost" of about 150 Monarchs. On August 18, Avifaunal Club members caught four Buckeye butterflies at Duluth, a new county record. The following weekend we caught two more, plus a Black Swallowtail and a Milbert's Tortoise-shell...all on Minnesota Point.

Although this report primarily covers the nesting season, the dates of

observation usually run from about June first to September first and include some of the earlier migrants such as warblers and shorebirds. For the purpose of keeping this report as nearly up-to-date as possible, I will include the more interesting of these migrant reports (usually late July and all of August) in the Summer Season and then catch the remainder of the migration in the Fall Report.

#### LOONS AND GREBES:

*Common Loon*: Aug. 13, Wood Lake, Lake Co., Adult, 2 young, Janet C. Green.

*Western Grebe*: June 9, Detroit Lakes, Becker Co., Avifaunal Club.

*Pied-billed Grebe*: July 28, Marsh Lake, Lac Qui Parle Co., Adult, young, Richard K. Olson.

#### PELICANS AND CORMORANTS:

*White Pelican*: July 28, Lac Qui Parle Co., 33 birds, Richard K. Olson.

*Double-crested Cormorant*: Aug. 13, Marsh Lake, ten nests with young, Arlin Anderson.

#### HERONS AND EGRETS:

*Great Blue Heron*: Aug. 13, Marsh Lake, 2 nests with young, Arlin Anderson.

*Common Egret*: Aug. 13, Marsh Lake, 7 nests with young, Arlin Anderson.

*Black-crowned Night Heron*: Aug. 13, Marsh Lake, 5 nests with young, Arlin Anderson.

*Yellow-crowned Night Heron*: July 28, LaCrescent, Houston Co., one adult seen by R. and H. Huber; adult and 2 immatures seen there Aug. 4 by Bob Janssen.

#### DUCKS AND GEESE:

*Canada Goose*: No date given, Marsh Lake, one pair nested but nest lost due to high water, Arlin Anderson.

*Snow Goose*: July 28, Lac Qui Parle Lake, 39 flying over, Richard K. Olson.

*Blue Goose*: A pair remained all summer at the Lac Qui Parle refuge, but apparently did not nest, Richard K. Olson; a single Blue has been staying all year at Silver Lake, Rochester, Olmsted Co., seen by many observers.

*Mallard*: June 3-15, Minneapolis, 4 broods with 3, 7, 11, 13 young, Brother Theodore; June 9, Clay Co., near Felton, nest with 11 eggs, R. Huber; July

10, Bowstring Lake, Itasca Co., 9 broods, John Mathisen; July 11, Edina, Hennepin Co., 10 young, H. Huber; July 30, Farm Lake, Ely, St. Louis Co., 6 young, Janet C. Green.

*Black Duck*: July 17, Fall Lake, Winton St. Louis Co., 6 young, Janet C. Green, July 24, Fernberg Road, Lake Co., 8 young, Janet C. Green; Aug. 7, Moose Lake, Lake Co., 5 broods, Janet C. Green.

*Blue-winged Teal*: No date given, Goodview, Winona Co., 3 young, Grace Gordon; June 21, 24, Minneapolis, 7, 13 young, Brother Theodore; July 10, Bowstring Lake, Itasca Co., 1 brood, John Mathisen.

*Wood Duck*: No date given, Winona, Winona Co., 6 young, Grace Dahm; no date, Whitewater State Park, Winona Co., 6 young, Marius Morse; June 30, La Crescent, 17 young, Avifaunal Club; July 22, Anoka Co., 4 young, H. Huber.

*Redhead*: July 27, Lac Qui Parle Co., 2 broods, 3, 9 young, Richard K. Olson.

*Common Goldeneye*: July 15, Stony River and Hwy 1, Lake Co., 2 young, Janet C. Green; July 17, Fall Lake, Winton, St. Louis Co., 2 young, Janet C. Green; July 10, Bowstring Lake, Itasca Co., 1 brood, John Mathisen.

*Ruddy Duck*: July 3, Minneapolis, 4 young, Brother Theodore; July 27, Lac Qui Parle Co., 2 broods, 3, 5 young, Richard K. Olson.

*Common Merganser*: Aug. 11, Farm Lake, Ely, 7 young, Janet C. Green.

#### VULTURES, HAWKS AND EAGLE:

*Turkey Vulture*: June 30, Freeburg, Houston Co., Avifaunal Club; seen almost daily along Fernberg Road near St. Louis-Lake Co. line during July by Janet C. Green.

*Broad-winged Hawk*: May 1, Minneapolis, pair building nest, R. Huber.

*Bald Eagle*: July 30, Itasca Park, Clearwater Co., 2 young on nest, Avifaunal Club.

*Osprey*: June 23, Itasca Park, 2 young on nest, avifaunal Club; July 26, N. Kawishiwi River, Lake Co., 1 young on nest, Janet C. Green.

*Peregrine Falcon*: Aug., Whitewater State Park, 2 young banded, Marius Morse.

*Sparrow Hawk*: Mid-Aug., Altura, Winona Co., 5 immatures seen, Grace Dahm.

### GALLINACEOUS BIRDS:

*Spruce Grouse*: Aug. 24, Isabella, Lake Co., adult male, adult female, ten miles apart, seen by Richard Oehlenschlager.

*Ruffed Grouse*: June 23, Itasca Park, 5 young, Avifaunal Club; July 8, Cook Co., 1 young, Dr. A. E. Allin; July 21, Fernberg Road, Lake Co., 2 young, Janet C. Green.

*Greater Prairie Chicken*: June 9, near Felton, Clay Co., four were flushed, Avifaunal Club.

*Sharp-tailed Grouse*: Sept. 3, Gonvick, Clearwater Co., two seen by R. Edevoid.

*Bobwhite*: July 28, Caledonia, Houston Co., one calling, Avifaunal Club; mid-Aug., between Elgin and Plainview, Wabasha Co., 2 adults, 10-12 young, Mr. and Mrs. Wm. Jacobs.

*Ring-necked Pheasant*: July 1, Goodhue Co., 6 young, A. C. Rosenwinkel; July 7, Minneapolis, 3 broods, 3, 8, 10 young, Brother Theodore; no date, Homer, Winona Co., 4 or 5 young, Bart Foster.

*Chukar*: July 21, Ely, 11 adults, 9 young, Avifaunal Club.

### CRANES AND RAILS:

*Sandhill Crane*: Sept. 3, North of Gully, along Clearwater River, Polk Co., one immature seen by R. Edevoid.

*Virginia Rail*: Aug. 28, Minneapolis, 4 young, Brother Theodore; late Aug., Winona, 7 young, Mrs. Lamberton.

*Sora*: June 24, Minneapolis, 7 young, Brother Theodore; July 15, Anoka Co., 1 flying immature, W. R. Pieper and R. Huber.

*Yellow Rail*: June 9, several heard, 3 seen along Becker-Mahnomen Co. line, south of Waubun, Mahnomen Co., Avifaunal Club; June 23, same area, several heard, one collected, Avifaunal Club; on same day, we found nest with egg-shell fragments, easily identifiable by reddish-brown caps on larger ends of eggs, *second Minnesota nest*; July 30, north of Gonvick, Clearwater Co., one heard in partially mown June-grass field, R. Oehlenschlager and R. Huber.

*Common Gallinule*: Sept. 8, Tiger Lake, Carver Co., one sub-adult, Avifaunal Club; two more sub-adults same day, south of Gaylord, Sibley Co.

*American Coot*: June 6-16, Minneapolis, 5 broods with 4, 3, 3, 2, 2 young, Brother Theodore.

### SHOREBIRDS:

*Killdeer*: June 6-12, Minneapolis, 4, 3, 2 young, Brother Theodore; July 21, Duluth, 6 eggs, Avifaunal Club.

*Ruddy Turnstone*: Aug. 25, Duluth, one in fall plumage, Avifaunal Club.

*American Woodcock*: Last week of June, adult with several young crossed road, Coon Rapids, Anoka Co., Larry Hassing, Jr.

*Upland Plover*: June 9, near Felton, Clay Co., 4 eggs, Avifaunal Club

*Spotted Sandpiper*: June 12, Minneapolis, 4 young, Brother Theodore.

*Willet*: July 30, Salt Lake, Lac Qui Parle Co., Richard K. Olson.

*Knot*: Aug. 18, Duluth, St. Louis Co., one in molt from spring to fall plumage, three in fall plumage, Avifaunal Club; Aug. 25, Duluth, one in molt, 4 in fall plumage, Avifaunal Club. An excellent field mark, not noted in popular literature, is the bright yellow "soles" of the feet, which contrast nicely with the greenish legs, as the Knots walk away from the observer.

*Long-billed Dowitcher*: July 11, Swan Lake Nicollet Co., 11 seen and heard ("keek") by Bob Janssen, Brother Theodore.

*Short-billed Dowitcher*: July 11, Swan Lake, Nicollet Co., 11 seen and heard ("tu-tu," only two syllables) near the above Long-bills, but not in close company with them, Bob Janssen and Brother Theodore.

*Western Sandpiper*: Aug. 18, Duluth, 2 seen by Avifaunal Club; one seen again on Aug. 25, Avifaunal Club.

*Buff-breasted Sandpiper*: Aug. 25, Duluth, 2 seen with large group of Baird's Sandpipers, Avifaunal Club.

*American Avocet*: July 29, Salt Lake, Lac Qui Parle Co., one flying immature with cinnamon-brown head, R. Huber.

*Wilson's Phalarope*: June 9, Becker-Mahnomen Co. line, south of Waubun, 5 eggs, Avifaunal Club.

*Franklin's Gull*: June 9, between Felton and Ulen, Clay Co., flying immatures seen, egg-shell fragments found, Avifaunal Club.

*Bonaparte's Gull*: July 23, Mille Lacs Lake, Mille Lacs Co., two in fall plumage seen, Bob Janssen.

*Forster's Tern*: June 23, Swan Lake, Nicollet Co., 3, 3, 2, 1 eggs, H. Huber.

*Common Tern*: July 21, Duluth, many

"nests" with from 1 to 3 eggs each, Avifaunal Club.

*Black Tern*: July 11, St. Paul, 14 flying young being fed by adults, A. C. Rosenwinkel; June 11, Ramsey Co., 6 nests with eggs and/or young, R. Huber.

#### DOVES AND CUCKOOS:

*Mourning Dove*: May 5, Dodge Co., 2 nests, 2 eggs each, Avifaunal Club; May 24, Minneapolis, 2 eggs, H. Huber. *Black-billed Cuckoo*: June, Ramsey Co, 2 young, Harvey Allen.

#### OWLS:

*Screech Owl*: May 5, Clairmont, Dodge Co., gray phase on nest with 4 eggs, Avifaunal Club.

*Long-eared Owl*: June 24, Hickory Lake, Aitkin Co., one flushed from tamarac bog, 3 pellets contained skulls of 3 Common Meadow Mice and one Canadian Deer Mouse, Avifaunal Club; July 28, La Crescent, R. Huber.

*WHIP-POOR-WILL*: Last half of June, Coon Rapids, Anoka Co., nest with eggs, then young, Larry Hassing, Jr.

#### WOODPECKERS:

*Yellow-shafted Flicker*: June 23, Ramsey Co., 2 young, A. C. Rosenwinkel; July 7, Ramsey Co., 3 young flying, just out of nest, A. C. Rosenwinkel. *Red-bellied Woodpecker*: June 2, Lake Jane, Washington Co., young heard inside of nest cavity, Avifaunal Club. *Red-bellied Woodpecker*: June 2, Lake nona, 2 immatures, Mr. and Mrs. Karl Lipsohn.

*Downy Woodpecker*: No date, Winona, 2 young just out of nest, Mr. and Mrs. Sanford Tyler.

*Black-backed Three-toed Woodpecker*: July 28, Itasca Park, Brother Theodore.

#### FLYCATCHERS:

*Eastern Kingbird*: No date, Goodview, nest, contents not noted, Grace Gordon.

*Western Kingbird*: June 9, Clay and Becker Co.'s, Avifaunal Club; Sept. 3, Jordan Sand Prairie, Scott Co., R. Huber.

*Great Crested Flycatcher*: June 22, Minneapolis, 4 young out of nest, Brother Theodore; July 10, St. Paul, 2 young out of nest, A. C. Rosenwinkel.

*Eastern Phoebe*: May 4, Minneapolis, nest completed, A. C. Rosenwinkel.

*Trail's Flycatcher*: June 19, Minneapo-

lis, 3 young out of nest, Brother Theodore.

*Olive-sided Flycatcher*: June 9, near Felton, Clay Co., Avifaunal Club.

#### SWALLOWS:

*Bank Swallow*: June 19, Minneapolis, young heard in nesting cavities, adults banded, W. R. Pieper, R. Huber.

*Rough-winged Swallow*: July 8, St. Paul, one young being fed by adult, R. Huber.

*Barn Swallow*: June 17, Sand Dunes State Forest, Sherburne Co., nest under bridge, W. R. Pieper and R. Huber.

*Cliff Swallow*: June 23, Whitewater State Park, 13 nests with young, A. C. Rosenwinkel; Hibbing, St. Louis Co., no date, 25 pair nesting under bridge, Harriet Micensky.

*Purple Martin*: June 17, Chisholm, St. Louis Co., nests in martin house, Harriet Micensky; Winona, no dates, 17 nests, Sanford Tyler; 10 and 16 nests, Francis Voelker; Homer, no date, 10 nests, Mr. and Mrs. Rihs.

#### CORVIDS:

*Gray Jay*: July 28, Itasca Park, Brother Theodore; Aug. 24, Isabella, Lake Co., many seen by R. Oehlenschlager.

*Blue Jay*: June 7, nest with 3 young, Brother Theodore; July 21, Cass Co., 2 young out of nest, Mr. and Mrs. John Mathisen; July 6-31, Ramsey Co., 3 broods seen by A. C. Rosenwinkel.

*Black-billed Magpie*: Sept. 3, Gonvick, Clearwater Co., many seen by R. Edevold on the Lester Eck farm. Seen in vicinity all summer, and numbers would indicate that they probably bred there.

*Common Raven*: July 21, Hibbing to Ely, several seen, Avifaunal Club; Aug. 24, Ely to Two Harbors, many seen, R. Oehlenschlager.

#### CHICKADEES THROUGH WRENS:

*Black-capped Chickadee*: June 17, Minneapolis, 5 young out of nest, Brother Theodore.

*Boreal Chickadee*: July 19, Hibbing, Adult feeding 2 young out of nest, Harriet Micensky; Aug. 24, Isabella, two seen, R. Oehlenschlager.

*White-breasted Nuthatch*: June 2, Minneapolis, young heard in nest cavity, H. Huber.

*House Wren*: May 19, Vasa, Goodhue Co., nest nearly complete, H. Huber;

June 24, St. Paul, 3 young leaving nest, A. C. Rosenwinkel; July 16, Cass Lake, Cass Co., 5 young in brush pile, John Mathisen; Goodview, no date, 2 nests, Grace Gordon

*Long-billed Marsh Wren*: June 17, Oxlip, Isanti Co., 3 nests with openings and fully lined, W. R. Pieper and R. Huber.

*Short-billed Marsh Wren*: June 9, Mah-nomen Co., 4 eggs, Avifaunal Club.

#### MIMIC THRUSHES THROUGH

##### SHRIKES:

*Mockingbird*: June 24, St. Paul, adult female banded by Mrs. Robert Leach. *Catbird*: Goodview, near Winona, no dates given, nest with 5 eggs, another nest, contents not noted, Grace Gordon. *Brown Thrasher*: Goodview, no date, nest destroyed twice, Grace Gordon; Winona, no date, nest, Grace Dahm; June 9, Clay Co., nest, no eggs, Avifaunal Club; June 16, Ramsey Co., 4 young just out of nest, A. C. Rosenwinkel.

*Robin*: April 17, Ramsey Co., nest half completed, A. C. Rosenwinkel; May 9, St. Paul, 2 young out of nest, A. C. Rosenwinkel; May 17, Minneapolis, 2 young out of nest, H. Huber; May 23, Hibbing, female on nest, Harriet Micensky; June 2, Ham Lake, Anoka Co., 1 young, H. Huber; July, Cass Co., adult at nest, Mr. and Mrs. John Mathisen; Goodview, no dates, 4 nests, one with 4 young, Grace Gordon; Winona, no dates, 2 broods raised, Grace Dahm. *Hermit Thrush*: June 23, Itasca Park, several heard singing, Avifaunal Club; July 21, Hibbing, one heard singing, seen, Harriet Micensky and Avifaunal Club.

*Eastern Bluebird*: Aug. 13, Cass Co., 1 young, Mr. and Mrs. John Mathisen; seven pair nested in Winona area, May and June, Hiawatha Valley Bird Club members.

*Blue-gray Gnatcatcher*: May 16 Vasa, Goodhue Co., building nest out of cobwebs, W. R. Pieper and R. Huber.

*Golden-crowned Kinglet*: July 2, Hibbing, adult feeding young in spruce grove, Harriet Micensky.

*Sprague's Pipit*: May 30, between Felton and Ulen, Clay Co., abandoned, water-filled nest with one egg found, Avifaunal Club; June 9, same area, empty nest found near where female

flushed from ground, male singing high overhead, Avifaunal Club.

*Loggerhead Shrike*: May 30, between Felton and Ulen, Clay Co., nest with 5 young, banded by R. Huber.

#### VIREOS AND WARBLERS:

*Bell's Vireo*: June 30, Reno, Houston Co., Avifaunal Club; July 28, same area, singing male, brought food several times to sumac-wild grape entanglement, apparently nesting, H. and R. Huber.

*Warbling Vireo*: No date given, Cosmos, Meeker Co., 3 young, Richard K. Olson.

*Blue-winged Warbler*: May 19, Vasa, Goodhue Co., abandoned nest with one Cowbird egg, Avifaunal Club.

*Tennessee Warbler*: July 28, Itasca Park, adult feeding one young out of nest, adult also singing, Brother Theodore.

*Yellow Warbler*: Late June, Rollingstone, Winona Co., adult at nest, Mr. and Mrs. J. M. Dahm.

*Black-throated Blue Warbler*: Aug. 24, 2 miles north of Isabella, Lake Co., adult male seen by R. Oehlenschlager.

*Myrtle Warbler*: Hibbing, July or Aug., exact date not given, adult feeding young off the nest, Harriet Micensky.

*Chestnut-sided Warbler*: June 21, Hibbing, nest with 4 eggs, two and a half feet up in raspberry brambles, Harriet Micensky.

*Connecticut Warbler*: June 24, Hibbing, adult singing continuously, Harriet Micensky. She saw it again July 2; July 21, one seen, singing, about 4 miles north of Virginia, Avifaunal Club; Aug. 18, Duluth, one in fall plumage, Avifaunal Club.

*Yellowthroat*: Goodview, near Winona, exact date not given, nest in willows, contents not noted, Grace Gordon.

#### BLACKBIRDS AND ORIOLES:

*Bobolink*: Aug. 1, Wadena Co., one juvenile seen by R. Oehlenschlager.

*Yellow-headed Blackbird*: June 10, Minneapolis, 4 eggs, 4 young, Brother Theodore.

*Redwinged Blackbird*: Goodview, no date given, 4 nests, 2 destroyed, Grace Gordon; June 3, Minneapolis, 3 nests, 3, 4, 4, young, Brother Theodore; May 20, Minneapolis, 5 eggs, H. Huber; June 9, Becker-Mahnommen Co. line, 6 nests, 5, 4, 4, 4, 4, 4, eggs, Avifaunal Club.

*Orchard Oriole*: June 30, Reno, Houston Co., one pair, Avifaunal Club.

*Baltimore Oriole*: June 17, Minneapolis, 4 young out of nest, Brother Theodore; July 10, St Paul, Adult feeding 3 young, A. C. Rosenwinkel; July 15, Cass Co., adult male feeding young, Mr. and Mrs. John Mathisen; Goodview, no date given, 2 nests, Grace Gordon.

*Brewer's Blackbird*: June 9, Becker Co., 6 eggs, Avifaunal Club.

*Common Grackle*: Goodview, no date given, 5 eggs, Grace Gordon.

*Brown-headed Cowbird*: See Blue-winged Warbler.

#### SPARROWS:

*Cardinal*: Goodview, no date given, 2 nests, Grace Gordon; May 19, Goodhue Co., 5 eggs, H. Huber; Winona, no dates, 3 eggs, Grace Dahm; 1 young out of nest, Louis Feiten; 3 immatures at feeders, Grace Dahm.

*Rose-breasted Grosbeak*: May 20, Minneapolis, female on nest, no eggs, R. Glassel and R. Huber; Goodview, no date, 2 nests, Grace Gordon; May 19, Wacouta, Goodhue Co., female on empty nest, H. Huber.

*Evening Grosbeak*: Seen almost daily between July 15 and Aug. 2, near Farm Lake, Ely, Janet C. Green.

*Red Crossbill*: July 21, about 4 miles north of Virginia, one seen and heard, Avifaunal Club.

*LeConte's Sparrow*: July 30, Gonvick, Clearwater Co., one singing adult male and one immature collected, R. Oehlenschlager; Aug. 1, Nimrod, Wadena Co., 2 tailless juveniles collected by R. Oehlenschlager.

*Henslow's Sparrow*: June 30, Winona, 5 "singing," Avifaunal Club.

*Sharp-tailed Sparrow*: June 9, 23, July

30, Becker-Mahnomen Co.'s, singing males present, behaved as if nesting, Avifaunal Club.

*Lark Sparrow*: June 17, Sand Dunes State Forest, Sherburne Co., singing male seen by W. R. Pieper and R. Huber.

*Chipping Sparrow*: May 19, Ramsey Co., nest with 1 egg in 6 foot red cedar, A. C. Rosenwinkel; June, Winona, 2 nests, Mr. and Mrs. Karl Lipsohn.

*Song Sparrow*: June 24, Minneapolis, 4 young out of nest, Brother Theodore.

*Chestnut-collared Longspur*: June 9, between Felton and Ulen, Clay Co., nest with 4 eggs, Bob Janssen.

**SUMMARY:** Approximately 23 observers reported 94 nesting species. After several seasons of writing this report, I am getting a picture of the observers around our state. Each time I get a report from the same few "reliables" plus a scattered few reports from remote areas of the state. Is it not conceivable that I could consistently receive reports from Madison, Bemidji, Walker, Windom, Fargo-Moorhead, Cass Lake, Chisholm, etc.? We have observers in each of these places. And what of you people in Albert Lea and Mankato? Your clubs are listed on the back cover of the *Flicker*, so you must still be organized. One would gain the impression that birders of our state "hibernate" during the nesting season. Without even looking at a checklist, I can think of about 25 common nesting species that were not reported this summer, probably because most birders did not bother to look for them.

*3121 Georgia Ave. So., Minneapolis 26, Minnesota*



# Duck Decor in Western Minnesota



Seventeen species of ducks made the 1962 roll call at Frog Lake, Stevens County, according to Ernest Strubbe of nearby Alberta. "Proof of the pudding" is featured here with twelve of our more famous web-footed friends in full plumage, showing the latest in fall fashions.

Some of the 1962 models stopp lake only long enough to meet M his 1000 mm Questar lens. Other species such as Redhead Teal, Ruddy Ducks and Pintails r



ed on this western Minnesota  
 Mr. Strubbe and get caught in  
 s, Lesser Scaup, Blue-winged  
 nested on Frog Lake, thus be-

coming regular performers for Strubbe's "Summer Stock."  
 Earlier in the spring other species were sighted but were  
 rather elusive in front of the camera. This group included  
 Common Goldeneye, Common Mergansers, Green-winged Teal,  
 American Widgeons, and Black Ducks.

Ken Haag

# THE DULUTH HAWK FLYWAY - 1951-1961

by P. B. Hofslund

Although falconers had been active in the region for some time, it was, as usual, the mass slaughter characteristic of good flyways that focused the attention of Duluth birders on the Duluth flyway. In 1946 the Duluth Bird Club called the attention of the public to this needless slaughter, and even as early as 1949 their efforts bore fruit and shooting was reduced to a relatively insignificant amount. In reality, the full appreciation of the flight did not come until 1951 when the Duluth Bird Club first participated in the Fish and Wildlife Service's hawk migration survey. The first count, held on the second and third weekends of September, totalled 8900 hawks and again when the count was repeated in 1952 over the same weekends, 13,138 hawks were counted.

Since 1952, the second and third weekends of September have become traditional "hawk watching" days in Duluth, but the survey has been extended so that there has been some watching going on throughout the hawk flight period, which here lasts from about the middle of August until the middle of November. This summary covers a total of 657 hours over 123 days, mostly through the months of September and October from 1951 through 1961.

Duluth, a city of some 104,000 people, is built on a series of bluffs which rise gradually to a height of 600 to 800 feet from the shore of Lake Superior. These bluffs provide several lookouts suitable for watching the migration and several of them have been utilized in gathering the data for this paper. However, as we gained experience, it became evident that the flight path was quite narrow and was concentrated in the northeastern section of the city. The superiority of a vantage point located on the Skyline Boulevard above 47th Avenue East has made this spot our chief lookout, and most of the data presented here comes from

this area.

The Skyline Boulevard Lookout is less than four miles from the center of the main business district of Duluth and is above a heavily populated residential section. It has certain advantages other than being an excellent spot for watching hawks. For people who are not inclined to devote any strenuous effort to their bird watching, the spot is easily reached by automobile, and once there, it is not even necessary to get out of the car, for frequently the birds are passing only a few feet from the roadway.

There are exciting things to look at even if the hawks are not flying at a heavy pace. A great variety of birds use the flyway: warblers, fringillids, ducks, geese, cormorants, shorebirds, many Common Ravens; thousands of Blue Jays, Robins, Yellow-shafted Flickers, chickadees, blackbirds, and waxwings may pass through in a single day. Many visitors during a lull in the hawk flight may take the short drive to Minnesota Point, one of our country's outstanding migration focal points, where usually a large shorebird flight is occurring at the same time as the major hawk flight.

The official count for the eleven seasons is 124,836, this total including 15 different species. Such hawks as Gyrfalcons, Swallow-tailed Kites, and Harlan's Hawk are not included in this figure even though they have been reported during fall flights. Gyrfalcons are frequently observed in the Duluth area in the fall, but only one bird was ever identified as such during a regular count period and there was the chance of confusion with an atypical Peregrine Falcon, because none of the observers were sufficiently acquainted with Gyrfalcons to give positive identification. Harlan's and the Swallow-tailed Kite are placed on the hypothetical list, because of their rarity in the northeastern part of Minnesota and we

have only one such unsupported identification in each case.

At least 75% of the total is made up of two species, the Broad-winged Hawks (69,958) and Sharp-shinned Hawks (28,912). The percentage of total for these two species is undoubtedly higher, because most of the 16,386 listed as unidentified were in all likelihood these two species. Of the remaining 13 species, only Red-tailed Hawks (3723), Marsh Hawks (2169), and Sparrow Hawks (1943) have occurred in sufficient numbers to average over 100 individuals a year. Cooper's Hawks (979) and Turkey Vultures (709) are next in frequency, but below this the count drops rapidly: 321 Ospreys, 302 Pigeon Hawks, 214 Rough-legged Hawks, 149 Goshawks, 99 Peregrine Falcons, 51 Bald Eagles, 25 Red-shouldered Hawks, and 14 Golden Eagles complete the count.

As is true for most of the Great Lakes hawk flyways, we expect the greatest numbers to occur somewhere within the second and third weeks of September, but individual species do peak at different times. Broad-winged Hawks peak usually between September 15-21 and 99% are through by the first of October. Between September 29 and October 12 only 33 Broad-winged Hawks have been counted and we have no records of this species after October 12. Sharp-shinned Hawks show a much more level distribution, although there may be two slight peaks, one near the second or third week of September and the other, a smaller peak, between the sixth and twelfth of October. The first peak is made up of immature birds and the second of adults. We have last recorded Sharp-shins (migrating) during the week of October 20-26. Marsh Hawks peak about the week of September 15-21, but they may be seen well into November. Rough-legged Hawks show no appreciable numbers until October and they make up roughly 50% of the November flight. Red-tailed Hawks are seen throughout the count period but their peak numbers have been during the period October 13-19, and they make up the major portion of the No-

vember flight along with the Rough-legs.

Viewers are always looking for the "big" day. For us, a really big day will average 400 or more hawks per hour (A A day) of observation. There have been only eleven of these days in our records, the biggest occurring September 15, 1961 when more than 2228 hawks were counted per hour. Among the 123 observation days, we have had 32 that averaged between 100-400 hawks per hour, (A days) 29 days with an average of 50-99, (B days) and 51 with less than 50 (C days). The lowest count for an eight hour observation period has been 21. There have been no observation periods when we have failed to see at least one hawk even though there were some occasions when the fog was extremely heavy.

This summarizes the eleven hawk seasons, but I would like to speculate on some of the factors that make for a good flight and a good observation post. At the very outset, I must admit that this is an educated guess, because not all of the data possible has been analyzed and that analyzed has pointed out certain shortcomings in our observational method plus a lack of necessary information about other focal points.

The first explanation offered for the focalizing of hawks at Duluth was done by Ross Olson (1952) a falconer from the immediate area. Mr. Olson proposed a continual set of thermals from the Quetico-Superior reservoir to Duluth on which the hawks could literally slide downhill all the way from Canada. He theorized that off-lake winds striking the hills caused declivity currents which produced a vertical velocity that could be used by soaring birds and that similar currents were produced by off-land winds when they struck the colder air above water. Surely these currents and the lake are important, but not in the same way as originally proposed. First of all, easterly winds mean almost no buteos and secondly, although bluffs may be found for almost the entire western shore of Lake Superior, concentrations of buteos apparently do not form along

the shore until the area of Two Harbors, 27 miles north and east of Duluth, is reached.

Mueller and Berger (1961) in their recent summary of the hawk flight at Cedar Grove, Wisconsin believed that the southbound hawk is oriented to a south direction and that with a wind will drift to a bearing determined by the hawk's airspeed and the direction and velocity of the wind. This theory suggests that a migrating hawk does not compensate for this wind drift. This has, I think, certain merits, but it does not answer such cases wherein northeasterly winds bring the greatest concentrations off the east coast, no good flights from a northerly direction (straight north or northeasterly) at Duluth, or observed cases of deliberate alteration of flight by individual hawks. This may be explained, at least in part, by the fact that most observation points are by large bodies of water, which may have a deterrant or *leitlinien* effect as indicated by Mueller and Berger.

As neither of the theories mentioned above answer the conditions we observe at Duluth, at least to our satisfaction, it behooves us to come up with certain modifications.

In order to develop a working hypothesis for either the cause of concentration or general movement of hawks along a flyway, we first have to know where the hawks are coming from. As the bulk of the flight is made up of forest-dwelling birds, we can see by a look at a vegetation map that for Duluth this could mean a source of supply from Alaska to the Atlantic coast. My belief is that our chief source of supply is from the area north and west of Lake Superior. This belief is based on several factors, chief of which are the lack of reports of concentrations along the shore above Two Harbors and the lack of noteworthy flights on northerly or northeasterly winds. Perhaps a point in opposition to this is the lack of many hawks that can be considered as western (Prairie Falcons, Ferruginous Hawks, etc.), but these are prairie birds, and there are the occasional Krider's Red-tails and pos-

sible Harlan's which may be indicators.

I think that it generally has been assumed that these migrating birds are heading due south. I personally believe that the flightline for Broad-winged Hawks east of the Great Plains is to the southwest, toward the Central America - Mexico passageway. This is based on reports of huge concentrations of this species migrating through Mexico, by the apparent angle toward which most of the major flyways lay, and because the movement across Duluth is to the west of south. Most large concentrations of hawks, and in fact most individuals, are first noted almost directly east of the lookout. They move to the west passing near the lookout, or drift southwest along the lakeshore shifting toward the west again as they reach the central part of the city. At least while they are within our view they show no indication of taking a due south direction. Should they move south while in this scope they would move across water either at a point over the narrow southwestern tip of the lake or over St. Louis Bay, or down the narrow strip of land known as Minnesota Point. Incidentally, any concentrations of Broadwings, Sharp-shins, or Red-tails seen in the spring are going over one of these routes, though of course, in a south to north or southwest to northeast direction. This directional tendency could have a certain influence on the flyways further east, but would almost seem to negate any heavy movement at Duluth except along the shore.

Again contrary to the wind drift hypothesis hawks that we observe tack into the wind at an angle of 30-45 degrees (Gunn in 1954 reported 30-90 degrees), and with any shift of wind there has been an immediate response by the hawks. We have noticed also that if there is an apparent difference in wind direction between ground and cloud level, the major movement is at the level in which they can tack into the wind and move in a westerly direction.

I still have a reluctance, however, to toss out the wind drift hypothesis en-

tirely. First, our big Broad-winged Hawk flights occur on winds with a westerly component. Our AA days have all been on winds that averaged between WSW to NNW; A days, S to NW; B, E to NW, and Class C days have occurred on every direction of the compass. It should be further pointed out that fairly large flights occurring on what seem to be unfavorable winds are largely made up of Sharp-shins, and on days when the winds tend to be favorable, but the count has averaged less than 50 per hour, most of them have been very early in the season or after the major flight has already gone through. It could be that these winds are merely associated with the passage of a cold front, which I believe and I think this belief is shared with most hawk-flight observers, is the initiator of the migration. However, if the front is the initiator, the winds surely act as the concentrator. First, they act as Gunn (*op cit.*) has suggested in directing the flight because of the ease in moving in the desired direction and secondly, because of the drift, not of the individual bird, but drift of the thermals.

In order to accept a thermal drift theory, one must accept the theory that thermals are not continuous columns of air, but finite bodies, once formed, free to drift with the prevailing wind. A very fine discussion of this theory is given in the March, 1962 issue of the American Scientist by C. D. Cone, Jr. Warmness of the air is perhaps the usual cause of thermals, but moisture content can be as much in importance. On forested terrain such as the majority of these hawks are starting from, the latter may be most important. This, I think, helps explain how we can get good flights of soaring hawks on days of nearly complete overcast as well as on days of very little cloud cover.

Once the flight has been initiated, the buteonine hawks would tend to move with the thermals as this would be the easiest way to make progress. While rising they would be drifting in an easterly direction with a prevailing westerly wind. The next thermal may

be "sensed" by means of the associated ground breeze after the hawk has left the thermal at its apex and glided in the desired direction as oriented by the prevailing wind. Depending on the distance north and west of the Great Lakes from which the flight has originated, the normal drift would be between the corridor that lies on the south side of Hudson Bay and the north side of the Great Lakes. Once one of the bodies of water were encountered the thermals would be disrupted, so that the birds would not move across the body of water, not because of natural reluctance to cross water, but because it would be easier to follow thermals along its edge. Flocks encountering the northwest shore of Lake Superior would be directed toward Duluth by land configuration as well as the water, the funneling effect being such that the flock would pass over the northeastern section of the city. Those hawks passing north of Lake Superior would hit Lake Huron and would cross over at the Saulte or continue until the effect of Lake Erie and Lake Ontario plus the St. Lawrence was felt, and then would move primarily along the northern edges until funnelled out between Lake Huron and Lake Erie. In addition, this latter path would receive those naturally moving southwest from the northeast reservoir, and therefore, should be, as the accounts indicate it is, the point of greatest hawk concentration.

One other directive effect that I think may operate would be a reluctance to leave forested areas by such birds as the Broad-wings and Sharp-shins in particular. The Great Plains might then be a barrier and so in turn may serve as a guide line toward Lake Superior.

In concluding this discussion I would like to mention other characteristics associated with good days and weather conditions. The westerly component of the winds have already been mentioned; 8 out of 11 AA days have had winds between 10 and 15 miles per hour, the others, two less than 10 miles per hour and one averaged 17.1 m.p.h. A days averaged as high as 20.9 and as low at 2.8 m.p.h. Generally, AA

and A days were associated with a rising barometer. Cloud cover varied from 0 to 10, and temperature from as low as 15 degrees below normal to as high as 20 degrees above normal.

The very character of this paper indicates the necessity for further study on hawk migration and the coordinated efforts of all focal points. At the Duluth flyway we plan to increase our study along some of the lines mentioned in hopes of coming up with answers that have fewer guesses associated with them. *Biology Department, University of Minnesota, Duluth, Minnesota.*

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## SUBURBAN BIRDING

by Mrs. Fred F. Lange

We moved to a home in suburban Minneapolis five years ago. At that time there were few houses in our neighborhood and few trees. Our lots cover about a half acre of flat land and is enclosed by a cyclone fence inside of which were planted shrubs which had been pruned and trimmed to a height of about three feet. There was a small group of Bolleana Poplars in one corner, three evergreen trees in the opposite corner and five other trees precisely set according to a landscaped plan. Two of these trees were soft maples which had been topped so that they resembled tall bushes.

Bird watching had always been one of our favorite hobbies. The situation in which we found ourselves offered a real challenge because of the lack of cover and the prairie-like terrain. We decided to allow the shrubbery bordering the property to grow unrestricted except to prune it as necessary to keep it healthy and shapely. The maple trees we fertilized heavily, and trimmed the lower branches thereby encouraging them to grow taller into clumps of several trunks. We planted nine fast growing trees — three pines,

a Chinese Elm, an American Elm, a Linden, a Horse Chestnut, and two seedless cottonwoods. The shrubbery already planted included Flowering Almond, Red-twigged Dogwood, French Lilacs, Russian Olive, Hawthorn, Honeycuckle, Hydrangea, Juniper, Arborvitae, Mugho Pine and Snowberry. After a winter or two we noticed that the Flowering Almond was disappearing and being replaced by Wild Plum—the graft root surviving the sub-zero weather.

The first winter we put out a bird feeding station and kept it supplied with suet, sunflower seeds, and a cracked corn mixture put up by a local garden center. Our visitors were an undistinguished lot of House Sparrows, Starlings, and two Blue Jays. In the spring we put up houses for House Wrens, Bluebirds and a Robin shelf. Bluebirds sat on the telephone wires but never used a house. However, we did have Tree Swallows who built in the bluebird house having won a battle waged by the House Sparrows, and a House Wren chose a house to his liking. That spring a pair of Chipping Sparrows were our greatest problem

because they threatened any newcomers. When warm weather came to stay, we discontinued the feed in the station. By this time, the shrubbery had grown to a height of six or more feet and we noticed that many American Goldfinches flew in and out. A Catbird built a nest in the most dense part of the shrubbery. The male serenaded his spouse all through the nesting period, perching upon the uppermost branch of a little willow tree which had not survived the winter but which we left standing because he used it as a podium for his recitals.

It was that fall that I heard a Black-capped Chickadee in our neighbor's yard where there are a number of scrub oak trees. Immediately, I filled the feeding station and suspended a fruit jar feeder filled with sunflower seeds. This little bit of encouragement was all that I needed to go to greater lengths. In a coconut shell which my husband had sawed into a basket, I put peanut butter. On a hollow log which we had found somewhere, he embedded two spikes on which we impaled ears of dried corn. We devised a heated bird bath using an electric spotlight surrounded by aluminum foil under a crockery bath top - all fitted into a wooden box. We hung a bird "Diner" - a branch in which we hollowed spaces for tiny nutcups filled with a suet and seed mixture which I made, storing the excess cups in the freezer for future use. The Black-capped Chickadees stayed with us all winter and we enlarged our bird family by having Hairy and Downy Woodpeckers, a White-breasted Nuthatch, and some Slate-colored Juncos.

We attached a shelf to the window-sill of our breakfast room and kept it supplied with the aforementioned goodies and peanuts. Five Blue Jays discovered these morsels and early in the morning while we ate breakfast they swooped down from the maple tree, snatched a peanut and took off, many times hiding their tidbit in the marsh hay which covered the tender perennials in the flower garden. A pair of gray squirrels also visited our station eating the corn from the cob and

the peanuts. We were beginning to see a pattern of balance among our wild friends. The House Sparrows retreated when the Blue Jays appeared, the Blue Jays had a hearty respect for the squirrels. In order to keep the station and feeders more available for the chickadees, woodpeckers, nuthatches, and juncos, we scattered scratch feed at the outskirts of the yard in several places.

That winter we were thrilled to see a flock of Cedar Waxwings use our bird bath and eat the Juniper berries. But the greatest thrill of all was the following summer when a Cardinal landed but a brief moment in our maple tree and was then gone like a flash of fire. We continued to increase our feeders and added several bird baths and began scattering safflower seed for the Cardinal.

The following summer was our fourth year. The shrubbery was now over ten feet high and made a dense screen surrounding our yard. The trees had doubled their height and we planted cosmos, four o'clocks, petunias, and nicotiana to encourage the American Goldfinches and Ruby-throated Hummingbirds. A Baltimore Oriole was interested in a bird bath with a drip fountain under one of the maple trees. To keep him happy we hung a platform feeder holding orange sections on each corner. Soon the female Baltimore Oriole was a regular visitor.

One day as I was cleaning a storage cupboard I found some plum jelly which I had made from our own fruit. Some of it had been cooked too long and the consistency was a bit rubbery. I wondered if the Ruby-throated Hummingbirds would find it and like it if I put it out for them. The coconut basket was hanging from the oriole's tree and into it went the jelly. I had no sooner returned to the house than a Baltimore Oriole was in the basket, feasting on the jelly. Soon his mate shared the treat. The rest of the summer we watched the Baltimore Orioles feed on the jelly, their preferring it to the oranges. When their babies were old enough to fly, the parents brought them and taught them to eat it and

to catch the dripping water from the tube on the bird bath. We tried orange marmalade and plum butter in the coconut feeder but the Baltimore Orioles did not care for it. The plum jelly was so popular that we ran out of it and then bought it from the grocery store.

Early during this season the male Cardinal returned and one day brought his bride to share the safflower seed which he had discovered. Later they brought their babies, a male and a female, to feed on the seed. Late in the day after the House Sparrows had gone to bed we'd scatter sunflower seeds for them.

This winter we have attracted new visitors. Sharing our feeders were Tree Sparrows, Evening Grosbeaks, and a

Purple Finch. A Redwinged Blackbird has stayed with us for reasons unknown.

We have been faithful in keeping the feeders filled and the bird bath open, especially so in cold weather. It is not always easy to take a hike across the yard in windy sub-zero weather to fill the feeders but it is well worth the pleasure we have in watching the birds. The sparrow problem is difficult and constant and one which we have not solved as yet. We have tried to keep them busy in outlying areas so that they do not molest the other birds. We do feel that our experience is proof that anyone can attract birds if he is willing to spend the time and the energy. 8024 W. 25th Street, Minneapolis 26, Minnesota.

## THE CANADIAN LAKEHEAD

by A. E. Allin

Following the severe winter of 1961-62, March had given some relief with a temperature 3.9° above normal. The mean temperature for April was 2° below normal but that for May was 2° above the long-term average. The mean again fell 1.5° below normal during June. After four successive nights of sub-freezing temperatures on May 6, 7, 8 and 9, the area was again subjected to frosty nights on May 21 and June 2 when temperatures fell to 31° and 30° respectively. Due to conflicting systems, the unusually warm wave involving much of Ontario on May 15 missed the Lakehead until May 17 when a record high for that date of 86° was attained. On May 18 it reached only 78° and then remained in the fifties and sixties until early June. Although we were absent from the area during this period, we understand this phenomenon did not effect migration at the Canadian Lakehead to a noticeable extent.

Precipitation for the three months was below normal; the total precipitation of 4.5" compared with a average

of 7.3". Ice conditions were poor for migrating water fowl. Cloud Bay was still frozen on April 29. On May 8, there was still much snow in the forests north of Nipigon. The small lakes were still ice-bound as was much of Thunder Bay.

The period has been an uninteresting one as it pertained to migration and the nesting season. As noted in the June number of *The Flicker*, early migration was delayed for most species although Sparrow Hawks arrived a week earlier than they had previously been recorded. The only heavy movement during April occurred during the three day period April 20, 21, 22, when 21 new arrivals were reported by members of the Thunder Bay Field Naturalists' Club. Wind conditions were generally unfavorable for mass movements throughout the remainder of April and were little better throughout May. There was evidently an acceleration of migration on May 12 and 13 with the reporting of Harris', White-crowned, Clay-colored, and Vesper Sparrows, as well as Cape May,

Nashville and Palm Warblers. There was a very heavy movement of Myrtle Warblers on May 13. It is of some interest to note that the main warbler migration passed through Point Pelee on the north shore of Lake Erie on that week end but locally the heaviest migration was two weeks later.

*Loons, Grebes and Herons*—No doubt the ice-filled lakes retarded the early migration of these birds. Common Loons and Red-necked Grebes were seen on Lake Helen on May 8, at which date most small lakes were still ice-bound. One always wonders how Great Blue Herons find sufficient food when they arrive in April. This year they were first reported on April 8, three days later than the record early of April 5, 1954.

*Swans, Geese and Ducks*—As usual, Whistling Swans were uncommon; two were seen on Lake Superior on April 23 and two on Whitefish Lake on May 6. There was a mass movement of Canada Geese on April 27; for the next few days thousands were reported resting on the ice of Kama Bay, east of Nipigon. A Canada Goose and two Blue Geese were still present locally on May 12. Both Green-winged and Blue-winged Teal were unusually common following their early arrival on April 21. A drake Green-winged Teal seen in Fort William on June 5 is possibly our only summer record for that diminutive duck. Both locally, and as we travelled on our holidays through Eastern Ontario, we felt there was a pair of Blue-winged Teal on every little marsh. Has there been a movement eastward to escape the drought which plagued their western breeding ground in 1961? It is believed such a shift possibly occurred during the dry thirties. We saw a Blue-winged Teal in Neebing Township on July 16 with 7 small downy young, a late breeding record. There were fewer Shovelers than usual. Wood Ducks are rare visitors locally having been reported on only a few occasions. We saw two on Slate River on April 20 and 3 pair on the Kaministiquia River on April 23. Mrs. Peruniak reported one at Atikokan on April 25, six on April 26 and later she establish-

ed a breeding record when she saw a female Wood Duck with two young. Once again we failed to see a Redhead. The two Canvasbacks seen on Thunder Bay on April 19 were our first for many years. Four Common Scoters off Chippewa Park on April 21 (K. Denis) were rare spring visitors. Mrs. Peruniak reported a Common Merganser's nest with 20 eggs at Eva Lake. The Common Goldeneye is usually an early nester. Three broods of young were present in the local harbor on July 10. The one lot were half-grown but the other two broods were composed of small downy young.

Hunting was forbidden in the local harbor in the fall of 1960. This has had two results. Ducks remain in numbers late into the fall. They also appear to be more abundant during the summer months. Several hundred are now present. The majority are Mallards, Pintails, Blue-winged Teal and Common Goldeneyes but there are numbers of Black Ducks. A few American Widgeon, Ring-necked Ducks, and Lesser Scaup are also present.

*Vultures and Hawks*—Pigeon Hawks are again nesting in a Black Spruce in Vickers Park, Fort William. This provides an unusual opportunity to introduce this little falcon to visitors who can observe it at leisure as it perches at the tip of a neighboring Maple drawing attention to its presence by its wild call as the nesting tree is approached. Mrs. Peruniak observed Turkey Vultures at Atikokan on April 20 and May 9 and the Quetico Park naturalist watched 7 soaring overhead on June 7. The Turkey Vultures from Kenora and Rainy River Districts as well as from Northern Minnesota may be the source of those seen flying over Duluth in mid-September. Dr. Lucas reported a Bald Eagle's nest on Lake Nipigon contained one large young in July.

*Grouse to Gulls*—Ruffed Grouse, Gray Partridge, and Sharp-tailed Grouse continue at a low level. The first Spruce Grouse reported from Sibley Park in several years was seen by the Olins of St. Paul in early July. An

American Woodcock was seen by Mrs. Plunkett on April 1, the earliest record for the area. Another was flushed on April 8 and we saw a third on July 8. Upland Plover returned to their breeding grounds on May 5; our earliest previous arrival date was May 7, 1960. A Common Snipe was first heard winnowing on April 30; they were still active on June 8. The Pectoral Sandpiper is a rare spring visitor; one was seen on May 1. We observed a Marbled Godwit and listened to its loud characteristic notes on June 5 and 9. No unusual reports of Gulls or Terns have come to our attention, except the return of Black Terns to Whitefish Lake.

*Doves, Cuckoos and Owls*—A few Mourning Doves again returned to the Hogarth Tree Farm, where we have found them breeding on two occasions. Few Black-billed Cuckoos have been reported locally. Mrs. Peruniak however, saw six in one day and found one nest at Atikokan where there is an incipient outbreak of Tent Caterpillars. Grace Remus found a dead Yellow-billed Cuckoo, in Fort William on June 19 only a 100 yards away from where R. Robb found an injured bird, in 1960. The first record for our area was one taken by R. Ryder in the Black Sturgeon area on September 24, 1958. J. Thompson reported the presence of a Barred Owl. A Long-eared Owl was found dead by H. Rydholm on May 2. Short-eared Owls were seen on April 22, May 1, May 14, and June 14. It has been found breeding here on at least one occasion.

*Whip-Poor-Wills to Woodpeckers*—Whip-Poor-Wills are regularly found on the Oliver Farm, southwest of Fort William. Mr. Oliver reports calling from 3 locations along one ridge. Reports were received this year of Whip-Poor-Wills, south of this area. The Common Nighthawk does not seem as common as usual. Chimney Swifts seem to be reduced in numbers. Mrs. Peruniak reports a Black-backed Three-toed Woodpecker feeding young in a dead conifer near Atikokan.

*Flycatchers, Swallows, Ravens and Crows*—Mrs. W. P. Hogarth saw a Great Crested Flycatcher in Neebing Township in June. This is one of our rarest summer visitors. Bank Swallows are still very scarce. David Allin located a colony of Cliff Swallows with 25 nests at Cloud Bay in June, and in July we found a colony in Ware Township. Common Ravens have been present in small numbers throughout the summer, probably indicating they are now nesting locally. Common Crows commenced feeding in large flocks on open fields in mid-July.

*Wrens, Mimids and Thrushes*—One large colony of Short-billed Marsh Wrens occupies a suitable area within the city limits of Fort William. House Wrens appear to be less common than usual. The Brown Thrasher has recently become a regular but uncommon summer resident. Three have been reported this season. Mrs. Peruniak saw a Catbird at Atikokan. Robins were still feeding young on July 21. Veerys are very common; Hermit Thrushes have made a come-back. Several pairs of Eastern Bluebirds have been reported; at least one brood successfully reached the flying stage.

*Kinglets to Starlings*—Flocks of Starlings were present on April 29, at which time local birds were present in pairs. Large flocks of adults and young were feeding in the fields by early July.

*Vireos and Warblers*—C. E. Garton reported a Yellow-throated Vireo at Dorion on May 26. There have been occasional sight records previously but none has been collected and the species must remain on our hypothetical list. Mrs. Peruniak reported 13 species of warblers summering near Atikokan including Cape May and Bay-breasted. On July 28, she heard 8 Connecticut Warblers in spruce swamps east of Atikokan, and saw a Palm and a Parula Warbler. Those interested in warblers might well plan a summer's intensive study in that region which is now readily accessible. A Black-throated Blue Warbler was seen at Dorion on May 26 as well as in Sibley Provincial Park in June.

*Bobolinks, Meadowlarks and Blackbirds*—A colony of Bobolinks was located in a new area, in Oliver Township in June. Blackbirds were present in great numbers in late April. The majority were Rusty and Redwinged Blackbirds but a flock of 15 Brewer's was seen on April 28. This species now breeds near the Lakehead Airport.

*Finches*—An Indigo Bunting was observed by local naturalists at Middle Falls, Pigeon River on June 16. Snow Buntings were scarce until April 29 when we saw a flock of 100 accompanied by a lone Lapland Longspur. Snow Buntings were still present on May 6 at Whitefish Lake where they were feeding along the borders of the ice fields still present. Numbers of Tree Swallows reconnoitered the same areas. Mrs. Hogarth reported a Grasshopper Sparrow on two occasions in Paipoonge Township. This is another species reported locally on a few occasions, but still on our hypothetical list since none has been collected.

Conservationists in Ontario, including the group in Thunder Bay, continue their efforts to preserve our natural resources for future generations. It is encouraging to note that the Naturalists and Sportsmen are working hand-in-hand. In March there was a suggestion that prospecting would be permitted in our Provincial Parks. The Federation of Ontario Naturalists were prominent in their efforts to prevent this exploitation. However, I believe, it would be fair to give equal credit for the defeat of the proposal to Bob Turnbull who devoted his sports columns in the Toronto Globe and Mail, Canada's most influential daily newspaper, to arousing sportsmen and naturalists to the danger of such a programme. Locally, Bill Love used his

column in the Port Arthur News Chronicle for the same purpose.

The F. O. N. is attempting to collect \$20,000 to purchase land for a nature preserve on the east shore of the Bruce Peninsula which separates Georgian Bay from Lake Huron. Here is a remaining stand of many unusual wild flowers including rare orchids of which *Hobenaria unalascensis* is probably the most unusual. Pete McGillen of the Toronto Evening Telegram supported this project in his Saturday sports columns as did our own Don Salo in the Fort William Times Journal. The latter also gave publicity to the efforts of the Ontario Waterfowl Research Foundation to collect some \$50,000. With this money they would purchase Niska Game Preserve in Southwestern Ontario and provide funds to enable graduate biology students to carry out various waterfowl studies in Ontario. The Toronto Sportman's Show has now contributed \$1,000,000 for conservation projects in Canada. This includes annual grants of \$5,000 yearly to the Federation of Ontario Naturalists without which that organization might well have collapsed. The F. O. N. is now sponsoring a Hiking Trail from Niagara Falls to Tobermory at the top of the Bruce Peninsula. Money to inaugurate this venture has been provided by the Atkinson Charitable Foundation so closely associated with the Toronto Daily Star. These combined efforts of Sportsmen and Naturalists give great satisfaction to this scribe who sees nothing incongruous in the fact he is a Vice-President of the Federation of Ontario Naturalists and a Trustee of the Ontario Waterfowl Research Foundation.—*Regional Laboratory, Ontario Department of Health, Fort William, Ontario.*

## NOTES OF INTEREST

**CATTLE EGRET OBSERVED NEAR VASA GOODHUE COUNTY:** On the weekend of May 12 and 13, 1962 my wife and I, accompanied by Mindy Rotstein, Robert Kaul, and Fred Kedney, all from Minneapolis, went to Frontenac to observe the warbler and shore bird migrating population. On Sunday morning Dr. William Zimmerman of the University of Minnesota, Physics Department and his friend, Betsy Traub from Carleton College, joined us at Frontenac after they had driven from Northfield via highway 19 to Redwing. He mentioned seeing a bird near Vasa he had never seen before and he asked us what type of egret it might have been that he saw. He described its size being about one-half the size of a Great Blue Heron, its bill and legs being yellow, and its plumage being all white except the breast and crown having a rusty tinge.

This description of his "new bird" certainly aroused our interest so later in the day we accompanied Dr Zimmerman back to the egret's pond. We arrived at the pond about 4:00 P.M., approximately six hours after the egret was seen by Dr. Zimmerman. The Cattle Egret was clearly visible from the road, standing at the margin of a small pond. The pond was about twenty feet in diameter, about one hundred and fifty feet from the edge of the pasture along the highway. The field was quite flat except for the small depression holding the pond. The pond was also about one hundred and fifty feet from the buildings on the Stanley W. Swanson farm yard. The egret had chosen an environment which was very active with humans, machinery, and automobile traffic.

The egret did not fly while it watched seven people get out of the two cars which parked about two hundred feet away from it, but remained in the short growth of cattails at the pond's margin. For about twenty minutes after we arrived the Cattle Egret stood fairly motionless facing us from the opposite side of the pond while we stayed near the road. His back was to the wind which was blowing about ten to twenty miles per hour from the south and this wind caused his ventral feathers to blow forward between his legs and his crown feathers to come up over his head.

Dr. Zimmerman remarked that when they observed the egret during the morning, it was feeding on earthworms which were abundant after the heavy rain during the previous night. About 5 minutes after we arrived I noticed a large amphibian which was bobbing in the water several feet from the egret. About thirty minutes after we arrived the egret suddenly seized the amphibian. The amphibian was now easily seen to be a very large toad, almost the size of the egret's head. The egret walked to a portion of the field about thirty feet from the pond. As it progressed to this feeding site, it repeatedly dropped the toad. At first the toad dropped into the water, and later it was dropped many times on land. The egret would pick the toad up by a leg or by grasping the trunk of the toad. When the egret finally reached the feeding site, a grassy level of the pasture, the egret began to do a more thorough job of killing its prey. It seemed to be breaking the body into a limp mass which could be more easily swallowed. The toad was dropped and many rapid-fire stabs were made into the toad as the egret apparently used its beak as a spear in a closed mandible position. After about twenty to thirty stabs into the toad which took place within five minutes, the egret seized the toad by the anterior end, raised its head to a swallowing position, and began to gulp down the toad. The toad's body disappeared but its legs still protruded. The toad was dropped again and another stabbing session began. This attempt to swallow and coughing up the toad again, followed by the repeated stabbing, occurred twice. On the third attempt the toad was swallowed. The egret's neck straightened out, the lump in

its throat slowly disappeared, and the egret made a couple more stabs at the ground where the toad had been repeatedly dropped. The egret then returned to the pond. *Vincent A. Heig, University of Minnesota, Minneapolis, Minnesota.*

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**FIRST BLUE GROSBEAK SPECIMEN FOR MINNESOTA:** Another bird may now officially be added to the list of birds that have been seen within the borders of our state. This recent addition to the list is the Blue Grosbeak. Four of these handsome visitors were seen on June 6, 1961 by Delbert Johnson and me in southwestern Minnesota in Rock County near the village of Beaver Creek. One male and two females were observed along the side of a gravel road in a patch of the past season's growth of nettle and giant ragweed. A little farther down the road we found a dead male which apparently had been killed by a car. I prepared a skin of this specimen which is now in the collection at the Minnesota Museum of Natural History. *Bertin W. Anderson, Luverne, Minnesota.*

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**SWAINSON'S HAWK IN DULUTH:** In Duluth the fall season is the expected time to see unusual hawks among the thousands that use this famous flyway. However, this spring, on April 12, 1962, I identified a Swainson's Hawk — the first one reported here. About 7:00 a.m. on a clear bright morning I was observing ducks in the Saint Louis River at Fond du Lac, south of Duluth, when I noticed a hawk perched near the top of a dead tree that stood above the willows that line the river. It was about 2,000 feet away (distance calculated by using a 1:24,000 topographic map) and I observed it carefully with the 15x and 30x objectives of a spotting scope for about three minutes as it remained perched in the tree facing me. With the sun at my back, the light conditions were excellent and I was able to see the dark brown head and wings, brownish breast and the contrasting light belly with reddish brown streaks — the plumage characteristics of a typical Swainson's Hawk. As I watched, it left the tree and glided down behind the willows and I did not see it again. In the few seconds it was visible in flight, it showed its back to me and it appeared uniformly dark. *Janet C. Green, 1923 Greysolon Road, Duluth 12, Minnesota.*

\* \* \*

**UNUSUAL GULL OBSERVATIONS IN DULUTH:** On April 30, 1962, after an unusually good morning of bird-watching on Minnesota Point, Duluth, I stopped in back of Clem's Service Station on the Point at about noon to see if I could see any Bonaparte's Gulls in the gull concentration on the southwest side of Harbor Island. Using the 15x objective of the spotting scope I soon located three Bonaparte's Gulls and then noticed a fourth gull with a dark head that was different. It was swimming in the water near the Bonaparte's Gulls and I was able to see them both in the scope at the same time and observe the contrast. This gull was larger, had a darker mantle, and the black of the head came further down toward the nape of the neck than on the Bonaparte's Gull. Using the 30x and 60x objectives I was able to see its red bill, white eye-ring

and rosy tinge to the breast. The sky was completely overcast. There was little glare off the calm harbor so using the high-power objective was possible. I watched the gull for about fifteen minutes as it swam off the shore of Harbor Island about 800 feet away. I concluded that it was a Franklin's Gull and since this species had never been recorded in Duluth before, I telephoned Dr. P. B. Hofslund. He was unable to come down immediately so I walked back to observe the gulls some more. The Franklin's Gull had moved up onto the sand bar at the end of the island, 1000 feet away, with the other gulls (I had counted 121 Herring Gulls and 187 Ring-billed Gulls). As I watched, I noticed near it a large gull, partially obscured by an immature Herring Gull, that seemed to have a black back. When the Herring Gull finally moved, I found myself looking at a beautiful adult Great Black-backed Gull. The larger size of its bill and its body in comparison to the Herring Gulls was very obvious as was its black mantle. I have seen many Great Black-backed Gulls on both coasts of the North Atlantic but seeing this one in Minnesota was a great thrill. I watched it for about five minutes with the spotting scope and then phoned Dr. Hofslund again. This time he was able to get a ride down to the Point with my husband. However, almost immediately after I got back to the shore and before they arrived, the Great Black-backed Gull flew. I watched it as it climbed fairly high and headed south toward the Wisconsin side of the harbor and disappeared from sight. Also just before my husband and Dr. Hofslund got there, the sun came out and the resulting glare made it difficult for them to identify with certainty the Franklin's Gull which by this time was partially obscured by a log. As we were looking at it, all the gulls took off upon the approach of a fishing boat and when they landed again, I was not able to find the Franklin's Gull among them. However, we did get a boat and explore the shore of Harbor Island, but did not see either the Franklin's Gull or the Great Black-backed Gull. Nor have they been seen since, in spite of diligent checking of the gull concentrations on Minnesota Point. *Janet C. Green, 1923 Greysolon Road, Duluth 12, Minnesota.*

\* \* \*

**COMMON GRACKLE FEEDING ON FISH:** On Memorial Day I was standing on the bank of the Zumbro River at the Mantorville dam, Dodge County. Three different times a female Common Grackle flew up to the dam and slid down the water to a ledge at the bottom. There was a school of 300-400 minnows swimming back and forth on the face of the lower end of the dam. The bird would make a grab for a minnow and fly off to a perch and eat it. While Common Grackles eat bugs and insects I didn't know they included fish in their diet.—*Forest V. Strnad, 21 Third Street S.W., Chisholm, Minnesota*

\* \* \*

**SOME COMMON RAVEN RECORDS FOR CENTRAL AND SOUTHERN MINNESOTA:** On October 3, 1959, while driving along U. S. Highway No. 10, approximately three miles south of Little Falls, Morrison County the senior author noted a large bird feeding on carrion near the adjacent railroad tracks. It appeared to be too large for a Common Crow and closer study with 6 x 30 binoculars proved it to be a Common Raven. Another record for central Minnesota was provided for me by Game Biologist Bernard Fashingbauer who reported sighting Common Ravens later that month near the Carlos Avery Game Refuge near Anoka, Anoka County.

The southernmost record we have was obtained by the junior author. This was a bird killed during the 1959 duck hunting season in Martin County. This bird was taken the weekend of October 23 and 24, approximately 13 miles southeast of Fairmont. It was shot while flying near the southwestern end of East Chain Lake. The head of the bird was obtained from Mike Wolters of East Chain and is without a doubt that of a Common Raven.

While this species is not uncommon in northern Minnesota and various nesting records from northeastern Minnesota have appeared in the Flicker during recent years (southernmost in Carlton County, reported by Robert Eng, *The Flicker* 30(1):39-40), the Martin County record appears to be the most southerly appearance reported. This location is only about two miles from the Iowa line. The only other record I can find from extreme southern Minnesota is that reported by Dr. Roberts (*Birds of Minnesota*, 1936, Vol. 2, p. 68) of a bird reported killed near Pipestone "many years ago".—*Edmund A. Hibbard and Richard J. Kramer, Biology Dept., St. John's University, Collegeville, Minnesota*

\* \* \*

**NOTES ON AN UNREPORTED HERON ROOKERY:** As a project for the ornithology class at Mankato State College during the spring of 1962, we made a study of a heron rookery located on Lake Jefferson in southern LeSueur County. This rookery, covering approximately four acres, is in a dense stand of mature elm, maple and basswood trees, on a narrow peninsula protruding into the lake.

Observations were begun in late April, at which time the Great Blue Herons had already arrived. A count of active nests was made before the trees had leafed out. A total of 388 nests in 57 trees were found with as many as 22 nests being found in one tree. Most of the nests were between 40 and 50 feet above the ground. No young Great Blue Herons were visible as late as May 21. On a visit to the rookery on June 26 numerous nestling birds could be seen.

Six nests occupied by Common Egrets were observed. Later in May there seemed to be an increase in the egrets but an accurate count was impossible because of the density of the foliage.

As far as we know this is the first time a count of the herons in this rookery has been made. The owner of the land states that the size of the rookery seems to have increased annually over the past six years.—*Darrell Richter and Roger Banwart, Mankato State College, Mankato, Minnesota*

\* \* \*

**NOTES FROM THE HIAWATHA VALLEY BIRD CLUB OF WINONA:** The one-year old Hiawatha Valley Bird Club of Winona held its first annual (we hope) checkup on about 75 bluebird houses that were put up during a time of hip-deep snow last March. Boxes were put up on Prairie Island, Aghaming Park along the river, hillsides and back roads; the results were not too encouraging. Occupying the boxes were about 40 House Wrens, 1 Black-capped Chickadee, 1 deer mouse and 6 Eastern Bluebirds. All the rest of the boxes were smashed by vandals or were empty. Most of the House Wrens had 6 or 7 eggs or fledglings. The Black-capped Chickadee had 6 young.

One mistake that was made was that many boxes put up in winter in what appeared to be open spots were by summer time completely overgrown with tall weeds and underbrush. We would like to put up more bluebird houses nearer to roads and open pastures, but what does one do about vandalism?

The Hiawatha Valley Bird Club has been having bird hikes every Wednesday at 5 o'clock under the direction of Francis Voelker and have seen interesting birds like Scarlet Tangers, Orchard Orioles, Yellow-headed Blackbirds, many water birds. One Wednesday evening Marius Morse, Naturalist of Whitewater State Park, was host to the club at a supper picnic, bird walk and evening bird movies. He pointed out to us in the park the nest of a Peregrine Falcon (rare so far south) that has been occupied for four years; also some Cliff Swallows, a large colony, that are now living under a park bridge. This year these swallows have changed their habitation three times. They left their natural home when boys kept destroying their mud nests with rocks, then had to leave their second home under a bridge when the Whitewater River rose and destroyed the nests, and now they are living under another bridge.

Can anyone explain this performance reported by a reliable St. Paul woman? Recently she and her husband scattered moth balls around some young shrubs to keep ravenous rabbits away. It didn't help one bit. But one morning she and her husband heard a terrific chattering of birds in the back yard. There they saw 7 or 8 blackbirds picking up the mothballs in their bills (not eating them) and rubbing them under their wings, down their necks and around their bodies. They looked very much like human beings applying soap during a bath..

Incidentally, bird lovers are always especially welcome in Whitewater Park and will find much of interest just poking around or joining one of Marius Morse's morning bird or nature walks.—Mrs. Gretchen Lambertson, Winona, Minnesota.

\* \* \*

ACTIVITY AT A PHOEBE NEST: On June 17, 1956, I made a dawn-to-dusk record of the feeding activities of a pair of Eastern Phoebes at Lake Itasca, Minnesota. The nest of these birds contained three eggs and two newly hatched young on June 9 and five young on June 10. On June 12, one of the adults was observed to make 15 consecutive trips to anthill. On June 14, when one nestling was found dead on the ground below the nest; one adult (assumed to be the female) made 29 feeding trips to the nest in a 2-hour period; her mate made 17. On the eighth day after the first young hatched, the parent's trips to the nest totalled:

4- 5 A.M.	27	8- 9 A.M.	40	12- 1 P.M.	25	4- 5 P.M.	26
5- 6 A.M.	44	9-10 A.M.	41	1- 2 P.M.	8	5- 6 P.M.	28
6- 7 A.M.	48	10-11 A.M.	26	2- 3 P.M.	10	6- 7 P.M.	45
7- 8 A.M.	41	11-12 A.M.	20	3- 4 P.M.	14	7- 8 P.M.	17

On June 18, the birds made 52 trips between 7 and 8 P.M. Dragon flies were now being brought in by (what I took to be) the male who would pound them on a concrete area before taking them to the nest. The first bird to fledge from this nest did so on June 24, the fledging period thus requiring 14-15 days. The clutch of four eggs in the second nest of this pair was completed by July 4.—John Conrad Christ, Division of Science and Mathematics, Nebraska State Teachers College, Peru, Nebraska.

## BOOK REVIEW

A BLACK BEAR'S STORY by Emil E. Liers. Illustrated by Ray Sherrin. The Viking Press, New York. 192 pp. \$3.00.

This is the third of Emil Liers' nature stories for children. The other two are "An Otter's Story" and "A Beaver's Story." Mr. Liers is well known as the "Otter Man", because of his trained Otters, which have performed for audiences in the United States and Canada, and for visitors to his home near Winona, Minnesota.

In "A Black Bear's Story", Mr. Liers presents the interesting facets of the natural history of Black Bears by telling the story of a mother bear, Kobota, two of her own cubs, Anong and Anoki, and an adopted cub, Paji.

The story begins shortly after the young are born. The young are born in January or February. The relatively small size of Black Bear cubs (less than a pound) is emphasized. They are born during the winter lethargy of the female and Mr. Liers refrains from calling this winter lethargy hibernation. Many biologists feel that the term, "hibernation", should be limited to only those mammals whose metabolism changes more drastically than the Bear's. Mr. Liers goes on to describe the changes which occur in the young as they grow and subtly brings out the fact that black or brown, they are the same kind of bear. With the warmth of spring, the female leaves the den and she and the cubs begin their wanderings in the Superior National Forest, the setting for this story.

In detailing their travels, Mr. Liers weaves in not only much information about Bears, but also much natural history information about other animals, as well as plants. Some of this information is presented through stories of the Bears' encounters with the animals, both friends and enemies.

I include among their friends, the cub's father (Koda) whom they meet very briefly. The point is very well brought out that the male takes no part in rearing of the young, yet he holds a special relationship to them, which the cubs feel but do not understand. There are those who may criticize this as being anthropomorphic. I think we are living in an era when anthropomorphism is not the anathema to zoologists it was twenty years ago. But of greater importance to me is what Mr. Liers did accomplish — that was to remove the Black Bear's behavior from human standards. To children it is right that the father belongs with the family. Yet in this story it seems just as right that the father did not remain with the family and human standards are not transposed to other animals.

Suspense and drama are provided by describing the family's encounters with such hazards as high water, Timber Wolves and Man, either as kidnapers (Cubnappers?) or killers.

Opportunities to relate natural history information are provided by animals and their activities which the Bears see in their wanderings (not always aimless). The Great Horned Owl, Ruffed Grouse, Chickadee, Otter, Fisher, White-footed Mouse and White-tailed Deer are among the other animals that enter into this story.

I do not agree with the author's reason for the Fisher's immunity to Porcupine quills. He wrote "But the Fisher has an invisible armor against the porcupine's quills - a tough, plastic-like membrane under the skin." Neither I nor others who have skinned Fishers have noted this. I suspect many animals occasionally attack Porcupines — Timber Wolves, Bobcats, Lynxes and Great Horned Owls. The results may be disastrous, but none of these animals consider the final consequences. The immediate pain may be proportional to their hunger at the mom-

ent. I am also puzzled when the author describes the drumming sound of Ruffed Grouse as being produced by "cupping his wings and clapping them slowly at first, then faster and faster." If "clapping" means clapping the air, the description is suitable. If "clapping" means bringing the wings together (like hand clapping), this the Ruffed Grouse does not do. These are minor criticisms.

The relationship between Bear's and Man's activities as for instance, at garbage dumps, are discussed (from the Bear's viewpoint). The point is rightly made that for the best interests

of both Man and Bear no effort should be made to entice Bears by feeding them. In other words "Leave wild things wild."

There is a wealth of natural history information in this book, and it is not limited to the Black Bear. I think children will get a very good understanding and feeling for the wilderness from reading this book; so will adults, who might have to read it to children.

*Harvey L. Gunderson*

*Minnesota Museum of Natural History*

*University of Minnesota*

*Minneapolis 14, Minnesota*

# *The Flicker*

VOLUME 34

DECEMBER, 1962

NUMBER 4



PUBLISHED QUARTERLY BY  
**THE MINNESOTA ORNITHOLOGISTS' UNION**

PERMANENT ADDRESS  
MUSEUM OF NATURAL HISTORY  
UNIVERSITY OF MINNESOTA  
MINNEAPOLIS, MINNESOTA

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## THE FLICKER

Organ of the *Minnesota Ornithologists' Union*. Published quarterly in March, June, September, and December. *The Flicker* is sent to all members not in arrears for dues. Dues for members: Active, \$3.00, Sustaining, \$5.00; Life, \$50; Patron, \$100 or more. All articles and communications for publications should be sent to the editor. Subscriptions, memberships, and requests for back issues should be sent to the treasurer.

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### FRONT COVER

Photograph of a Hooded Warbler by Murray Olyphant. The bird had just been removed from a trap used for banding purposes by the Olyphants. (See Notes of Interest)

## THE PRESIDENT'S PAGE

It is always heartening to see an organization set goals for its members which are beyond their immediate grasp. I feel that action taken at the annual Paper Session business meeting of the M.O.U. at the Minnesota Museum of Natural History, December 1st will be a great booster for the morale of those who want to see our organization grow.

One project voted for was to have the President appoint a Committee to purchase land surrounding Salt Lake in Lac Qui Parle County, Minnesota. This lake is a typical prairie lake and many species of shore birds and prairie land birds are to be found in this area. The purpose of purchasing the immediate land surrounding the lake is to provide a place where research and study may be carried on by the University of Minnesota, the Minnesota Department of Conservation or individuals interested in this type of habitat. If such land is not set aside now it will some day be drained and lost forever to the future generations. We hope that the South Dakota Ornithologists' Union will be able to take similar action and thus secure land in that state so that all the land surrounding this lake may be preserved for research and study.

Members of the committee appointed by your President are, Dana Struthers, Chairman, Minneapolis, Goodman Larson, Minneapolis, and Dr. George N. Rysgaard, M.D., Northfield. These men are authorized to collect and expend money, for the above mentioned project, from M.O.U. members, interested conservation groups and other interested individuals. May I encourage you to send in your contribution to the chairman or any of the members at your earliest convenience. I am sure that a report of their work will probably be carried in a future issue of THE FLICKER and certainly they will have a report to the members at the next December meeting.

A second project approved was to begin work on a new check list of birds of Minnesota. It has been many years since the Minnesota list has been brought up to date and many new birds have moved into our state and are considered summer visitors or residents or winter transient visitors now.

With this project under way we will need the cooperation of every careful observer through the state of Minnesota. We will need to have your carefully recorded field notes. Some of the things you need to record about the birds of your locality are:

Name of species	Spring migration dates	Breeding population density
Status of species	Exact location	Fall migration dates
Habitat	Nesting dates	Maximum counts.

To help you in this work you might like to read, *A Guide To Bird Watching* by J. Hickey; "Leisure Time Study of Birds," Orwin A. Rustad, FLICKER, September 1956, pp. 105-115, or write to Drs. W. J. Breckenridge or Dwain W. Warner at the Minnesota Museum of Natural History on the University of Minnesota campus, Minneapolis 14, for further suggestions.

We should remember that bird populations differ around the state so that what is a common nesting bird in one area of the state may be a rarity in other parts of the state. This is especially true of summer residents and transient winter visitors. There is a great need for careful study of bird populations in very area of our state by the people who live there.

Factors which affect bird populations is the movement of people from the city to the suburbs, changing practices in farming, draining of our wetlands and the establishment of new refuges and impounding of new water supplies. All these will either eliminate some species or encourage others to come into these areas.

With this new project as a starter we might be able to work into the larger project of a revision of Robert's, "*Birds of Minnesota*." If you are willing to help with this latter project send your records to the Editor, Robert B. Janssen who is heading up this project.

During 1963 we will bring out a roster of membership in the March issue of *THE FLICKER*. The Policy Committee planned for this this year but the work of compiling the list could not be undertaken in time. The editor would appreciate hearing from you about the value of this roster to you.

Good birding to you in the months ahead. We hope we will hear from you in regard to these proposed projects for 1963.

*Forest V. Strnad*

## NORTH SHORE FIELD TRIP

This year the annual winter field trip meeting of the Minnesota Ornithologists' Union and the Thunder Bay Field Naturalists' Club will be held at Grand Marais on the 16th and 17th of February.

The field trip will leave Duluth at 9:00 a.m. on Saturday, February 16th from the Lester River Bridge on London Road (Highway 61) at the northeast end of the city. Along the North Shore of Lake Superior participants can hope to see such winter birds as Oldsquaw, Glaucous Gull, Common Raven, Gray Jay, Northern Shrike and some winter fringillids as well as perhaps Bohemian Waxwings. Invasions of Goshawks and Hawk-Owls were noted in the area in late fall this year and might be present in unusual numbers during the winter.

The dinner and meeting will be held Saturday evening at 5:00 p.m. in the Grand Marais High School. This year's program will be furnished by the Duluth Bird Club. Reservations for the dinner should be made with Mrs. A. M. Fenstad, Grand Marais, Minnesota. Cost of the dinner is \$2.00. This is an informal meeting so come in your field clothes if you like.

Hotel reservations at Grand Marais may be made at either the East Bay Hotel or the Shoreline Motor Lodge. Remember that this is at the height of the skiing season so hotel reservations should be made well in advance. If you belong to a M. O. U. affiliate club, consult your local chairman for further details or write to Mrs. Harvey Putnam, 1407 Woodland Ave., Duluth, Minnesota.

# OBITUARY -- ARNOLD B. ERICKSON

1909 - 1962

All who knew Arnold Erickson were saddened on learning of his passing April 4, 1962 after a brief illness.

Dr. Arnold Burton Erickson was born in Minneapolis on September 15, 1909, the son of Mr. and Mrs. Arvid Erickson. He attended public schools in Minneapolis and subsequently the University of Minnesota where he earned his B. S. degree in 1935, his M. A. degree in 1937, and his Ph. D. degree in 1942. In 1944 he was married to Ellen Elizabeth Wilson. Two children were born to them—a son, Rolf Arnold, and a daughter, Ruth Ann.

Dr. Erickson joined the Minnesota Department of Conservation as a Game Biologist in 1939 and, with the exception of a year in 1945-46 with the United States Public Health Service in Georgia, he devoted his entire career to this department. He was promoted to Game Research Supervisor in 1952, and during his 10 years in this capacity he directed an active and productive research program.

Although Dr. Erickson's prime interest was in the field of wildlife parasitology, he was a keen student in many branches of the natural sciences and had a scholarly interest in the American and English classics. He was recognized as an authority in the field of game parasitology and wrote some twenty articles on this subject. At the time of his death he was engaged in the preparation of publications on North American Game Parasites and the Beaver in Minnesota. Dr. Erickson's most recent publication, in collaboration with other wildlife experts, was a monographic study entitled "White-tailed Deer in Minnesota," a report which summarized the results of a twenty-year study of this species.

Arnold was an active field ornithologist as his many publications indicate, and his studies of the Common Snipe prompted Leslie M. Tuck of the Cana-

dian Wildlife Service to write, "Your work (on the snipe) is by far the most important being done in North America." His editorial and organizational capabilities are well evidenced in the completeness and clarity of his field study publications. He was no compromiser, and he spared no effort in pursuing all facets of a problem. All who worked with him benefited from his generous understanding and counsel.

To the best of my knowledge, Arnold joined the Minnesota Bird Club in 1934 and accompanied the then relatively small group of enthusiasts on a Christmas vacation field trip to Frontenac and the Carimona-Lanesboro area. These field trips were memorable events and strong friendship bonds were created. Arnold continued as an active member of the bird club and later served four terms as president. With the organization of the Minnesota Ornithologists' Union, Arnold became one of its strongest supporters. He served as its president in 1957, and he served as editor of *The Flicker* for a longer tenure than anyone else in the organization. He was first elected to the position of editor in 1939 and continued his service in this capacity through 1944. During 1941 and 1942 he shared the editorship with George N. Rysgaard and Charles Reif, respectively. Unless one has been intimately associated with the labors and trials of editing and publishing a journal under severe financial restrictions, one cannot appreciate the problems and actual physical labor involved. For several years, to pare expenses, the linotype work for *The Flicker* was done at a commercial print shop, and the heavy galleys of type were then transported to the St. Paul Vocational School in Arnold's car and carried up several flights of stairs to the printing department where the pages were composed and the press work done. During the war

years when there was a dearth of manuscript material, Arnold somehow managed to maintain the quality of *The Flicker*.

Arnold was a charter member of the Wildlife Society and a member of Sigma Xi, American Society of Mammalogists, American Society of Parasitologists, Minnesota Academy of Science, and the American Ornithologists' Union. He is listed in the *American Men of Science*. In 1950 he was awarded one of three Honorable Mentions from the Foundation for the Study of Cycles for the period from 1944-1947 for his paper "Helminth Infections in Relation to Population Fluctuations in Snowshoe Hares" published in the *Journal of Wildlife Management*. In 1961 he received the Distinguished Conservation Service Award of the Minnesota Division of the Izaak Walton League. The Minnesota Award established by the Minnesota Section of the Wildlife Society was presented, posthumously, in 1962 for his outstanding contribution to the profession of wildlife management.

The M. O. U. members will miss Arnold in many ways. They will miss his willing acceptance of the difficult task, his calm and understanding in debate, his scholarly contributions and above all, his humble friendship to all who came to know him. *G. N. Rysgaard, Northfield, Minnesota.*

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## ARRESTED PASSERINE MIGRATION AND KILL AT LAKE SUPERIOR

by Janet C. Green

It is usual for the first big wave of spring passerine migrants to reach Duluth sometime during the second week of May and the spring of 1962 was no exception. However, a combination of weather further south favorable for migration and unfavorable local weather conditions produced unusual numbers of grounded migrants as well as a large kill of birds washed up on the Lake Superior shore of Minnesota Point.

From the 7th of May, 1962 until the 15th of May the winds in Duluth were easterly and the city was blanketed in fog. The fog was most persistent and thickest near Lake Superior and was

accompanied by intermittent rain and drizzle as well as an occasional thunder shower. During the first part of this period, from the 7th through the 11th, marine tropical air flowing north from the Gulf of Mexico was blocked in the middle Mississippi Valley by a stationary front that hovered around Missouri. On the 12th this front began to move northward and by the 13th was north of Minneapolis. The night of the 13th-14th it reached a point halfway between Minneapolis and Duluth where again it remained stationary for a day and a half.

In response to the northward movement of this warm air the first wave

of migrants reached Duluth the night of the 13th-14th. They were heard moving on Minnesota Point during the night and the next day thousands of warblers, sparrows and thrushes were grounded there. Myrtle Warbler, Palm Warbler, Ovenbird, Magnolia Warbler and American Redstart were the most numerous warblers but nine other warbler species were observed; most of these were first arrivals. White-throated Sparrows and Chipping Sparrows were the most numerous of all passerines but Slate-colored Juncos, Clay-colored Sparrows, White-crowned Sparrows and Lincoln's Sparrows were also abundant. Hermit Thrushes, Veeries and Swainson's Thrushes were common and a few other species were noted by first arrivals. The visibility on Minnesota Point was only about 500 feet but most of the birds, including the warblers, were on the ground and could be approached very closely (to within a couple of feet sometimes). It was not necessary to move about much to see hundreds of birds and tens of species, and I did all my observing along the grassy edge of the brush-covered dune at the bay side of the Recreation Center. In this spot during an hour and a half I counted 36 passerine species of which 19 were first arrivals for the Point which I visited every day. I did not go to the beach on the Lake Superior side of the Point that day.

Minnesota Point was not the only area where the migrants were concentrated. Birds were conspicuous all over the residential parts of the city. On the 14th my husband, Dr. John C. Green, counted 32 passerine species during a mile walk which he took almost daily during the spring; 18 of these were first arrivals for his area. Around our house we observed 31 passerine species during that day.

During the night of the 14th-15th the fog continued to cover Duluth and light to moderate rain accompanied by thunder occurred from about 10:00 p.m. to 2:00 a.m. As the warm front finally moved through Duluth, the overcast and fog lifted. At the U. S. Weather Bureau station at the airport, six miles

back from Lake Superior, the clearing started at 6:00 a.m. when the last fog was reported and was complete at 9:00 a.m. However, on Minnesota Point the fog, which reduced visibility early in the morning to about 200 feet, persisted until 11:00 a.m. As the warm front passed, the wind shifted to the south and the temperature rose to a maximum of 83°, 14° above the previous day's maximum.

On Minnesota Point on the morning of the 15th the birds were as thick, if not thicker, than the day before. With the exception of Magnolia Warbler, American Redstart and Slate-colored Junco which decreased in number, the same species as the day before were the most numerous. However, more species (a total of 46 passerines) were recorded. Since much more time was spent observing on the 15th, it is hard to say whether this represents an actual increase in the birds present. The warblers were as tame as the day before (in fact I picked up a Black and White Warbler that did not appear to be injured), but they were feeding on the sandy beach on the Lake Superior side.

While watching the warblers on the beach, I noticed that there were many dead birds scattered along the sand. In the afternoon I returned and picked up and identified all the dead birds along a 3400 foot stretch of beach in front of the Recreation Center. A total of 43 species of birds and one species of bat were identified. These species, together with the total number of individuals of each species plus those unidentified, are listed in the table at the end of this paper. They were distributed along the beach in two strand lines. The birds in the higher strand line were not as soaked as those in the lower one, probably because they had had a chance to dry out. The lower line probably represented those being washed up by the waves at the time the collecting was done. The lake was almost calm and a few birds were seen in the water.

It is assumed that these birds had been killed while migrating on the

night of the 14th-15th, possibly by hitting severe weather conditions in a thunder storm over the lake. The stretch of beach at this southwestern tip of Lake Superior is nine miles long, including both the Minnesota and Wisconsin parts. If the dead birds were distributed all along the beach, and a check of other points on the Minnesota side indicated that they were, then about 5,500 birds were killed and washed up on the beach. 1923 *Greysolon Road, Duluth 12, Minnesota.*

TABLE showing number of each species found dead on the Lake Superior beach of Minnesota Point, Duluth, May 15, 1962.

Species	Number
Sparrow Hawk	1
Sora	2
Yellow-bellied Sapsucker	1
Empidonax Flycatchers	11
Red-breasted Nuthatch	2
House Wren	65
Brown Creeper	1
Winter Wren	5
Short-billed Marsh Wren	20
Brown Thrasher	1
Robin	1
Hermit Thrush	2
Swainson's Thrush	1
Golden-crowned Kinglet	1
Ruby-crowned Kinglet	4

Solitary Vireo	6
Red-eyed Vireo	1
Black and White Warbler	8
Golden-winged Warbler	1
Orange-crowned Warbler	3
Nashville Warbler	23
Parula Warbler	1
Yellow Warbler	1
Cape May Warbler	1
Magnolia Warbler	13
Myrtle Warbler	17
Black-throated Green Warbler	2
Blackburnian Warbler	4
Chestnut-sided Warbler	3
Bay-breasted Warbler	2
Palm Warbler	5
Ovenbird	25
Northern Waterthrush	4
Yellowthroat	6
American Redstart	3
LeConte's Sparrow	7
Chipping Sparrow	14
Clay-colored Sparrow	2
White-crowned Sparrow	1
White-throated Sparrow	51
Lincoln's Sparrow	17
Swamp Sparrow	12
Lapland Longspur	1
Unidentified warblers	16
Unidentified sparrows	14
Unidentified passerines	9
Total birds	391
Silver-haired Bat	3

## MY REVOLUTION WITH THE HOUSE SPARROW

by Alan R. Fiers

I thought that it was back in 1776 when the problem with the British was settled; but, believe me, they are still invading my back yard. Back in 1850 some of those pesty birds slipped by the immigration authorities and began their infiltration tactics. Before long these outlaws had increased until they were found in every middlesex, village and town. They became such a nuisance that by 1898 the state of Michigan, for example, had paid out nearly \$50,000 in bounty on the blighters, but their ranks kept moving forward.

Then to prevent the slaughter of our feathered friends the U. S. Legislature in 1913-14 passed the Weeks-McLean Bird Law, which was ratified in 1916 between the United States and Great Britain to protect migratory insectivores and game birds as well as a number of others. In 1918 this became the Bird Treaty Act which in 1936 included Mexico also.

Now all this treaty business didn't have any bearing on my private war because neither the House Sparrow or the Starling came under this law. Not

having any large sum of money to spend on their eradication as Michigan did, I spent a couple of dollars on some  $\frac{1}{2}$  inch mesh hardware cloth (screen wire) and proceeded to make a trap. (See diagram) I knew exactly how to make it because, as a boy, I recalled the "Ag" man in Olmsted County setting such a trap in our yard at Rochester. In those days we had a sparrow factory, a barn with horses, right next door and we were kept busy emptying the bread baited trap.

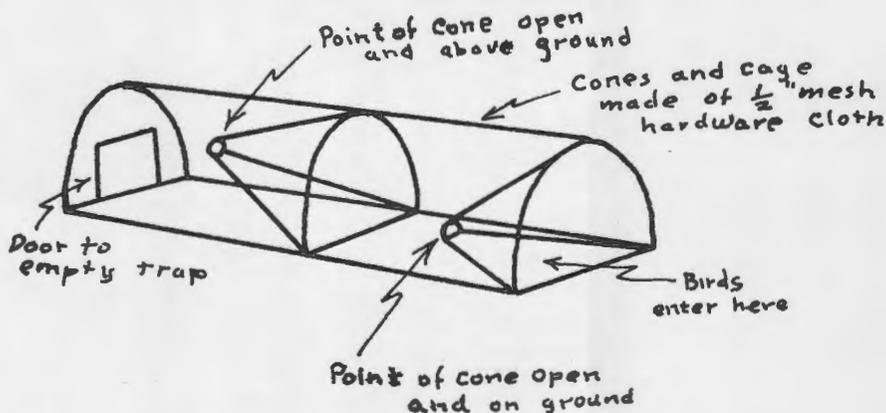
Now when my wife and children saw what I was up to, they immediately objected to my killing these poor unprotected birds, so I compromised. I suggested we carry them some distance away and released them. This appeased the Pro-British factions of the family.

I wanted to be sure that the rascals would not come back, so it was necessary to identify them. I decided against banding when I spotted a can of silver spray paint in the garage as I was putting the captives in the trunk of the car. I took the first contingent of prisoners about a mile from the house, sprayed some stripes or spots on each, and let the jailbirds go. As I suspected, like drowned kittens, one of them beat me back home and in a day or two the others followed. I tried going farther and farther noting that after I passed the three mile limit they did not come back. After that I released about a hundred sparrows 10-15

miles out to be safe, and unless they found some paint remover they never returned.

Disposing of from 2 - 20 House Sparrows and an occasional Starling each day got to be quite a chore. However, when the family saw all the new varieties of birds that came because of the reduced opposition, they consented to let me kill the intruders. The easiest and most humane way to dispose of them was to set the trap by the car exhaust and cover it with a canvas. After about two minutes and a trip to the garbage can I was done for the day. By trapping intermittently over the last two years I disposed of about 300 House Sparrows and a few Starlings.

I think it is impossible to really eliminate the pests, they are like molecules of air — you take some away and others come to take their place. But as long as I keep trapping the native birds are able to get a foothold once again in their homeland. I like to think that the feathered friends of my backyard battlefield consider me their ally, and when I see the Purple Martins take renewed vengeance against the enemy I am sure they do. Only two protected birds have wandered into the trap since the war began — a Baltimore Oriole and a House Wren both of which were promptly released. 7238 Queen Avenue S., Minneapolis, Minnesota.



# THE FALL SEASON

by Ronald L. Huber

*Weather:* September and October were approximately normal, although October fluctuated between warmer-than-usual and colder-than-usual temperatures. The monotonous rains which plagued summer campers finally relented during September and October. In early November some snow fell on northern Minnesota but this was soon melted away. The day after Thanksgiving (November 23), heavy snow snarled traffic in southern Minnesota with some areas getting as much as seven inches. At this time, northern Minnesota was still brown. Then a record-breaking warm spell melted the snow in the southern part of the state, leaving all of Minnesota brown. On December 2, several friends and I made the Avifaunal Club's usual early-December trip to Baudette, Lake-of-the-Woods County, on the Canadian border. Imagine our surprise to find shirt-sleeve temperatures (plus 50 degrees Fahrenheit) and no snow! This report covers September through early December, but a few August reports, which were turned in late, are included because they are of interest.

## LOONS AND GREBES:

*Common Loon:* Last observed Nov. 18, north shore L. Superior, Janet C. Green, and Nov. 17, Lake Harriet, Minneapolis, Hennepin Co., Bob Janssen.

*Red-throated Loon:* Oct. 31, Lester River, Duluth, St. Louis Co., one in fall plumage, Bob Janssen; Dec. 6, same place, same plumage, Janet C. Green.

*Red-necked Grebe:* Nov. 10, Pleasant Lake, Ramsey Co., A. C. Rosenwinkel; Dec. 6, Lester River, Duluth, Janet C. Green.

*Western Grebe:* Sept. 2, Lake Traverse, Traverse Co., adult feeding young, R. Grant; Oct. 6, Frog Lake, Stevens Co., Avifaunal Club, five seen.

*Pied-billed Grebe:* Dec. 15, Winona, Winona Co., Brother Theodore.

## PELICANS AND CORMORANTS:

*White Pelican:* Sept. 8, Tiger Lake, Carver Co., 200 seen, Avifaunal Club; Sept. 8, Titlow Lake, Sibley Co., 300

seen, Avifaunal Club; Oct. 6, Lake Traverse, 500 seen, Avifaunal Club; Oct. 17, Two Harbors, Lake Co., 1 seen, Mrs. R. A. Kuchta; Oct. 20, Minnesota Point, Duluth, 1 seen, John Green; Dec. 1, latest date, Lac Qui Parle Refuge, 1 seen, Arlin C. Anderson (refuge manager) and Avifaunal Club members. (See Notes of Interest)

*Double-crested Cormorant:* last report, Oct. 30, Lac Qui Parle Lake, Lac Qui Parle Co., John Bitter.

## HERONS, EGRETS AND BITTERNS:

*Great Blue Heron:* latest dates; Dec. 2, Mud Lake, Traverse Co., R. Grant; Dec. 4, Cedar Ave. Bridge, Minneapolis, H. Huber; Dec. 15, Winona, Brother Theodore.

*Green Heron:* Oct. 6, Lake Traverse, Avifaunal Club; last report, Oct. 12, Ramsey Co., A. C. Rosenwinkel.

*Common Egret:* Oct. 6, Lake Traverse, Avifaunal Club; Oct. 6, Lac Qui Parle Lake, Richard K. Olson; Oct. 21, Ramsey Co., 2 seen, A. C. Rosenwinkel.

*Black-crowned Night Heron:* Oct. 6, Frog Lake, Avifaunal Club; latest date, Nov. 11, Mud Lake, 40 seen, R. Grant.

*American Bittern:* latest date, Oct. 13, Felton, Clay Co., R. Grant.

*Least Bittern:* Sept. 8, Swan Lake, Nicollet Co., 2 seen, Avifaunal Club.

## DUCKS, GEESE AND SWANS:

*Whistling Swan:* Last seen in Duluth, Nov. 7, P. B. Hofslund; last week of Nov., Marsh Lake, Lac Qui Parle Co., Arlin C. Anderson; Nov. 18, Bass Pond, Hennepin Co., 119 seen by Bob Janssen.

*White-fronted Goose:* Seen for several weeks up until Nov. 26, Lac Qui Parle Refuge, Arlin C. Anderson.

*Snow and Blue Geese:* Several large flocks, Dec. 7, Lac Qui Parle Refuge, Arlin C. Anderson and Avifaunal Club members.

*Green-winged Teal:* latest dates, Dec. 4, Black Dog NSP Plant, Dakota Co., H. Huber saw 17; Dec. 15, Winona, Brother Theodore.

*Blue-winged Teal:* Nov. 16 (exceptional) Frog Lake, E. Strubbe saw three. (See Notes of Interest)

*American Widgeon*: Dec. 1, Minneapolis, Avifaunal Club; Dec. 1, Lac Qui Parle Refuge, Arlin C. Anderson and Avifaunal Club members; Dec. 2, Ramsey Co., A. C. Rosenwinkel.

*Shoveler*: last report, Nov. 24, Duluth, 1 female, Avifaunal Club.

*Greater Scaup*: Oct. 29, Duluth, 10-20 seen, Janet C. Green; Nov. 6, Duluth, about 175 seen, Janet C. Green.

*Ruddy Duck*: Nov. 23, French River, St. Louis Co., winter male, R. Oehlenschlager; Dec. 2, Lake Calhoun, Minneapolis, Bob Janssen saw three.

*Oldsquaw*: Oct. 29 and Nov. 2, Minnesota Point, Duluth, 1 male, Janet C. Green; Nov. 18, four seen along north shore of Lake Superior, Janet C. Green; Nov. 23, near Two Harbors, Lake Co., 1 male, R. Oehlenschlager.

*White-winged Scoter*: Oct. 28, Two Harbors, 3 seen by Dr. Gerald Church; Oct. 29, Duluth, Janet C. Green; Nov. 3, Duluth, Janet C. Green and Avifaunal Club members; Nov. 18, Grand Marais harbor, Cook Co., 3 seen by Dr. A. E. Allin; Nov. 17, Two Harbors, 12 seen, Dr. Gerald Church.

*Surf Scoter*: Oct. 19, Two Harbors, 5 females or immatures seen by Dr. Gerald Church; Oct. 20, Lake Vermillion, St. Louis Co., specimen taken by E. Wolverton.

*Common Scoter*: Oct. 15, Two Harbors, 4 females or immatures seen by Dr. Gerald Church; Oct. 19, Duluth, 1 female or immature, Janet C. Green; Nov. 3, Duluth, 1 female or immature, keeping company with above species, Janet C. Green and Avifaunal Club members; Nov. 5, Wolf Lake, Becker Co., 2 females collected by H. Penner; Nov. 18, Encampment Forest, Lake Co., P. B. Hofslund.

*Harlequin Duck*: Nov. 3, French River, St. Louis Co., 3 females seen by John and Janet C. Green and Avifaunal Club members; Nov. 23, same area, one female seen by R. Oehlenschlager. (See Notes of Interest)

#### **VULTURES, HAWKS AND EAGLES:**

*Turkey Vulture*: Sept. 6, Duluth, K. Hankins; Sept. 14, Duluth, 16 seen by Janet C. Green; Oct. 9, Duluth total of 7 seen by P. B. Hofslund and/or Janet C. Green; last report, Oct. 18, Duluth, Janet C. Green.

*Goshawk*: This and several other northern species made unprecedented

invasions of Minnesota this fall. First one, an immature, seen Sept. 24, Duluth, Janet C. Green; seen all during Sept. with peak for that month on Sept. 30, when 6 were seen. Immatures made up about half of total seen during September; during Oct., 90% or greater were adults; numbers moving through increased consistently thru-out Oct. with peak for that month occurring on Oct. 30 when 169 were counted at Hawk Lookout, Duluth, in 3 hour period (P. B. Hofslund, Janet C. Green); latest report, Nov. 3, one seen at Two Harbors dump, Lake Co., Avifaunal Club; another seen near Isabella, Lake Co., same date, Avifaunal Club.

*Swainson's Hawk*: Only fall report, Sept. 2, Brown's Valley, Traverse Co., R. Grant, 2 seen.

*Ferruginous Hawk*: Nov. 5, Mud Lake, 1 immature seen on ground and flying, studied carefully at 100 yards through 20X scope, R. Grant.

*Red-shouldered Hawk*: Oct. 13, Breckenridge, Wilkin Co., one adult moving south, R. Grant.

*Golden Eagle*: Oct. 12, Carlos Avery Refuge, Anoka Co., 2 seen by Brother Theodore; Oct. 16-18, Duluth, total of 2 adults, 2 immatures seen, P. B. Hofslund.

#### **Bald Eagle:**

all fall, Lac Qui Parle Refuge, several, Arlin C. Anderson

Aug. 27, Duluth, St. Louis Co., Ralph McCarthy.

Sept. 13-23, Duluth, 4ad, 2imm, P. B. Hofslund.

Oct. 2, Duluth, 1 imm., Janet C. Green.

Oct. 4, Lake Traverse, 1 imm., R. Grant.

Oct. 5, Hibbing, St. Louis Co., Forrest Strnad.

Nov. 17, Salt L., Lac Qui Parle Co., 1 ad., Avifaunal Club

Nov. 24, Wabasha, Wabasha Co., 1 imm., Bob Janssen.

Nov. 24, Maple Springs, Wabasha Co., 2 ad., Bob Janssen.

Dec. 8, Washkish, Beltrami Co., 1 ad., Avifaunal Club.

Dec. 8, Leech L., Cass Co., 2 ad., Avifaunal Club.

*Prairie Falcon*: Dec. 2, White Rock, on Minnesota-South Dakota line, north of Lake Traverse, one studied for 10

minutes at close range, black axillars clearly seen when bird flushed, R. and L. Grant.

*Peregrine Falcon*: Sept. 14-26, Duluth, to Two Harbors, total of 6 seen, P. B. Hofslund, Janet C. Green and Dr. Gerald Church.

#### GALLINACEOUS BIRDS:

*Wild Turkey*: Sept. 19, about 9 miles west of Minnesota-South Dakota line, near Big Stone Lake, adult female and 6-8 young seen by R. and L. Grant; The South Dakota Dept. of Agriculture has introduced them in recent years in the western part of South Dakota. This is apparently first record for eastern part of that state and perhaps indicates an eastward spread. If such be the case, the Turkey can eventually be looked for in western Minnesota (Big Stone, Lac Qui Parle, Traverse Counties).

*Spruce Grouse*: Nov. 3, Teamster Lake, about 10 miles NW of Isabella, Lake Co., 1 female on road, Avifaunal Club.

*Greater Prairie Chicken*: Nov. 13, Nimrod area, Wadena Co., R. Oehlenschlager.

*Sharp-tailed Grouse*: Dec. 8, near Washkish, Beltrami Co., Avifaunal Club.

*Bobwhite*: Nov. 24, Wabasha, 8 seen, Dr. D. G. Mahle.

*Chukar*: Nov. 1, Ely, St. Louis Co., small flock, Bob Janssen.

*Ring-necked Pheasant*: Sept. 9, Ramsey Co., a very late brood of 7 young, a few weeks old, A. C. Rosenwinkel.

*Gray Partridge*: Nov. 17, near Dawson, Lac Qui Parle Co., Avifaunal Club; Sept. 2, near Marietta, Lac Qui Parle Co., 10 seen, R. Grant.

#### CRANES AND RAILS:

*Sandhill Crane*: Sept. 20, Duluth, 6 seen, Karl Hankins and Janet C. Green; Oct. 6, west of Rothsay, Wilkin Co., about 40 seen, Avifaunal Club; Oct. 8, Two Harbors, 1 seen, Dr. Gerald Church. (See Notes of Interest)

*Sora*: Sept. 8, Swan Lake, Nicollet Co., Avifaunal Club; Sept. 19, Madison, Lac Qui Parle Co., R. Grant.

*Virginia Rail*: Sept. 8, Swan Lake, Avifaunal Club.

#### SHOREBIRDS THROUGH ALCIDS:

*Piping Plover*: Aug. 30, Duluth, one seen, Janet C. Green.

*Killdeer*: latest reports, Dec. 2, Salt

Lake, Lac Qui Parle Co., R. Grant; Dec. 15, Winona, one seen by Brother Theodore.

*American Golden Plover*: Nov. 6, Duluth, Janet C. Green; Nov. 17, Salt Lake, Lac Qui Parle Co., Avifaunal Club.

*Black-bellied Plover*: latest report, Nov. 3, Duluth, Avifaunal Club.

*Ruddy Turnstone*: latest date, Oct. 5, Duluth, Janet C. Green.

*Lesser Yellowlegs*: latest report, Nov. 17, Beardsley, Big Stone Co., Avifaunal Club.

*Pectoral Sandpiper*: latest report, Nov. 11, Blackdog NSP Plant, Dakota Co., Avifaunal Club.

*Dunlin*: latest date, Nov. 11, Blackdog NSP Plant, Dakota Co., in company with above species, Avifaunal Club.

*Buff-breasted Sandpiper*: Sept. 13, Duluth, O. A. Finseth.

*Dowitcher, species (?)*: Aug. 25 and Sept. 2, Salt Lake, Lac Qui Parle Co., several seen, did not call, R. Grant; Sept. 7, Salt Lake, one, did not call, Richard K. Olson.

*American Avocet*: approximately third week in Oct., sizeable flock at Salt Lake, Lac Qui Parle Co., seen by Goodman Larson of Conservation Dept.

*Glaucous Gull*: Nov. 23, Two Harbors, Lake Co., R. Oehlenschlager; Dec. 6, Knife River, Lake Co., one adult, Janet C. Green.

*Franklin's Gull*: two late reports, Oct. 26, Martin Co., flock of 50-60 following plow, A. C. Rosenwinkel; Nov. 5, Mud Lake, Traverse Co., 5 seen, R. Grant.

*Common Tern*: latest report, Oct. 13, L. Traverse, 4 seen, R. Grant.

*Dovekie*: Nov. 5, specimen taken near Grand Rapids, Itasca Co. Second Minnesota specimen.

#### CUCKOOS THROUGH

##### HUMMINGBIRDS:

*Yellow-billed Cuckoo*: Sept. 16, Ramsey Co., A. C. Rosenwinkel, last report.

*Snowy Owl*: Nov. 18, Faribault, Rice Co., 1 seen, Orwin Rustad

Nov. 3, Duluth, St. Louis Co., 1 seen, Mrs. D. J. Gazett

Nov. 10, Duluth, 1 seen, J. K. Bronoel

Nov. 18, Knife R., Lake Co., 1 seen, Janet C. Green

Dec. 16, Christmas Lake, Carver Co., 1 seen, Mrs. Herz

Nov. 21, St. Paul, Ramsey Co., 1 seen, observer?  
Nov. 22, Mud Lake Traverse Co., 2 seen, R. Grant  
Nov. 26, Plainview, Wabasha Co., 1 seen, Dr. D. G. Mahle  
Late Nov., Lac Qui Parle Refuge, 1 seen, A. C. Anderson

**Hawk-Owl:**

Oct. 26, 20 mi S International Falls, 1 seen, Ray Naddy  
Oct. 27, 20 mi N Duluth, 2 seen, J. K. Bronoel  
Oct. 27-28, general Duluth area, 8 seen, Lester Magnus  
Oct. 29, Duluth, 1 seen, Ray Naddy  
Oct. 29, Chisholm, St. Louis Co., 1 seen, Forest Strnad  
Oct. 31, Murphy City, Lake Co. 1 seen, R. B. Janssen  
Nov. 3, general Duluth area, 3 seen, Lester Magnus  
Nov. 3, Murphy City, Lake Co., 1 seen, Avifaunal Club  
Nov. 3, Greenwood L., Lake Co., 1 seen, Avifaunal Club  
Nov. 4, Mud Lake, Traverse Co., 1 seen, R. Grant  
Nov. 4, Hovland, Cook Co., 1 seen, Mrs. Sundquist  
Nov. 8-18, Ely, St. Louis Co., 1 seen, Mrs. Prigatel  
Nov. 10-25, Hibbing, St. Louis Co., 1 seen, Mrs. Micensky  
Nov. 13, Cass Co. near Nimrod, Wadena Co., 1 seen, R. Oehlenschlager  
Nov. 16, Wawena, Itasca Co., 1 seen Ray Naddy  
Nov. 10-18, Mahtowa, Carlton Co., 1 seen, E. C. Myhre  
Nov. 17, Duluth area, 3 seen, Lester Magnus  
Nov. 17, Wabasha, Wabasha Co., 1 seen, Bob Janssen  
Nov. 18, Mineral Center, Cook Co., 1 seen, Dr. A. E. Allin  
Nov. 18, Duluth area, 1 seen, Anne K. Arndt  
Nov. 23-24, Cass Co., to St. Louis Co., 12 seen, R. Oehlenschlager  
Nov. 24, Finland, Lake Co., 1 seen, Janet C. Green  
Nov. 24, Murphy City, Lake Co., 1 seen, Janet C. Green  
Nov. 24, Isabella, Lake Co., 1 seen, Janet C. Green  
Nov. 25, Duluth area, 1 seen, Anne K. Arndt

Nov. 26, Twig, St Louis Co., 1 dead, Stephen Haase  
Dec. 2, Beltrami/Lake-of-the-Woods Co.'s, 9 seen, Avifaunal Club  
Dec. 8, Beltrami/Lake-of-the-Woods Co.'s, 6 seen, Avifaunal Club

A letter from Dr. A. E. Allin, dated Nov. 26, states that there were also four records from the Canadian Lake-head region by that date. He also said, "It would seem that this was the biggest flight of Hawk-Owls in recent decades. This is a happy thought as only a few years ago, it was considered that the Hawk-Owl had become very scarce, and until the last two or three years, we had not had a flight and rarely saw an individual since the winter of 1938-1939." Avifaunal Club records, notes of interest in recent *Flickers*, and information in *Birds of Minnesota* (1936) would seem to indicate that this owl is, in limited numbers, a permanent resident of northern Minnesota, and can be seen every winter in small numbers. An increase in these numbers (5-10 reports) such as we had about three years ago, probably constitutes a minor invasion which precedes by 1-3 years the large-scale invasion, such as we have this year. The Hawk-Owl invasion this winter, like the Goshawk invasion, is probably without precedent in Minnesota.

*Great Gray Owl:* Oct. 27, one trapped near Duluth by Ross Olson, seen by John G. Hale, photographs seen by Janet C. Green and the Huber brothers; Dec. 8, near Washkish, Beltrami Co., one seen by Avifaunal Club.

*Long-eared Owl:* Oct. 17-20, Duluth, one, P. B. Hofslund; Oct., Duluth, two trapped at game farm, D. Meyer.

*Short-eared Owl:* Oct. 24, Duluth, one, P. B. Hofslund; Dec. 2, Traverse Co., total of 13 seen, R. Grant.

*Saw-whet Owl:* Oct., Duluth, one trapped at game farm, D. Meyer.

*Ruby-throated Hummingbird:* Sept. 24, Ramsey Co., A. C. Rosenwinkel; Oct. 6, Duluth, P. B. Hofslund; Oct. 13, Orr, St. Louis Co., Nels Hervi.

**WOODPECKERS THROUGH SWALLOWS:**

*Yellow-shafted Flicker:* latest dates, Nov. 17, Salt Lake, Lac Qui Parle Co., Avifaunal Club; Dec. 11, Shakopee, but in Carver Co., R. Huber.

**Red-shafted Flicker:** On Sept. 19, one with very red wing-and-tail-linings seen near Nimrod, near the Wadena-Cass Co. line—may have been a hybrid. The following day, in the same area, R. Oehlenschlager collected a typical Yellow-shafted Flicker which had three red feathers in the left "whisker-mark," another hybrid specimen for Minnesota.

**Red-bellied Woodpecker:** This handsome resident of SE Minnesota continues to wander northward and westward across our state. A letter from Lowry Elliott of Milbank, South Dakota, dated December 7, mentions a Red-belly coming to the feeder of A. H. Riss, one mile inside the Minnesota line from South Dakota, and in Lac Qui Parle County. Perhaps an even more interesting record was a specimen found dead at Walker, Cass County in mid-November and brought to Mr. H. R. Hanson for identification.

**Yellow-bellied Sapsucker:** last report, Oct. 20, Ramsey Co., A. C. Rosenwinkel.

**Black-backed Three-toed Woodpecker:** date? Gull Lake, Brainerd, Cass Co., reported to John Pratt

Sept. 15, Encampment Forest, Lake Co., 1 female, John Pratt

Oct. 13, Encampment Forest, Lake Co., 1 male, John Pratt

Oct. 31, Murphy City, Lake Co., 1, Bob Janssen

Nov., First Wk., Encampment Forest, 1, Myrtle Penner

Nov. 5, Knife R., Lake/St. Louis Co. line, specimen brought to Duluth taxidermist for identification.

Nov. 15, Two Harbors, Lake Co., 1, Mrs. R. A. Kuchta

Dec. 3, Beltrami Co., near Washkish, 1 female, R. Huber

Although 1-2 reports per year of this species are usually received, eight reports over a four-month period might indicate a mild southward movement. Any correlation with the Hawk-Owl-Goshawk invasion?

**Northern Three-toed Woodpecker:** Dec. 3, 5.3 miles south of Washkish, Beltrami Co., R. Huber, D. Dorn, Bill Littke. One adult male seen in close proximity with the above species in a Black Spruce-White Cedar swamp. A note of interest on this most detectable of Minnesota woodpeckers

will appear in the future issue of the *Flicker*.

**Eastern Phoebe:** Oct. 1, Duluth, Janet C. Green; Oct. 6, Frog Lake, Stevens Co., Avifaunal Club.

**Least Flycatcher:** Oct. 6, Ramsey Co., A. C. Rosenwinkel; Oct. 6, Frog Lake, Stevens Co., Avifaunal Club.

**Tree Swallow:** last report, Oct. 6, Frog Lake, Stevens Co., Avifaunal Club.

**Barn Swallow:** same as for Tree Swallow.

#### CORVIDS THROUGH WRENS:

**Gray Jay:** Oct. 8, Virginia, St. Louis Co., 8 seen by Vera F. Barrows; Nov. 3, Lake Co., 10-15 seen, Avifaunal Club, very tame; Dec. 3, 8, near Washkish, Beltrami Co., Avifaunal Club.

#### **Black-billed Magpie:**

Last week Nov. Lac Qui Parle Lake area, 1 seen, Arlin C. Anderson

Dec. 3, 9 mi N Tamarac R., Beltrami Co., 1 seen, Avifaunal Club

Dec. 3, 16 mi N Tamarac R., Lake-of-the-Woods Co., 1 seen, Avifaunal Club

Dec. 3, 33 mi N. Tamarac R., Lake-of-the-Woods Co., 1 seen, Avifaunal Club

Dec. 8, 4 mi SW Washkish, Beltrami Co., 1 seen, Avifaunal Club

Dec. 15, 4 mi E Nimrod, Wadena Co., 1 seen, R. Oehlenschlager

**Boreal Chickadee:** Aug. 14, Hibbing, St. Louis County, Harriet Micensky;

Sept. 25 and 30, Hibbing, Harriet Micensky; Nov. 1, Hibbing, Forest Strnad;

numerous reports during all seasons of the year indicate that Mrs. Micensky has a "monopoly" on these brown-capped little fellows.

**Tufted Titmouse:** Another SE Minnesota resident which, like the Red-bellied Woodpecker, has been spreading across our state. A recent letter from Lowry Elliott reports that he banded one at Big Stone City, South Dakota, just across the Minnesota border, on Nov. 27.

**House Wren:** last report, Oct. 6, Frog Lake, Stevens Co., Avifaunal Club.

**Winter Wren:** Oct. 5, Duluth, Janet C. Green; Dec. 1, Dunroven, Washington Co., Brother Theodore.

**Rock Wren:** Oct. 28, near Dalton, Ottertail Co., one clearly seen at close range by Bob Janssen. Third Minnesota record. (See Notes of Interest)

## MIMIC THRUSHES

### THROUGH SHRIKES:

*Brown Thrasher*: last report, Oct. 27, Ramsey Co., A. C. Rosenwinkel.

*Hermit Thrush*: latest report, Nov. 10, Ramsey Co., A. C. Rosenwinkel.

*Swainson's Thrush*: last date, Oct. 19, Duluth, Anne K. Arndt.

*Veery*: last date, Oct. 22, Lake Jane, Washington Co., Jane Olyphant.

*Ruby-crowned Kinglet*: last dates, Nov. 10, Ramsey Co., A. C. Rosenwinkel, Nov. 15, Lake Jane, Washington Co., Jane Olyphant.

*Bohemian Waxwing*: Oct. 30, Duluth, 4 seen, Janet C. Green; Nov. 23, Isabella area, Lake Co., 3 small flocks, R. Oehlenschlager.

*Northern Shrike*: Oct. 31, Chub Lake, Lake Co., R. B. Janssen; Dec. 8, Kelliher, Beltrami Co., Avifaunal Club. Both species of Shrike seem scarce this fall.

### VIREOS AND WARBLERS:

*Solitary Vireo*: last date, Oct. 6, Duluth, P. B. Hofslund.

*Orange-crowned Warbler*: last date, Oct. 6, Ramsey Co., A. C. Rosenwinkel.

*Nashville Warbler*: last reports, Oct. 7, Ramsey Co., A. C. Rosenwinkel;

Oct. 12, Duluth, P. B. Hofslund, Ramsey Co., A. C. Rosenwinkel; very

*yellow Warbler*: last report, Oct. 4, Ramsey Co., A. C. Rosenwinkel; very few October dates for Minnesota.

*Magnolia Warbler*: last report, Oct. 7, Duluth, Anne K. Arndt.

*Myrtle Warbler*: Last reports, Oct. 27, Two Harbors, Lake Co., Dr. Gerald Church; Nov. 4, Ramsey Co., A. C. Rosenwinkel.

*Chestnut-sided Warbler*: last date, Oct. 4, Ramsey Co., A. C. Rosenwinkel.

*Bay-breasted Warbler*: Oct. 1, Duluth, Janet C. Green; Oct. 20, Morris, one seen, R. Grant (very late).

*Pine Warbler*: late date, Oct. 6, Lac Qui Parle State Park, Richard K. Olson.

*Palm Warbler*: latest dates, Oct. 13, Duluth, P. B. Hofslund; Oct. 27, Ramsey Co., A. C. Rosenwinkel; Nov 10, NSP Blackdog Plant, Dakota Co., Avi faunal Club.

*Northern Waterthrush*: Sept. 26, Ramsey Co., A. C. Rosenwinkel, last date.

*Mourning Warbler*: last date, Sept. 30, Ramsey Co., A. C. Rosenwinkel.

*Yellowthroat*: latest dates, Oct. 7, Ramsey Co., A. C. Rosenwinkel; Dec. 15, Winona, one seen by Brother Theodore (exceptional).

*Yellow-breasted Chat*: A record to end all records: on Oct. 15, Harding Huber found a chat flying around inside the Dunwoody Institute basement in Minneapolis. He tried to capture it for banding purposes and on several occasions he was close enough to almost grab the bird bare-handed. The chat finally escaped through an open window, however. This occurred on the last day of a week-long warm spell with southerly winds that undoubtedly brought some migrants back north again. The following day, however, a week-long cold spell began, quieting insect activity and probably affecting the demise of many of these late-lingering warblers.

*American Redstart*: last date, Oct. 10, Ramsey Co., A. C. Rosenwinkel.

### BLACKBIRDS AND ORIOLES:

*Bobolink*: last date, Sept. 30, Ramsey Co., A. C. Rosenwinkel.

*Eastern Meadowlark*, Dec. 15, Winona, Brother Theodore.

*Brewer's Blackbird*: latest dates, Nov. 13, Duluth, Mrs. S. N. Erickson; Nov. 16, Shakopee, R. Huber; Dec. 14, Shakopee, R. Huber.

*Orchard Oriole*: Aug. 24, Benson, Swift Co., R. Grant; Sept. 3, Ramsey Co., A. C. Rosenwinkel.

### SPARROWS AND FINCHES:

*Cardinal*: Like the Tufted Titmouse and Red-bellied Woodpecker, the Cardinal is extending its range across our state, perhaps even more quickly than the other two species. The Conservation Dept. station at Washkish, Beltrami County, about 30 miles south of Baudette and the Canadian border, reports that they had several Cardinals there this past summer. H. R. Hanson reports one at a feeder in Walker, Cass County, during November and early December; Nov. 28, Duluth, Mrs. Jack Everett; the Cardinal is almost becoming a regular visitor in the Duluth area now.

*Dickcissel*: Sept. 2, Carlos State Park, Lac Qui Parle Co., Richard K. Olson; a very late date was Oct. 4, Graceville, Traverse Co., R. Grant.

**Evening Grosbeak:** Aug. 1-16, young being fed by adults near Duluth, P. B. Hofslund and Mrs. S. N. Erickson; Aug. 21-28, Chisholm, St. Louis Co., Forest Strnad; Sept. 5, Duluth, P. B. Hofslund; Sept. 11, Virginia, St. Louis Co., Vera F. Barrows; greatest number for Sept. was Sept. 7, Duluth, 24 seen by Anne K. Arndt; during Oct. only 1-2 individuals at a time were reported—Oct. 7 and 24-30, Duluth area, P. B. Hofslund, Mrs. S. N. Erickson, Anne K. Arndt, and Janet C. Green; numbers increased again in Nov.—Nov. 24, Duluth, 20 seen, Janet C. Green and Huber brothers; Dec. 8, Kelliher, Beltrami Co., 11 seen by Avifaunal Club.

**Red Crossbill:** Aug. 9-13, Duluth, P. B. Hofslund; Aug. 31, Virginia, St. Louis Co., Vera F. Barrows; Sept. 11, Duluth, P. B. Hofslund; Oct. 31, Encampment Forest, Lake Co., Bob Janssen; Nov. 10, Ramsey Co., A. C. Rosenwinkel.

**White-winged Crossbill:** Aug. 16, Duluth area, 2 seen, Mrs. S. N. Erickson; Sept. 30, Encampment Forest, Lake Co., 6 seen, P. B. Hofslund; Oct. 6, Duluth, P. B. Hofslund; Nov. 1, Hibbing, 2 banded by Forest Strnad; Nov. 10, Duluth, 18 seen, P. B. Hofslund; Nov. 21, Duluth, 2 seen, Janet C. Green; Nov. 27, Duluth, 3 seen, Janet C. Green; Dec. 8, Washkish, Beltrami Co., 3 females, 1 male seen, Avifaunal Club; Dec. 8, Kelliher, Beltrami Co., 10 seen, Avifaunal Club.

**Rufous-sided Towhee:** last date, Oct. 9, Duluth, 1 male, P. B. Hofslund.

**Oregon Junco:** Oct. 20, Carlos Avery Refuge, Anoka Co., one adult male seen, R. Huber; this Junco has always been a source of fascination to Richard Oehlenschlager and me. I would like to encourage all of you to send in your reports of this bird, with complete and detailed descriptions where possible, and with particular reference to the contrast of the hood with the back and sides, and the color of these three parts.

**Field Sparrow:** last dates, Oct. 20 Morris, Stevens Co., R. Grant; Oct. 29, Ramsey Co., A. C. Rosenwinkel.

**Harris' Sparrow:** first report from Duluth area, Sept. 22, Janet C. Green; last reported there on Oct. 16, Mrs. S. N. Erickson; Oct. 6-18, Cass Lake, Mr. and Mrs. John Mathisen; Oct. 13, Lake Traverse, R. Grant, became very

common thereafter until early Nov.; last seen there on Nov. 11.

**White-crowned Sparrow:** last date, Oct. 17, Duluth, Anne K. Arndt.

**White-throated Sparrow:** last week of Nov., feeder in west Minneapolis, Gloria Peleaux; Nov. 27, Duluth, Janet C. Green; Dec. 15, Winona, Brother Theodore.

**Fox Sparrow:** Oct. 21, Morris, R. Grant; Oct. 24, Eveleth, St. Louis Co., Florence Miller.

**Lincoln's Sparrow:** last date, Nov. 6, Ramsey Co., A. C. Rosenwinkel.

**Chestnut-collared Longspur:** On Nov. 17, Brother Theodore and R. Huber were observing thousands of Longspurs around Salt Lake, Lac Qui Parle Co. For the most part, these birds preferred not to fly, but rather they walked and fed in the fields. In one particular alfalfa field, we were able to walk amongst a rather tame gathering of them, flushing various individuals from five to ten feet ahead of us. Of approximately the first twenty-five, which we carefully checked, most seemed to be Lapland Longspurs, but one was a Chestnut-collared Longspur (white notch on either side of tail) and one, possibly two, were Smith's Longspurs. Another late-fall/early-winter record for the Chestnut-collared Longspur was Nov. 12, 1941, six seen with flock of Snow Buntings (MMNH files). This might indicate that during mild winters, the Chestnut-collared Longspur could be a winter resident in the SW corner of our state.

**Smith's Longspur:** Nov. 17, Salt Lake, see above species for details. Large flocks of Longspurs in SW Minnesota during late fall and winter deserve close scrutiny. Since the Smith's Longspur is known to winter as far north as NW Iowa, it seems likely that they could winter in SW Minnesota, and perhaps more than just occasionally. Look for very buffy birds with Longspur call-note, and Junco-like outer tail feathers.

**Snow Bunting:** Oct. 31, Wabasha, flock of 100 seen by D. G. Mahle.

**SUMMARY:** Looking back on this year as a whole, many rare and casual species occurred in Minnesota. The fall and early-winter season was no exception as this report shows. After a heavy invasion of Bohemian Wax-

wings and Evening Grosbeaks last winter, we aren't surprised to find them somewhat lacking this winter. But both crossbills were reported, Hawk-Owls and Goshawks as never before, Great Gray Owls, Three-toed Woodpeckers from widespread areas in the northern third of the state, Red-throated Loons, three species of scoters, Prairie Falcon, Ferruginous Hawk, Dovekie, two uncommon longspurs;

October Dickcissels, Field and Chipping Sparrows; November warblers and shorebirds. This fall, and indeed, the year as a whole, must go down as unique for Minnesota birdwatchers. These very interesting records would not have been possible without the excellent state-wide coverage which we have recently achieved. *3121 Georgia Ave. So., Minneapolis 26, Minnesota.*

## 1962 FALL HAWK MIGRATION, DULUTH

by Janet C. Green

This fall, the twelfth year of organized observation of the fall hawk migration in Duluth, more time was put in counting the hawks than ever before. Observations were made from the 8th of September to the 7th of November but with the first part of the migration period receiving the most attention. A total of 172½ hours was spent counting the hawks (all but 3½ of these were at the hawk lookout on the Skyline Blvd. above 45th Ave. East) — 116½ of them in September, 51 in October and 5 in November. During this time 45 separate days were covered with daily observations of four to six hours a day from September 11th to October 11th.

Dr. P. B. Hofslund lead the observers from the Duluth Bird Club and the M. O. U. on the weekends of the 15th-16th and 22nd-23rd of September and also contributed counts for four other days. Raymond Naddy, Rosalie Naddy, Dennis Meyer and John C. Green contributed counts for a separate day each. The rest of the time I was the observer and was often joined for a short while by local bird watchers and out-of-town visitors who helped in the tallying and made the observing more enjoyable. I would like to thank them as well as Dr. Gerald E. Church, Comdr. Edward P. Wilson and Dr. John C. Green whose observations of hawk migration along the North Shore of Lake Superior added to our knowledge (their counts were not included

in the totals, however).

In spite of the increased observation the total number of hawks seen was not as large as last year but was still an impressive 26,726. Although the figures are not easily comparable because of the many variables (weather, hours watched, etc.) involved, the buteo flight seems about the same as last year. The best day was the 14th of September when over 12,000 hawks, most of them Broad-wings, were seen at the rate of almost 1,500 per hour. On this day the buteos came by so fast and were so far away that many were undoubtedly missed and the total compares favorably with last year's high of almost 15,000 in a single day (the largest flight recorded in Duluth). Comparisons with years before 1961 will not be attempted since during these years the migration period was not covered so extensively.

With the exception of the buteos and the Goshawk, the totals for all other species were less than last year. Since so little is known about hawk migration, this can't be considered a drop in the populations of these species but only a different migration pattern from last year, perhaps on a broader front or concentrated at another point. One obvious drop was in the three falcon species but information from other parts of the area indicates that they may have been



**Bird  
feeders-  
focus  
fun!**





The feeding of winter birds in Minnesota always provides a means of enjoyment to people young and old. To some it provides more than that. To Delmar Holdgrafer of Donnelly, Minnesota, it invokes his masterful skill in carpentry, as he has fashioned numerous bird feeders. It has brought him fine feathered returns. Lapland Longspurs, Horned Larks, Black-capped Chickadees, and Snow Buntings (left) have all dined in swank feeders at his farm.

The White-breasted Nuthatch (upper left) has been a regular winter resident at the home of Art Skoglund in St. Paul. This fancy little free-loader proves an excellent subject for the candid photography of Mr. Skoglund.

Downy and Hairy Woodpeckers, a Slate-colored Junco, and a Song Sparrow, (upper right), have found a meal ticket in the feeder-laden yard of Ernest Strubbe, Alberta, Minnesota.

Ernie's camera has caught them in typical poses as they devour the suet he has put out.

Ken Haag

following the shore line of Lake Superior more closely and were not visible from the hawk lookout. The same might apply to the small accipiters, whose numbers were down quite a bit from last year, or else the weather sequence was such that they migrated on a broader front than usual. The greatest notable drop in numbers from last year was in Marsh Hawks; the total for this season was less than the peak daily count for last year. Very few reports of Marsh Hawks from other parts of the area were received and this change is puzzling.

The most startling increase in numbers from previous years was in the Goshawk total. On the peak day this year more were counted than during the entire ten-year period from 1951 to 1960. Some of this is probably due to increased coverage during October but no daily counts approaching those of this year have been recorded on days when observing was done in October before. This probably indicates an invasion of this species, a conclusion supported by the number of adults seen. Of the 250 Goshawks identified as to age, 93.5% of them were adults and if the period after the 15th of October is considered alone, the figure rises to 97.5% adults. I would be interested in hearing from others whose observations during the fall and winter support (or not) the idea of an invasion of this species.

The totals and peak and extent of migration for each species is discussed below. The period quoted for peak migration does not mean that the high hourly counts were made on every day within the period but only on days with favorable weather or other conditions.

*Sharp-shinned Hawk.* A total of 3,668 was counted from the 8th of September to the 21st of October. Significant migration (counts of 10 or more per hour) was noted from the 8th of September to the 18th of October with two peaks, on the 17th of September and the 9th of October, when counts of 71 and 81 per hour respectively were made. The first adult was seen on the

16th of September. The two peaks probably represent the high for the immature's migration in September and the adults' in October.

*Cooper's Hawk.* A total of 50 was counted from the 8th of September to the 18th of October. Counts of more than two a day were made from the 11th to 18th of September and on the 2nd of October. Eight were seen on the latter date for the greatest number tallied in a single day.

*Goshawk.* A total of 332 was counted from the 24th of September, when the first one was seen, to the 7th of November. Counts of four or more an hour were made from the 2nd of October to the 4th of November and ten or more an hour from the 16th of October to the 4th of November. The peak day was the 30th of October when 169 were tallied in three hours.

*Broad-winged Hawk.* A total of 20,604 was counted from the 11th of September to the 11th of October. Significant migration (counts of ten or more per hour) was noted from the 12th to 25th of September with counts of 100 or more per hour from the 13th to 17th of September. The peak day was the 14th when 11,774 were tallied; part of this figure represents necessarily estimating large "kettles" of buteos.

*Red-tailed Hawk.* A total of 1,238 was counted from the 13th of September to the 4th of November. Significant migration (counts of 10 or more per hour) was noted from the 1st to 21st of October, including the peak of 117 per hour on the 18th. One Krider's Red-tail was seen on the 14th of September by P. B. Hofslund and the 16th of October by Rosalie Naddy.

*Rough-legged Hawk.* A total of 79 was counted from the 25th of September to the 30th of October. Counts of two or more per hour were made on some days during most of this period with the biggest counts coming on the 1st of October (18 in 6 hours) and 30th of October (8 in 3 hours).

*Sparrow Hawk.* A total of 217 was

counted from the 8th of September to the 9th of October. Significant migration was noted from the 12th to 25th of September with the largest count (41 in 8 hours) on the 16th of September. Although the counts from the hawk lookout were poor for this species, Comdr. Edward P. Wilson reported about 400 observed on the 19th of September along Hwy. 61 between Two Harbors and the Canadian border.

*Pigeon Hawk.* A total of 10 was counted from the 12th of September to the 18th of October. Although no more than one a day was ever seen from the hawk lookout, an observation of four on Minnesota Point, Duluth, on the 15th of September was made by Robert B. Janssen.

*Peregrine Falcon.* A total of 4 was counted from the 14th to the 26th of September. This is quite a drop from the 34 seen last year but last year's figure was unusual.

*Osprey.* A total of 45 was counted from the 11th of September to the 9th of October. The only day when more than one per hour was seen was 14 counted in 8 hours on the 16th of September.

*Marsh Hawk.* A total of 126 was counted from the 8th of September to the 18th of October. The only times

when more than one per hour was recorded was 25 in 6 hours on the 18th of September and 19 in 2 hours on the 18th of October.

*Turkey Vulture.* A total of 62 was counted from the 11th of September to the 18th of October. Peaks of more than one per hour occurred on the 14th and 17th of September and the 9th of October with the greatest number (16 in 8½ hours) on the 14th.

*Bald Eagle.* A total of 8 (4 adults, 4 immatures) was counted from the 13th of September to the 2nd of October with the greatest number (3 - the only daily count greater than one) seen on the 14th of September.

*Golden Eagle.* A total of 3 (2 adults, 1 immature) was counted on the 18th of October. Though this was the only day they were observed while hawk watching, an immature that had been caught by a falconer on the 16th of October was brought to P. B. Hofslund to band.

*Unidentified.* A total of 13 unidentified accipiters, 145 unidentified buteos, 12 unidentified falcons and 110 other unidentified hawks was recorded during the migration.

1923 Greysolon Road  
Duluth 12, Minnesota

## THE CANADIAN LAKEHEAD

by A. E. Allin

The summer of 1962 was cool at the Canadian Lakehead with mean temperatures 2° below normal for the month of June, July, August and September and maximum daily temperatures exceeded 80° on only seven occasions. Frost was reported in outlying areas on August 9; officially a temperature of 29° was recorded at the Airport on September 19, 20, 29 and 30th. Precipitation for September was normal but that for July and August totalled 2" more than the long-term average.

The first half of October was dry and cloudy and the mean temperature of 53.6° was 8° above the average. An abnormal 80° maximum on October 15 preceded a period when snow storms struck Western Canada but the major local change was the strong wind of October 16 when gusts reached 75 miles per hour.

For unknown reasons, leaves were reported turning color in Northeastern Ontario in late August, two weeks

earlier than usual. At the Lakehead, Aspens, Mountain Maples, and Pin Cherries, were colorful by September 9. Leaves began to fall from the Paper Birches on September 25 and the gales of October 16 finally denuded these Birches and Poplars although Willows and Alders still remained green. Tamaracks were masses of gold against the green backgrounds of Jackpine and Black Spruce. Nasturtiums and Dahlias were still blooming in sheltered spots in mid-October and Michelmas Daisies were masses of blossoms patronized by Honey-bees and the late broods of Mourning Cloak, Painted Beauty, and Milberts' Tortoise Shell Butterflies. Little Brown Bats still flew over the city streets on October 1 and Garter Snakes were seen killed on the highways on September 30 and October 7. By October 13, only two muskrat houses had been built at Whitefish Lake.

Prospects are excellent that there will be a good ingress of winter birds. There is a very heavy crop of fruit on the Mountain Ash trees in both Cities and surrounding forests. The ornamental apples are also heavily laden with fruit. Like the Mountain Ash, they are favourites of Pine Grosbeaks, Bohemian Waxwings and occasionally of Cedar Waxwings, Purple Finches and wintering Robins. There is a danger that the immense flocks of Starlings will strip the Mountain Ash; they commenced feeding on them in late September. The crop of keys on the Manitoba Maples could scarcely be greater. Large numbers of Evening Grosbeaks may be anticipated as these keys are their favorite natural food. There is an abundant cone crop on the Black and White Spruces which should prove attractive to the Red and to the White-winged Crossbills. They may also tempt more Red-breasted Nuthatches to again winter here. Regular winter residents prior to 1955, they have been scarce subsequently except in the winter of 1960-61.

The first nine months of 1962 failed to produce any bird records of interest. No major migrational phenomena

were reported. To our knowledge no new species were added to our avian fauna and no additional species were added to the breeding list. Fall migration was not unusual.

*Loons to Bitterns*—Common Loons were present in their usual numbers. No Horned Grebes were seen locally although the Allins and Churches saw several on Lake Superior, near Two Harbors, on September 23. Double-crested Cormorants have been very scarce although a few were seen in the harbor on September 2.

*Swans, Geese, and Ducks*—No Whistling Swans were reported in the area this summer; usually one or more are seen. The main flight of geese passed through the area on October 7-10. At least 1000 Snow Geese landed on Chapple's Farm, an unusual event, on October 8. An estimated 5000 Canada Geese were seen on Ogoki Lake, 175 miles northeast of Fort William during the last week of September. This is a new resting place for waterfowl, evidently due to lowered water levels when the Ogoki River was diverted from its normal northward flow into the Albany River, south into Lake Nipigon. This changed the lake from a typical, deep, northern, lake, relatively unimportant to waterfowl, to a shallow one whose bays now provide feeding and resting areas for Canada Geese.

Ducks were common throughout the summer in the local harbor. Another flock of 500 was present on September 1 on Cranberry Bay and 500 more on Whitefish Lake. We have recommended that one of these areas be utilized as a banding station by the Fish and Wildlife Service, which is anxious to establish such a station in this general area. The majority of these ducks are Black Ducks, Mallards, Blue-winged Teal, Pintails, and Common Goldeneyes. A few Green-winged Teal, American Widgeons, Ring-necked Ducks and Hooded Mergansers might also be banded. Another problem requiring study is the harvesting of Wild Rice at Whitefish Lake. It seems illogical that the Indians can continue to harvest this crop as they have been doing

for commercial interests in recent years, without depleting the food supply of migrating ducks. Until recent years the ducks utilized this lake in great numbers from late September, when the Ring-necked Ducks arrived, until the freeze-up in the north brought down the last Mallards and Greater Scaup in early November. Another factor affecting the water-fowling on this Lake is the increasing use of motor boats, not only by the duck hunters, but by numerous anglers who now fish there, until freeze-up, for Walleyes, which were introduced into Whitefish Lake in 1944.

*Vultures to Hawks*—The Allins saw a Turkey Vulture north of Pigeon River on July 29, not far from where they had seen one a few years ago. Mr. Davis, Superintendent of Grand Marais National Monument saw one in that area in mid-summer. Two Bald Eagles were feeding in a marsh of Whitefish Lake on October 13, and on October 15 two were seen feeding on a dead Moose in Aldina Township. A local Conservation Officer reports at least one breeding pair in that township, possibly the one we reported a year ago nesting at Weikwikwabinanau Lake. This may be the pair evidently driven from a nest previously occupied at near-by Titmarsh Lake.

The hawk migration at the Lake-head is never spectacular. On only two occasions has a movement been reported along the ridge at Port Arthur. This year, however, we estimated 800 Broad-winged Hawks moved over Hillcrest Park on September 14. About 200 were seen there on September 15, and C. E. Garton counted 238 in the Dorion-Port Arthur area. The largest kettle contained 99 hawks. A few Sharpshinned Hawks, 2 Red-tailed Hawks, single Cooper's and Marsh Hawks, and a Peregrine Falcon were also seen. No Broad-winged Hawks have been seen subsequently. We saw 3 Red-tailed Hawks on September 30, a Marsh Hawk on October 14, and Mrs. Knowles found a Sparrow Hawk on October 12. We saw an early Rough-legged Hawk in Cook County, Minnesota on Septem-

ber 22. Only a few were seen locally in the first half of October.

*Grouse to Coots*—Spruce and Ruffed Grouse are at the low ebb of their cycles. The only report of a Spruce Grouse was a female seen in Sibley Park by the Olins of St. Paul. They saw a female Ruffed Grouse with young in the same area, one of the few breeding records for that species. The Allins saw a female with one Starling-sized young in Cook County on July 8. Ruffed Grouse have been generally scarce during the hunting season. No Sharp-tailed Grouse has been reported. Gray Partridge are probably as scarce as they have ever been since their introduction in the mid-thirties. American Coot were uncommon. We saw 15 on Whitefish Lake on October 13.

*Plovers to Terns*—An early American Golden Plover was brought to us on September 11. It had obviously been shot as had a Black-bellied Plover received on Oct. 11. A flock of 17 American Golden Plovers was seen in Neebing Township on September 19, but the large flocks which are usually seen in the early fall failed to appear. A flock of 24 Killdeer was seen on September 17. No American Woodcock and only a few Common Snipe have been reported. Our first and only Solitary Sandpiper was seen on September 15. The first migrating shore birds, a Greater and a Lesser Yellowlegs, were seen August 2. No other shore birds were reported despite our hopes that the heavy August rains would produce favorable conditions in the fields. It was obvious that the high waters of Lake Superior had flooded the only mud flats available.

No unusual gulls or terns were reported. Herring Gulls are creating a major problem at the airport due to their constant frequenting of the runways. Those in authority believe they are attracted by the garbage disposal grounds which are adjacent to the airport. Fortunately, no one has suggested shooting them to solve what, in this air-borne age, has become an international problem. Rather, it has

been suggested a new site for the disposal grounds be found remote from the airport.

*Doves to Kingfishers*—A few Mourning Doves have been present since late spring and they were heard calling on one occasion. It is a peculiar fact that they are heard so rarely when their mournful "coos" are heard incessantly in most regions where they occur. The only cuckoos reported locally in 1962 were the Yellow-billed Cuckoo found dead on June 19 and a Black-billed Cuckoo we saw on July 29. A young Common Nighthawk was brought to us on July 31. Two weeks later, all Common Nighthawks as well as Chimney Swifts had apparently migrated.

*Woodpeckers to Swallows*—On September 9, we saw an immature Red-headed Woodpecker in Neebing Township in an area where this species has occasionally been seen in recent years, although not previously in 1962. In view of the date we cannot definitely consider it a local breeding record. Yellow-shafted Flickers were migrating on September 15.

Eastern Kingbirds were common, and evidently migrating on September 2. A week later we saw only one at the Lakehead although we identified one in Cook County on September 22. Horned Larks, evidently the Northern race since their faces showed much yellow, were reported in several areas on September 30. A flock of 100 Tree Swallows was seen on September 9 in Paiponge Township.

*Jays to Creepers*—Gray Jays were present in increased numbers. Blue Jays were migrating on September 9 but many were still present on October 13. C. E. Garton reported 100 Common Ravens east of Port Arthur on September 15. A very large flock of Common Crows was present on October 7 but few were seen a week later. A few Red-breasted Nuthatches accompanied the migrating flocks of warblers and fed in the Paper Birches.

*Wrens to Starlings*—Robins were very common in July. There was a

heavy movement from October 7 to 10 when they were quite noisy, some singing notes intermediate between their whispered song and the regular spring effort. The migration of thrushes was poor. Eastern Bluebirds were reported breeding on four occasions. The usual migration of these birds in early October failed to materialize or missed our attention.

Two Water Pipits were seen on September 30. An immature Cedar Waxwing found by Mrs. Rydholm had orange, rather than lemon-yellow, tips to the tail feathers.

*Vireos and Warblers*—Vireos were conspicuous by their virtual absence in the mixed flocks of small birds we saw migrating. There was a heavy, prolonged migration of warblers although only a few species were recognized. The first movement, noted on September 2, consisted principally of Bay-breasted and Tennessees. More Tennessee Warblers moved through the Cities on September 6 and 18. Palm Warblers were common on September 15. The first movement of Myrtle Warblers was noted on September 19 and there was scarcely a day when they were not seen in the following three weeks. At times their droppings whitened the sidewalks beneath the Paper Birches which they commonly frequented. These trees had been afflicted by a heavy crop of aphids earlier. Myrtle Warblers were still present in these trees on October 17.

*Meadowlarks to Cowbirds*—Mrs. Knowles reported the last Western Meadowlark on October 12. We have no winter record for this species. Common Grackles seem to be increasing in numbers and were present in small flocks until October 7. On that date Rusty Blackbirds were reported for the first time; large flocks were reported subsequently.

*Cardinals to Snow Buntings*—Pine Siskins were first seen on September 2 and have been present in small numbers subsequently. A migration of Chipping Sparrows was seen on September 9. We saw no White-crowned

or Harris' Sparrows. White-throated Sparrows were heard singing on September 15 and October 6. Slate-colored Juncos were common. First seen on September 19, flocks were still present in mid-October.

Lapland Longspurs seemed less common than usual unless it was longspurs seen by T. Perrons in numerous flocks along the C. P. Railroad west of Fort William in early October. From his cab, it was impossible to separate Lapland Longspurs from Horned Larks. C. E. Garton reported flocks of about 60 Snow Buntings at Marathon and near Terrace Bay on September 28, a very early date. However, Perrons saw his first small flocks along the C.P.R. on October 12.

Apart from birds, a few important observations were made of both faunal and floral interest. In late September, H. Rydholm brought us a Central Newt. This is the race of that amphibian which has worked its way northward into the southern parts of Thunder Bay and Rainy River Districts. Its presence in Canada was first recorded in these columns based on our specimens from the Lakehead area. On June 29, we heard the trilling of a Common Tree Toad on W. Hartley's property at the foot of Mt. McKay, where Sugar Maples reach their northern limits. Mr. Hartley had suspected its occurrence there a year ago. The late Col. L. S. Dear once told me that this toad had been taken several decades ago, southwest of Fort William. On October 1, C. E. Garton was given a Hoary Bat by one of his students. This is a very scarce migrant which has been reported in the District on only very rare occasions.

Visitors to our area frequently make important discoveries overlooked by local naturalists. Dr. Axtell, of Buffalo, produced the only local record of a Yellow Rail while visiting the area several years ago. V. Elliott discovered a colony of the Small Round-leaved Orchid, var. *lineata* in Sibley Park while working there as a park naturalist in 1959. It was previously known only from the Cypress Hills of Al-

berta. This past summer a visiting botanist from Michigan, with the park naturalist, rediscovered the rare Bog Adder's Mouth in Sibley Park.

At High Falls, on the Pigeon River we were delighted to find the colony of Small Purple-fringed Orchid flourishing despite the encroachments of civilization since we first found the station in 1946. It has also been reported along Mosquito Creek where the latter flows into the Kaministiquia River near Highway 61. It is probably significant that the only two local stations for the Turtlehead or Balmoney are at Middle Falls and near the confluence of Mosquito Creek and the Kaministiquia River. Ornithologists who are also orchid enthusiasts may query why the Pink Moccasin Flower had such a poor year locally, in contrast to 1961. Incidentally the Allins found this lovely flower in bloom in the upper portion of the Lower Michigan Peninsula in May as we watched the rare Kirtland's Warblers singing in the Jackpines. We found Romanzof's Ladies Tresses at the mouth of the Cloud River after failing to find it for several years. Mrs. Beckett discovered the first local colony of Hooker's Orchid at Shebandowan. Mrs. Knowles directed us to a large colony of Spotted Coral-root var. *punicea* which we had never seen before but we failed to find var. *flavida*, the vigorous yellow form with unspotted white lip, which David Allin found outside Port Arthur in 1961. The Allins spent a delightful afternoon on July 2nd studying Arethusa, Grass-pinks, and Rose Pogonia in a small bog west of the Lakehead.

It seems scarcely possible that these columns begin the twelfth year of the appearance of "*The Canadian Lakehead*" in *The Flicker*. During that time we have mentioned Whitefish Lake, which lies 45 miles southwest of Fort William, on many occasions. Whether it is winter or summer, spring or fall, there is always something of interest on the lake or about its shores. We are not the only ones to be entranced by Whitefish Lake and its surrounding

terrain. Some of you may be interested in reading "Canadian Spring" by Sheila Burnford, which appeared in *The Atlantic* (July, 1942, pp. 44-47). Mrs. Burnford, wife of a Lakehead physician, informs me that the locale of her story is the Whitefish Lake so frequently referred to in these columns. Her story is enhanced by a delightful woodcut by Susan Ross of a typical view across the Lake. Mrs. Burnford is the author of *The Incred-*

*ible Journey*, a best-seller. The film rights have been purchased by Walt Disney and a picture based on the story is now being filmed. Mrs. Burnford had the region west of Whitefish Lake in mind when she wrote this imaginative story of two dogs and a Siamese cat. Unfortunately the picture is being filmed in an area of Southern Ontario, north of Toronto.— *Regional Laboratory, Ontario Department of Health, Fort William, Ontario.*

## NOTES OF INTEREST

HOODED WARBLER BANDED IN WASHINGTON COUNTY: On June 2, 1962, while mist netting birds for banding purposes at Lake Demontreville, Washington County, I had the very good fortune to net a Hooded Warbler. My nets were placed in a grassy clearing along a row of red elder bushes bordering a deciduous woods of white and red oaks, birch and black and choke cherries. The time the bird was netted was approximately 5:15 P.M. When I came to check the net, the net contained the Hooded Warbler, one Black-throated Green Warbler, three Red-eyed Vireos, and four Cedar Waxwings. The Hooded Warbler was removed from the net banded, photographed and released (see cover photograph). *Mrs. Murray Olyphant, Jr., 4000 Hidden Bay Road, St. Paul 9, Minnesota.*

\* \* \*

THIRD MINNESOTA ROCK WREN RECORD: On October 28, 1962 I was hunting Ring-necked Pheasants on the Grant-Otter Tail County line, approximately five miles south of Dalton, Otter Tail County. The area in which I was hunting was a farm that had been placed in the soil bank. In the immediate vicinity of a county section road there was a low marshy area bordered on the east and west by rather steep hills. The hill on the west leveled off into the soil bank field and another low marshy area. On the top of this hill there was a large pile of rocks surrounded by high grass. As I stepped onto the rockpile a small wren-like bird approximately seven inches long appeared from among the rocks. The bird was not more than ten feet from me. It was grey-brown on the upperparts and the breast and underparts were grayish and appeared to be unstreaked. I did not have my binoculars with me at the time. The bird bobbed up and down from the knees in a nervous manner. I flushed the bird and as it flew it fanned its tail revealing very fine black barring and buffy tail corners. The bird returned immediately to the rockpile about five feet from me, affording an excellent opportunity to identify it as a Rock Wren. There are two additional records for this bird in Minnesota. The first is a bird collected by Alfred Peterson at Pipestone, Pipestone County on May 13, 1922. The second is a sight record by Franklin Willis at Salt Lake, Lac Qui Parle County on April 18, 1948. *Robert B. Janssen, 1817 W. 59th Street, Minneapolis, Minnesota.*

**MOOSE KILLED IN OTTERTAIL COUNTY, MINNESOTA:** A female Moose approximately two and a half years old was shot during the 1959 deer season. The locality was nine miles west and one mile north of Bertha at the southeastern edge of Ottertail County. There had been earlier reports of a small bull, a cow and a calf moose in this area. The senior author obtained the head and prepared the skull for permanent deposit in the Biology Department at St. John's University, Collegeville, Minnesota. This skull represents a southwestern record for Minnesota. Gunderson and Beer (*The Mammals of Minnesota, 1953*) record them no closer than extreme northwestern Becker and northern Hubbard Counties. *Joseph Fraune and Edmund A. Hibbard, Biology Dept., St. John's University, Collegeville, Minnesota.*

\* \* \*

**UNUSUAL FALL MIGRANTS IN DULUTH:** *White Pelican.* In the latter part of October my husband, Dr. John C. Green, received a report that a White Pelican had been seen on Minnesota Point, Duluth. On the next day, Oct. 20, 1962, he went down to investigate and found the bird sitting on the shore on the Lake Superior side. Not wanting to disturb it, he watched it from a distance of about 100 yds. through 15X and 30X oculars of a Bausch and Lomb spotting scope. An attempt was made to locate the pelican on the next two days but it was not seen again.

Last fall Dr. Gerald Church reported to me that he had seen a pelican in the harbor at Two Harbors on Nov. 5, 1961 (not in Oct. as stated in the Dec., 1961 issue of *The Flicker*). His description of the observation left no doubt in my mind that he had seen a White Pelican.

*Sandhill Crane.* On Sept. 20, 1962 while watching hawks from the lookout above Lakeside with Karl Hankins, I was startled to hear Karl say that some cranes were coming over the hill a quarter of a mile away to the north. I turned and quickly picked them up in my spotting scope. There were six of them and they came toward us fairly low until they were 200 yds. away. Then they began to circle to gain height and finally headed west and disappeared. The light conditions for observation were excellent and the red crown was very obvious. They were in view for about five minutes and I watched them through the 15X and 30X oculars of a Bausch and Lomb spotting scope.

Dr. P. B. Hofslund told me that on Sept. 15, 1956 he saw two Sandhill Cranes while hawk-watching from the same spot. This record has not been previously recorded in *The Flicker*.

*Western Kingbird.* Dr. P. B. Hofslund reported to me that on Sept. 8, 1962 he saw a Western Kingbird that perched on a wire in his back yard for fifteen minutes and that all field characteristics were noted. This species has been seen in Duluth during the spring migration the last two years but this is the only fall record of which I am aware. *Janet C. Green, 1923 Greysolon Road, Duluth, Minnesota.*

\* \* \*

**BIRD "ANTING" WITH MOTH BALLS:** Mrs. Henry Halvorson, now deceased, resident of Fourth Avenue, Saint Cloud, told us of scattering moth balls on her lawn to discourage ants. Shortly after she had put out the moth balls a flock of Common Grackles appeared and went thru the performance so well described by Gretchen Lamberton in the September 1962 "*Flicker*". The Common Grackles would pick up a moth ball and rub themselves with it, and seemed to enjoy the feel and perhaps scent of the strange articles. Mrs. Halvorson said that people might doubt her story, but it was the truth.

We have had families of Common Grackles in our yard in late summer. Next time we have such visitors we may throw out some moth balls and see what happens. *Mrs. George W. Lehrke, Rural Route 1, Lake Alexander, Cushing, Minnesota.*

\* \* \*

POSSIBLE WESTERN Tanager: On October 8, 1962 my husband and I saw a female Western Tanager in a woods two miles east of Annandale, Minnesota. We had very good views of the bird as it sat a short distance from us about 15 feet up in a small tree. Neither of us had ever seen this species before, so we checked very carefully with Peterson's "Field Guide". At first we thought it was a female Scarlet Tanager, but when it turned so we could see its back we noted the unmistakable white wing bars. *Mrs. Warren Christopher, Cokato, Minnesota.*

\* \* \*

BLUEBIRD TRAIL RESULTS, DULUTH: A survey of 89 occupied houses during June 1962 resulted in the following percentage of occupancy: Tree Swallows - 77%, Eastern Bluebirds - 19%, House Wrens - 4%. The increase in Eastern Bluebird occupancy from 7% in 1961 to 19% in 1962 indicates a remarkable recovery from a record low. In 1961 there were a total of 71 occupied houses. (Flicker Vol. 33 No. 3, p. 91) *J. K. Bronoel, Duluth Bird Club, Duluth, Minnesota.*

\* \* \*

BLUEBIRD NESTING: Ten nesting boxes were provided for Eastern Bluebirds near Plainview during the past year. On April 5 the first eggs were noted in three houses. On May 26 there were 20 young in four houses and four eggs in another house. Also on May 26 seven young Black-capped Chickadees were noted in one house. On July 10, 14 more young Eastern Bluebirds were noted and on August 15 three more young left one nest. The totals from the ten houses included 37 young Eastern Bluebirds, 7 young Black-capped Chickadees and approximately 15 House Wrens. *D. G. Mahle, Plainview, Minnesota*

\* \* \*

ANOTHER HARLEQUIN DUCK RECORD FOR 1962: On November 3, 1962 my husband and I took a trip up the North Shore of Lake Superior to look for ducks. We saw very few and were getting discouraged when about noon I spotted three ducks close to shore near French River, four miles northeast of the Duluth city limits. They were small, dark ducks which we identified as female (or immature) Harlequin Ducks. They were swimming together southwest about 100 feet from shore. Occasionally they preened as they swam along but they never dove. We watched them for about 15 minutes, backing the car up when necessary to keep pace with their progress along the shore. We were fortunate that at that point the highway is only 50 feet from the lake, there are few trees to block the view, and the bank is only a few feet high so we could easily observe the ducks using the car as a blind. The last time we backed the car up to get abreast of them we lost them for a minute and then found that they were very close to shore and only 60 feet from us. They became aroused by our presence then and stretched their necks in a tense position, tilted slightly forward — a characteristic we had noted in the male Harlequin Duck we had seen last winter. After a minute or so of swimming around in this fashion they took off and flew south-

west along the shore, giving us a chance to see their distinctive, rapid flight.

During the time of observation the sun was out and was about 75° away from the perpendicular to the shore so there was glare only when the ducks had swum that far away from the car toward the southwest. We would then back up the car to get them again in good light. Lake Superior had a faintly choppy surface. Both my husband and I observed the ducks using 7x35 binoculars and the 15x and 30x oculars of a Bausch and Lomb spotting scope. We made the following field notes on the plumage of these ducks: back and head, dark brown; sides and upper breast, lighter brown and faintly barred; lower breast (observed when they stood up on the water and flapped their wings), light gray; wings and tail, dark brown; tail sometimes cocked, sometimes trailing on the water; bill, uniformly dark; side of head with three whitish spots. These spots, which are the best field mark, varied somewhat from duck to duck and from the illustration in the Peterson Eastern Field Guide. The spot posterior to the eye was the brightest and most conspicuous in all three ducks, being a pure white. It was round in two of the birds and oval in the other with the long axis horizontal. The spot that ran from the chin upward into the cheek was the largest spot, triangular in shape rather than round as illustrated in the Peterson guide. It was dirty white and varied slightly in color and shape among the three ducks. The third spot, ahead of and above the eye, was the least conspicuous since it was the smallest and also a dirty white color. *Janet C. Green, 1923 Greysolon Road, Duluth 12, Minnesota.*

\* \* \*

**FROG LAKE WATERFOWL:** Frog Lake never gives up. Not until boreas huffs 'n puffs and blows his way in and engages Jack Frost to transform the nimble, dancing waters into a silvery slab of ice.

On November 18th the lake was brimming from shore to shore—with ducks! I doubt if there's another puddle of similar size in the state of Minnesota that would compare to Frog Lake and its webfoot society.

All week (Nov. 11-18, 1962) we had picked corn around the south end of our slough north of Alberta, Stevens County and had seen quite a few flocks of 6 to 20 Mallards circling around—eating corn in picked fields, but seldom ever landing in any local sloughs or puddles. Other folks had seen the same thing, wondering where they were landing. Naturally they all went to Frog Lake.

Elbert Holslin called me up on Friday, Nov. 16 and asked if I could bring my telescope over to his dad's farm (on Frog Lake) on Sunday—explaining that there were "thousands and thousands of ducks on Frog Lake, mostly Mallards. Sunday we went down on the point and looked and looked.

First there were about a thousand Mallards out in the middle (the water was quiet and smooth as glass — but the sun was only half shining) plus a few American Widgeon, Lesser Scaup, several Ring-necked Ducks, one Shoveler and at least three Blue-winged Teal (two drakes)...and this late in November.

Elbert seemingly was disappointed about then—but then the ducks started to come in from the N.E., past and over the faded old barn across the lake. Thousands of ducks! Coming in, presumably from picking up shelled corn from all the picked corn fields in the area, until there was a raft of ducks out there thicker than ants at a picnic, and stretching from slightly south of due east around to about due north. Then we settled down to some intensive duck watching with the result that I added two new ducks to the already bulging Frog

Lake records, and two new birds to my life list, making 19 species of ducks seen on Frog Lake in 1962.

Elbert was looking through the questar telescope, getting more excited every second when he exclaimed "Hey Ernie! A Merganser!" I looked and replied, "It's a Hooded Merganser along with two girl friends." About then things started to perk up. As I took my second look at the drake, he suddenly woke up and went into action. He reared up on his hind feet, flapped his wings, stretched his head and neck up and out and raised his "hood" up to full fan shape. Then he swam around a little, showing a view from every angle. He was very pretty from the front showing the two front black marks as sort of parenthesis on the sides of his white breast. The white on his head was not visible from the front until he turned his head sideways—which he did several time... proving to be a very obliging little rascal. Then he folded himself all back together and went back to sleep! —just another duck.

So we continued to explore the "raft." Ed Holslin was looking and all of a sudden said, "there's something you don't see around here every day! Take a look Ernie." So I looked and there were about a half dozen Black Ducks right on the edge of a bunch of Mallards.

Most books give the measurements of the Mallard and Black Ducks to be the same, but state that the Black Duck is heavier and slightly larger built on the average. This was plainly evident as they were right next to and among dozens of Mallards, both drakes and hens. The darker color was very noticeable and really appeared almost black, especially on the breasts. The heads were lighter. So now the Frog Lake duck list for 1962 reads as follows being revised and corrected on November 18, 1962.

- |                      |                       |
|----------------------|-----------------------|
| 1. Mallard*          | 10. Ruddy Duck*       |
| 2. Black Duck*       | 11. Canvasback        |
| 3. Pintail*          | 12. Redhead           |
| 4. American Widgeon* | 13. Ring-necked Duck* |
| 5. Shoveler*         | 14. Lesser Scaup*     |
| 6. Gadwall*          | 15. Greater Scaup     |
| 7. Blue-winged Teal* | 16. Common Merganser* |
| 8. Green-winged Teal | 17. Hooded Merganser* |
| 9. Wood Duck         | 18. Common Goldeneye  |
|                      | 19. Bufflehead*       |

\*All ducks that were seen on Frog Lake, November 18-25, 1962.

Another highlight of the Frog Lake waterfowl parade of 1962 was the Grebe family. All five; the Western, Pied-billed, Red-necked, Horned, and Eared Grebes were present during the year.—*Ernest H. Strubbe, Alberta, Minnesota.*

## BOOK REVIEW

HANDBOOK ON NORTH AMERICAN BIRDS, Sponsored by the American Ornithologists Union, Edited by Ralph S. Palmer. Volume I, Loons through Flamingos, Yale University Press, New Haven, Connecticut, 1962.

567 pp., 6 color plates plus many black and white illustrations, range maps. \$15.00.

At first inspection it will surely be noted that the Handbook of North American Birds is a great addition to

the voluminous amount of recent literature on North American birds.

The book begins with a very detailed Introduction. This section explains in detail the contributors' methods of discussing each bird. The reader will have little reason to misunderstand how each species is to be treated.

For the amateur, there will be the first real exposure to the new nomenclature used for plumages and molts in the text. To one not familiar with this nomenclature it is advisable to study this section carefully before proceeding to the species discussion. Such terms as Prebasic I Molt, Basic I Plumage and Prebasic II Molt replace the old familiar terms such as Postjuvinal Molt, First Nuptial Plumage and First Postnuptial Molt. I wonder if this is to be the accepted language to be used in all future ornithological literature. Readers can judge for themselves as to its merits and we can be assured that there will be much discussion surrounding these new definitions. Also in the Introduction is a chromatic hexagon which gives the reader another "first" where he is able to see the colors mentioned in the text.

Families covered in the text include Loons, Grebes, Albatrosses, Petrels, Shearwaters, Fulmars and Allies, Strom Petrels, Tropicbirds, Pelicans, Gannets, Boobies, Cormorants, Anhingas, Frigatebirds, Herons, Bitterns, Storks, Ibises, Spoonbills and Flamingos.

As the reader progresses to the species treatment we find a general discussion of the Order. Each species is discussed as follows: Description, Field Identification, Voice, Habitat, Distribution, Migration, Banding, Status, Reproduction, Habits and Food. Each topic is treated in detail. One of the most valuable portions of this book is the range maps included for each species. These range maps show breeding and wintering ranges, area of occurrence during migration, postbreeding dispersal and records of stragglers outside of the main range. The authors state in the Introduction that "range maps are perhaps the most vulnerable

to criticism of any item that can be included in a zoological treatise." They go on to explain why this is so, because ranges are not always known in detail and are changing and some of the available data are not trustworthy. However in spite of what the author stated this reviewer could not help but question several of the maps dealing with certain species known to occur in Minnesota. Examples are as follows: The Common Loon is shown as a wintering bird in northeastern Minnesota and on Lake Superior. There are no recorded observations of this bird in this area at that time of the year. The Red-throated Loon is also shown as wintering on Lake Superior. There are only two known records from Minnesota at this time of year. The Western Grebe is not shown as a breeding bird in Western Minnesota. It was known as a regular breeder in this area in the past and has continued to breed in this area up until the present. The White Pelican is shown as breeding in Western Minnesota. The last positive record of breeding in this area was 1904. The range map for the Double-crested Cormorant is very difficult to read. The key contained on the map would lead one to believe that this species occurs throughout Minnesota in the winter. This is of course not correct. The Yellow-crowned Night Heron has been an established breeder in southeastern Minnesota for at least five years. The range map indicates the closest breeding area to Minnesota as southern Missouri.

Knowing that the authors have spent years checking and sorting countless pages of ornithological data it is difficult to make the above criticism. However it is hoped that in subsequent volumes material from Regional publications made by reliable professionals and amateurs will be utilized more fully and whenever possible.

Robert Mengel's line drawings contained throughout the text are a definite asset to the book. These drawings are used mainly to illustrate birds in typical habit situations. The drawings illustrating the Western Grebe

and Green Heron are excellent examples. The six color illustrations are used mainly to picture plumage changes and other points of biological interest.

The Handbook is a much needed publication on North American birds. In this volume and the five planned for future publication recent changes in North American birdlife will become

readily available to the bird student. Such a tremendous undertaking of course leads to criticism and discussion on various points but this and succeeding volumes should become standard reference works for many years to come. Publication of the next volumes will be eagerly awaited by all bird students.

Editor

## **CHRISTMAS BIRD COUNT DATES**

The dates for the annual Christmas Bird Count will be December 19, 1962 to January 1, 1963. Compilers of the counts are urged to send their reports to the editor, Robert B. Janssen, 1817 West 59th Street, Minneapolis 19, Minnesota as soon as they are completed. The editors would like to have this information for publication in the March 1963 Flicker.

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*Printed by Curle Printing Co. Inc., Minneapolis, Minnesota*

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