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A MAGAZINE OF WISCONSIN BIRD STUDY



# *The Passenger Pigeon*

*Winter 1970*

VOLUME 32, NUMBER 4



WINTERING QUAIL

by Owen J. Gromme

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## COVER PICTURE —

OWEN GROMME, with the help of WILD WINGS, INC., is making available a signed limited edition artist proof in full color of his original oil *Wintering Quail*. (See last page for ordering.)

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LOGGERHEAD SHRIKE  
R. Knuth





DAVID J. COX — 1898-1970

He lived a full life and he loved his fellow man. What more need be said about a man like David Cox — “Dave” to his many friends. An enthusiastic birder and observer of our natural world, Dave was ever willing to give generously of his time and talents to help others find enjoyment in the out-of-doors, whether through his work with various scientific and conservation organizations, his highly popular bird banding demonstrations given to hundreds of grade school children in the Reedsburg District nature programs, or his willingness to make his property at Honey Creek available to the numerous campers and hikers visiting the Honey Creek and Baraboo Hills Natural Areas. The annual Honey Creek work days and May hikes have been highlights of the year for many WSO members and friends over the past 10 years, largely due to the warm reception accorded everyone by the Coxes.

Their work with the WSO, as Supply Department assistants since 1955, and as active board members and convention chairmen were recognized by the presentation of the Society’s Silver Pigeon Award in 1968. Also worthy of recognition were Dave’s activities with the Inland Bird Banding Association, the many hours he and Hazel spent in the folding and mailing of CNRA reports, their guidance of the Ned Hollister Bird Club of Beloit, and their active support of other groups including the Nature Conservancy, Baraboo Hills Naturalist Society, and the Friendship Rural School Historical Society. Also, the many years devoted to raising a fine family.

Dave’s passing is as if one of the tall pines standing guard over the farmhouse at Honey Creek had toppled overnight. The void will be long in healing, and Dave will be sorely missed by all who had the privilege of knowing him.

Harold Kruse

Loganville, Wis.

8-9-70



# CURRENT MIGRANT SHRIKE STATUS IN WISCONSIN

By Thomas C. Erdman

The status of the Migrant (Loggerhead) Shrike, *Lanius ludovicianus migrans* (Palmer), in Wisconsin has changed. Early state ornithologists, Kumlien and Hollister, in their "THE BIRDS OF WISCONSIN" (1903), and Cory, in his "BIRDS OF ILLINOIS AND WISCONSIN" (1909), concordantly referred to the Migrant Shrike as a **common summer resident** in the south, central and northwest portions of the state. Kumlien and Hollister observed that the species often raised two broods each year. Alden Miller in his comprehensive life history studies of American Shrikes in the 1930's indicated it



was a **common species** here and also noted a general second nesting. This status was also reported in Bent's "LIFE HISTORIES" (1940), for Wisconsin. When the Wisconsin Society for Ornithology published its initial checklist of Wisconsin birds in 1942, the status given the Migrant Shrike was **fairly common resident** in summer. In the last checklist, published in 1960, the Loggerhead Shrike was described as an **uncommon summer resident**.

To ascertain the current status and range of the Migrant Shrike in the state, the Wisconsin Society for Ornithology sponsored a research inquiry and nesting survey in 1967 and in 1968. The general inquiry of spring and summer 1967 asking for sightings and nestings received a response of 19 reports. However only 8 of these reported sightings of Shrikes! Several of the reporters stated they had not seen the species for a number of years.

There were 3 positive and 4 probable nesting sites reported in the summer of 1967. A positive sight was one where adults with young were observed. A probable site was one where an adult, or adults were observed during the breeding season, but no nest or young were found. A total of 31 individuals was reported, 13 of which were young birds from the 3 positive nesting sites. There was an average of 4.3 young per nest. The 1967 nesting sites were located in the southern and east central portions of the state (Fig. 1). The Shrikes generally arrived the last week of April and eggs were found by the seventh of May. The young Shrikes were usually out of the nests by the second week of June. All 3 positive sites were in similar habitat, open cultivated farm lands. Two were on

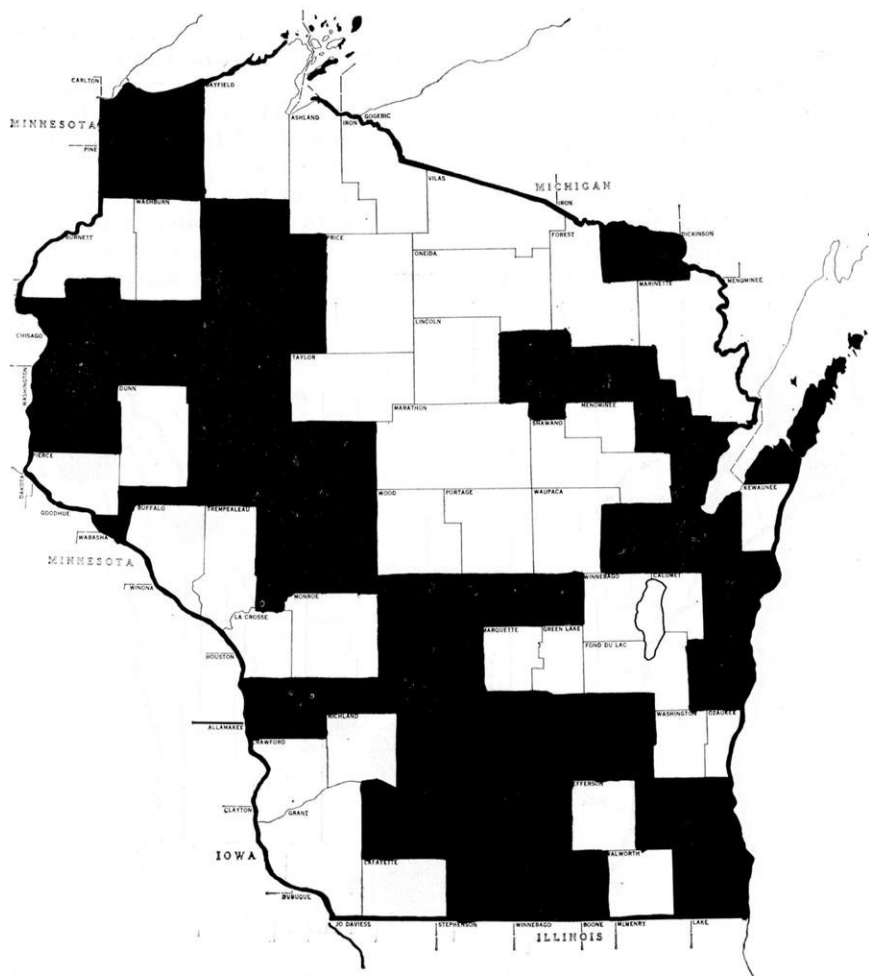
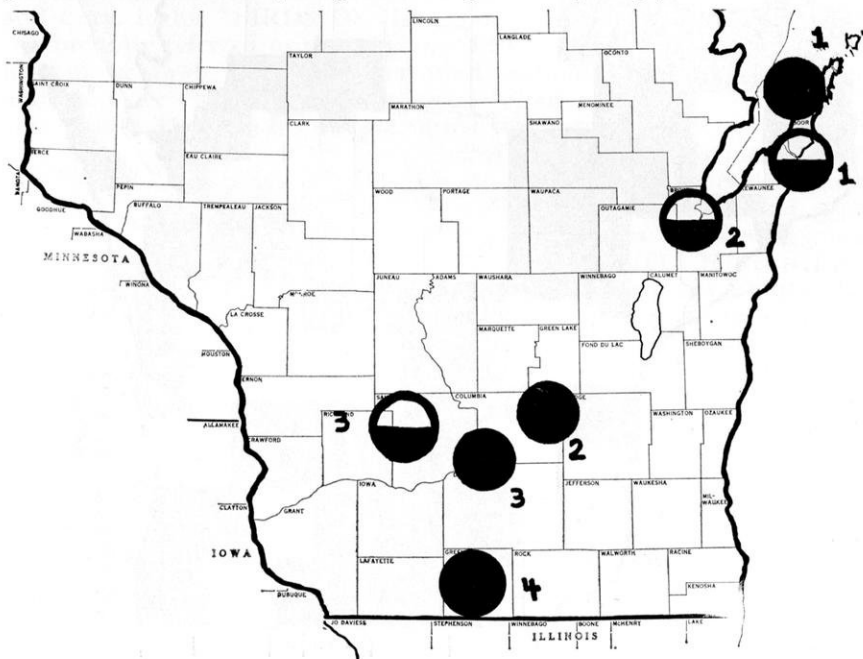


FIG. III. COUNTIES IN WHICH MIGRANT SHRIKES HAVE BEEN OBSERVED SINCE 1939.  
TAKEN FROM THE PASSENGER PIGEON.

bushy fencerows, dotted with small trees, and the third was in a small abandoned apple orchard.

In 1968 I excluded the general sighting inquiry and asked only for reports of possible nesting birds. It had become evident from some of the 1967 reports that there was confusion between the Migrant Shrikes and the similar Northern Shrikes, *Lanius b. borealis* (Vieillot), which also can be observed in spring migrating northward. For example on May 20, while banding on Point Au Sable, Green Bay, I observed a migrating Northern Shrike. At this time a pair of Migrant Shrikes were brooding six young only five miles away. Because of the difficulty for the casual observer in distinguishing between the two species, I asked only for reports of nesting birds.

The nesting survey of 1968 yielded 6 positive and 1 probable sites. Two of the positive sites and one of the probable sites remained unchanged from 1967. The other positive site and two of the probable sites reported in 1967 were not checked in 1968. The four new nests were in the same type of habitat as the nests found earlier. Three were in the same parts of the state as the ones reported in 1967. I found two of the positive sites at Bailey's Harbor while searching for the probable one reported by Roy Lukes in 1967. The site reported by Sam Robbins in Polk County in 1968 is the farthest north and west of all the sites in the two years of the study (Fig. II). The six positive nestings reported for 1968 produced a total of 21 young, an average of 3.5 young per nest.



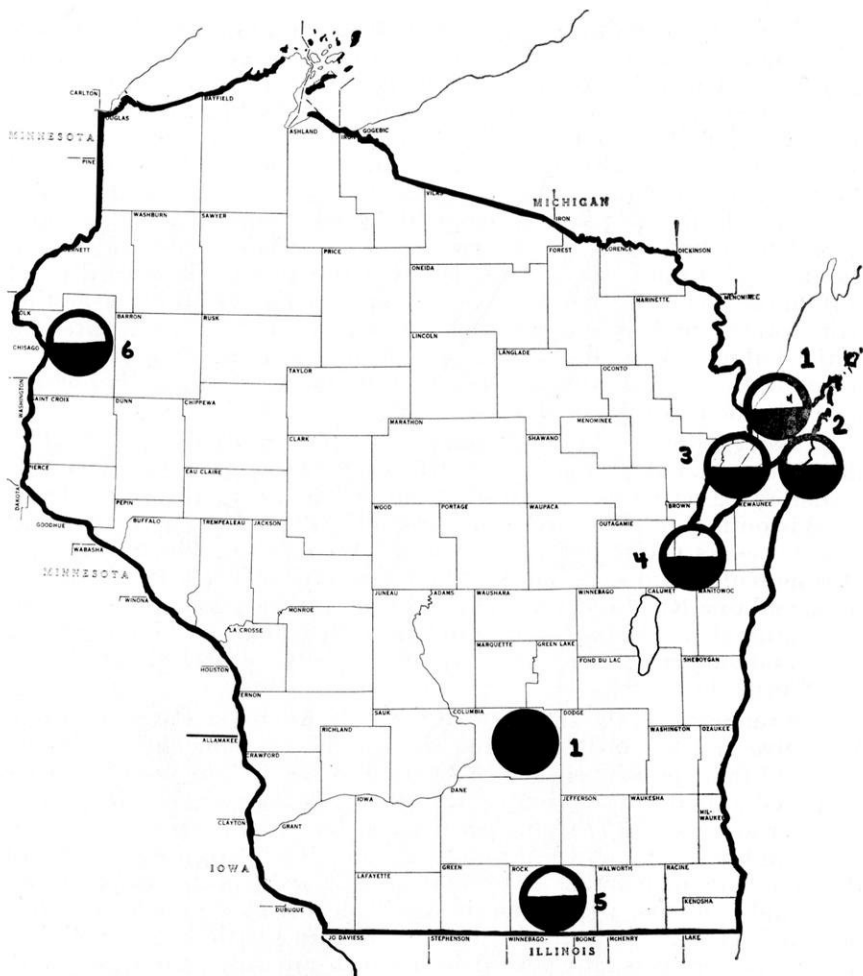
NESTING SITES OF MIGRANT SHRIKES  
IN 1967

(Fig. I)

In 1967 there were three positive and four probable nesting sites reported in Wisconsin. Below is an explanation of Fig. I and the location and reporter of each site.

- Positive nesting sites.
  1. Bailey's Harbor — Door County — Roy Lukes.
  2. Green Bay — Brown County — Thomas Erdman.
  3. Highway P.F. — Sauk County — Edward Peartree.
- Probable nesting sites.
  1. Bailey's Harbor — Door County — Roy Lukes.
  2. Lake Wisconsin — Columbia County — Doris Platt and Judson Kempton.
  3. Pardeeville — Columbia County — Doris Platt and Judson Kempton.
  4. Green County — Joan Emlen.





NESTING SITES OF MIGRANT SHRIKES  
IN 1968  
(Fig. II)

In 1968 a total of six positive and one probable nesting sites reported. Below is an explanation of Fig. II, and the location and reporter of each site.

- Positive nesting sites.
  1. Bailey's Harbor — Door County — Roy Lukes (same as 1967).
  - \* 2. Bailey's Harbor — Door County — Thomas Erdman (probable site in 1967).
  - \* 3. Bailey's Harbor — Door County — Thomas Erdman.
  - \* 4. Green Bay — Brown County — Thomas Erdman (same as 1967).
  5. Afton — Rock County — Thomas Ellis.
  6. Clayton — Polk County — Sam Robbins.
- Probable nesting sites.
  1. Highway P.F. — Sauk County — Doris Pratt and Judson Kempton.  
(same as 1967)

Two of the nests were disturbed in 1968 and although 11 eggs were laid only 5 young eventually fledged. Two young raccoons climbed the nest tree at Green Bay causing the young Shrikes to scatter so that only 4 young fledged from the 6 eggs. The other disturbed nest was one of the new sites at Bailey's Harbor (Fig. II, number 3). It produced only one young from 5 eggs. This nest was very flimsy in construction, and placed far out on a branch rather than in a secure crotch as is usual with shrikes. Undoubtedly it was partially emptied by wind and storm conditions typical to Door County. The presence of a partially destroyed nest in the same group of trees, and the fact that this pair of Shrikes still had eggs in the first week of June about 3 weeks behind the other 2 nesting pairs located nearby, suggests that this was a second nesting after an initial failure. Both adults were present and no other young were observed in the area. If this was a second nesting it was the only one observed in the two years of study.

Observations on the food habits of the Green Bay pair of Shrikes closely correspond to those of F. H. King (1883) who classified this predatory passerine as "omnivorous" after examining the stomachs of 15 Wisconsin birds. The Green Bay pair fed mainly on unidentified insects, beetles (Coleoptera), and bees (Hymenoptera), with a few mice *Mus musculus*, and some birds. Three English Sparrows, *Passer domesticus*, and one Red-Eyed Vireo, *Vireo olivaceus* were found stuck up at the nesting site. The pair seemed to have little trouble obtaining enough food, and surplusses were found decorating nearby barbed-wire fences and thorny shrubs.

In summary, in the two years of research the survey was able to find 7 positive and 3 probable nesting sites of the Migrant Shrike. (**Note: Three of those positive sites were deserted in 1969!**) The positive 7 sites produced a total of 9 nestings in the two years, fledging 34 young for a two-year average of 3.77 young per nesting. The average number of eggs found in four nests checked was 5.3 per nest. The known nests were all the same type of habitat. They were usually well constructed of roots, twigs and mud, and were often lined with feathers (See photo) and one nest in Green Bay had shredded plastic from a plastic bag as a lining. The nests were generally placed in a crotch anywhere from 3½ to 12 feet off the ground. Thinly treed fencerows and orchards were preferred nesting sites and often the same bush or tree was used in succeeding years.

My conclusions from the study as to the current status of the Migrant Shrike in Wisconsin is that it is **very uncommon** and probably **rare** throughout most of the state and **decreasing!** At Bailey's Harbor only one of the three positive sites found in 1968 was active in 1969. In Brown County we have nesting records as far back as 1939 (Per Edwin Cleary). I had 3 nesting pairs in 1965, but have not seen a Migrant Shrike in the county since 1968. John Bielefeldt, in his reply, included a series of observations of Migrant Shrikes in Waukesha County by S. P. Jones and A. R. Cahn beginning in 1913. The Shrike was considered a regular summer resident in Waukesha County, but has not been observed there since 1965. Professor Arol Epple reported that no Migrant Shrike nest record card for Wisconsin had been submitted to him since the nest card program started in 1965. Reports when few in number and con-

taining information such as above suggest this species is in serious trouble. The survey also indicated that many of the Wisconsin observers are unfamiliar with the Migrant Shrike, and that there is some confusion between it and the Northern Shrike which I believe is more commonly observed of the two. Some observers apparently use only the date of observation as a method for distinguishing between the species.



*Baby  
Migrant Shrikes  
in nest.*

*Picture  
taken at  
Scray's Hill,  
Brown County  
(1966).*

As to why this species has declined since the 1930's the answer at this time is open to speculation. There seems to be little change in the habitat required and the food habits of the species. Although the sample sizes are very small the clutch size and young fledged appear normal when compared to the literature (Miller examined 7 Wisconsin Shrikes in the 1930's). One aspect noted however is that our Wisconsin Shrikes seem no longer to be producing a second clutch or brood. Virtually all the data indicate a late April or early May egg-laying. The one exception was the Bailey's Harbor nest in 1968 which appeared to be a second nesting after an initial failure. There eggs were found in June. The second nesting took place in early July, and often one adult would still be feeding the first nestlings while its mate was brooding the second clutch. Unfortunately we do not know what number of young Shrikes



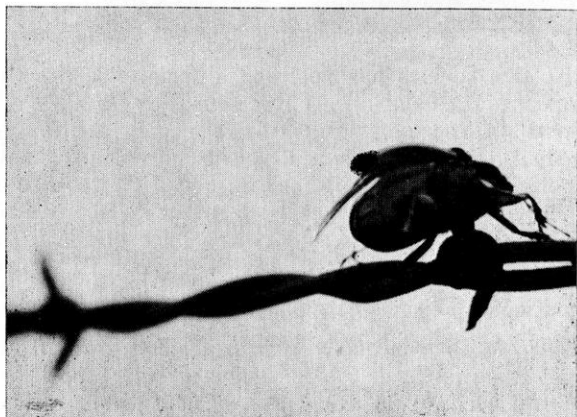
must be fledged to maintain the population. The possibility of this species being affected by pesticides is very strong. It is a predatory bird at the top of an eco-system which has received more than its share of chemical abuse. There are some indications that the Shrike population decline corresponds to the introduction and use of persistent pesticides in the state. More research is needed and soon. If present trends persist there may not be any Migrant Shrikes to give status to!

#### ACKNOWLEDGMENTS

I would like to thank all those individuals who participated in the survey by sending in reports. I hope those few individuals who were able to report Migrant Shrikes will continue to keep records of any future observations. I'm very grateful to Elmer Strehlow for his work compiling all the Migrant Shrike observations for the Passenger Pigeon for the state, and his excellent information on the species for Brown County (Fig. III, counties reporting Migrant Shrikes since 1939). I would like to thank Roy Lukes for his aid in the banding of nestling Shrikes, and his almost daily observation of the three nesting sites at Bailey's Harbor. I also very much appreciate the critical review and discussion given this paper by Drs. Fred and Fran Hamerstrom. It was the observations of the unusual scarcity of Migrant Shrikes in the Plainfield area which prompted them to recommend a statewide study.

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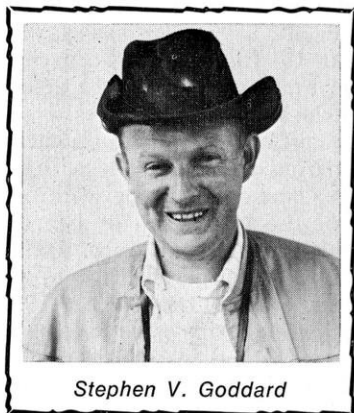
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# Species Composition and Density of The Lower Kinnickinnic River Valley

by STEPHEN V. GODDARD

Associate Professor, Department of Biology, Wisconsin State University  
River Falls, Wisconsin



Stephen V. Goddard

*Dr. Goddard is a Wildlife and Zoology Professor at Wisconsin State University, River Falls. He has a BS and MS degree from Utah State, a PhD in Zoology from Oklahoma State. He has worked as a wildlife research biologist for the U. S. Fish and Wildlife Service. He is married, 33 years old, has completed a number of ornithological papers and at present is doing research on factors influencing utilization of western Wisconsin wetlands.*

The lower Kinnickinnic River Valley is known locally as an excellent birding area. In the last four years, the author has recorded 158 species in this area. During the middle of May, 85 to 90 species may be seen while walking down the valley. A study is being undertaken at the time by members of the Wisconsin State University faculty to survey the flora, fauna, geological, scenic and any other unique features and to coordinate the work of several interested groups in order to preserve this outstanding area (Beaver, 1969). With this as background, this portion of the study was taken to determine:

1. Total population of breeding birds;
2. Species composition of the breeding birds;
3. Density of the various breeding birds and
4. The relationship of species to the various habitat types.

The 1100 acre study area is located in the northwestern corner of Pierce County, Wisconsin, and includes the 7.3 miles of Kinnickinnic River Valley and adjacent bluffs from the lower dam in the town of River Falls west to the bridge on Highway F in Clifton Hollow. The river valley is generally quite narrow but widens to about one-quarter of a mile in some places. The bluffs along the river are very steep and rise 150 feet straight up in some places. The area is interlaced with several large eroded gullies. In many cases, these gullies have reached bedrock and in the lower valley form small scenic waterfalls. There are eight small springs emptying into the river plus a fairly large feeder stream (Rocky Branch). A small spring fed pond (3 acres) is in about the middle of the area. The major tree species are Oaks (*Quercus* sp.), Elms (*Ulmus* sp.), Junipers (*Juniperus* sp.), Pines (*Pinus* sp.), and

Basswoods (*Tilia* sp.). There is a good deal of Ironwood (*Ostrya* sp.), Prickly Ash (*Zanthoxylum* sp.), Elderberry (*Sambucus* sp.), Gooseberry (*Ribes* sp.), and both raspberries and blackberries (*Rubus* sp.), making up the understory of the woods. Several open prairie situations are scattered down the river valley, and vary in size from one to 20 acres. Dominant grasses are: Sideoats grama (*Bouteloua* sp.), Love grass (*Eragrostis* sp.), and meadow grass (*Glyceria* sp.). Typically, these areas are overgrazed by cattle and many invader species and weeds are present. This indicates the area has a wide diversity of habitats. Additional evidence is the over 500 plant species reported for this area (Richardson, 1970).

I conducted the work from 10 June to 15 July 1970. Fourteen rectangular shaped (220 x 440 yards) sample areas containing 20 acres were selected at one-half mile intervals down the river. Boundaries were established to include not only the river valley but also the bluffs on each side of the river. Several equidistant transect lines were laid out within each sample plot. Starting at sunrise, each area was censused by walking the various transect lines and recording all of the birds seen or heard. Special care was taken to prevent tabulating birds more than once. Data for all plots were combined and expanded to give an estimate of the total population and population of each species on the area. Density per 100 acres for each species was also calculated. Additional trips were taken in an attempt to detect any species that were not observed in sample plots. Observations were taken in the evening and at night to determine the occurrence of crepuscular and nocturnal species.

During the study, 72 species of breeding birds were recorded in the sample plots and a total population of 8,116 was calculated (Table 1).

#### SUMMARY OF THE SPECIES, FREQUENCY, BIRDS/100 ACRES AND POPULATION ESTIMATES

TABLE I

Species	Scientific Name	Areas in Which Species Observed	Number Observed	Birds 100 Acres	Estimate For Area
Great Blue Heron	<i>Ardea herodias</i>	10	15	5.35	59
Green Heron	<i>Butorides virescens</i>	3	6	2.14	24
Mallard	<i>Anas platyrhynchos</i>	1	1	0.36	4
Wood Duck	<i>Aix sponsa</i>	6	9	3.21	36
Red-tailed Hawk	<i>Buteo jamaicensis</i>	3	6	2.14	24
Ruffed Grouse	<i>Bonasa umbellus</i>	14	44	15.71	174
Killdeer	<i>Charadrius vociferus</i>	2	3	1.07	12
Spotted Sandpiper	<i>Actitis macularia</i>	5	9	3.21	36
Mourning Dove	<i>Zenaidura macroura</i>	12	32	11.45	127
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	3	23	8.32	91
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	3	6	2.14	24
Woodcock	<i>Philohela minor</i>	1	3	1.07	12
Great Horned Owl	<i>Bubo virginianus</i>	1	2	0.72	8
Chimney Swift	<i>Chaetura pelagica</i>	4	9	3.21	36
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	5	8	2.86	32
Belted Kingfisher	<i>Megasceryle alcyon</i>	12	21	7.50	83
Yellow-shafted Flicker	<i>Colaptes auratus</i>	12	51	18.20	202
Pileated Woodpecker	<i>Dryocopus pileatus</i>	2	3	1.07	12
Red-bellied Woodpecker	<i>Centurus carolinus</i>	10	26	9.28	103
Hairy Woodpecker	<i>Dendrocopos villosus</i>	8	12	4.28	48
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	2	6	2.14	24
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	6	18	6.43	71



TABLE I (cont.)

Species	Scientific Name	Areas in Which Species Observed	Number Observed	Birds 100 Acres	Estimate For Area
Downy Woodpecker	<i>Dendrocopos pubescens</i>	11	21	7.40	83
Crested Flycatcher	<i>Myiarchus crinitus</i>	12	60	21.40	238
Eastern Phoebe	<i>Sayornis phoebe</i>	11	29	10.35	115
Alder Flycatcher	<i>Empidonax virescens</i>	1	2	0.72	8
Least Flycatcher	<i>Empidonax minimus</i>	8	28	10.00	111
Eastern Wood Pewee	<i>Contopus virens</i>	14	75	26.80	296
Tree Swallow	<i>Iridoprocne bicolor</i>	8	26	9.28	103
Rough-winged Swallow	<i>Stelgidopteryx ruficollis</i>	14	93	33.20	368
Barn Swallow	<i>Hirundo rustica</i>	1	2	0.72	8
Bank Swallow	<i>Riparia riparia</i>	1	2	0.72	8
Bluejay	<i>Cyanocitta cristata</i>	13	60	21.40	238
Crow	<i>Corvus brachyrhynchos</i>	12	38	13.55	150
Black-capped Chickadee	<i>Parus atricapillus</i>	10	40	14.30	159
White-breasted Nuthatch	<i>Sitta carolinensis</i>	13	39	13.95	155
House Wren	<i>Troglodytes aedon</i>	14	110	39.30	436
Catbird	<i>Dumetella carolinensis</i>	14	122	43.50	483
Brown Thrasher	<i>Toxostoma rufum</i>	7	24	8.57	95
Robin	<i>Turdus migratorius</i>	11	51	18.20	202
Eastern Bluebird	<i>Sialia sialis</i>	1	2	0.72	8
Wood Thrush	<i>Hylocichla mustelina</i>	2	4	1.42	16
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	2	8	2.86	32
Cedar Waxwing	<i>Bombycilla cedrorum</i>	10	32	11.45	127
Starling	<i>Sturnus vulgaris</i>	5	14	3.68	41
Yellow-throated Vireo	<i>Vireo flavifrons</i>	4	10	3.57	40
Red-eyed Vireo	<i>Vireo olivaceus</i>	12	70	25.00	278
Warbling Vireo	<i>Vireo gilvus</i>	1	2	0.72	8
Yellow Warbler	<i>Dendroica petechia</i>	6	11	3.93	44
Yellowthroat Warbler	<i>Geothlypis trichas</i>	5	12	4.28	48
Ovenbird	<i>Seiurus aurocapillus</i>	9	44	15.70	174
Northern Waterthrush	<i>Seiurus noveboracensis</i>	1	4	1.42	16
American Redstart	<i>Setophaga ruticilla</i>	5	10	3.57	40
Bobolink	<i>Dolichonyx oryzivorus</i>	4	5	1.79	20
Western Meadowlark	<i>Sturnella neglecta</i>	2	3	1.07	12
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	6	10	3.57	40
Baltimore Oriole	<i>Icterus galbula</i>	13	47	16.80	186
Brown-headed Cowbird	<i>Molothrus ater</i>	13	67	23.90	265
Bronzed Grackle	<i>Quiscalus quiscula</i>	11	21	7.50	83
Scarlet Tanager	<i>Piranga olivacea</i>	6	13	4.65	52
Cardinal	<i>Richmondia cardinalis</i>	11	47	16.80	186
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	14	99	35.35	392
Indigo Bunting	<i>Passerina cyanea</i>	12	44	15.70	174
Dickcissel	<i>Apiza americana</i>	1	2	0.72	8
American Goldfinch	<i>Spinus tristis</i>	13	95	33.95	392
Rufous-sided Towhee	<i>Pipilo erythrophthalmus</i>	11	52	18.58	206
Savannah Sparrow	<i>Passerculus sandwichensis</i>	2	4	1.42	16
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	2	4	1.42	16
Vesper Sparrow	<i>Poocetes gramineus</i>	2	4	1.42	16
Song Sparrow	<i>Melospiza melodia</i>	14	114	40.70	451
Chipping Sparrow	<i>Spizella passerina</i>	7	42	15.00	166
Field Sparrow	<i>Spizella pusilla</i>	7	20	7.14	80
Total					8116

Another seven species: American Bittern (*Botaurus lentiginosus*), Turkey Vulture (*Cathartes aura*), Cooper's Hawk (*Accipiter cooperii*), Sparrow Hawk (*Falco spawerius*), Nighthawk (*Chordeiles minor*), Eastern Kingbird (*Tyrannus tyrannus*), Whip-poor-will (*Caprimulgus vociferus*), were observed in the area. Eight species were observed on all 14 plots. These were Ruffed Grouse, Eastern Wood Pewee, Rough-winged Swallow,

Catbird, Rose-breasted Grosbeak, Baltimore Oriole, Brown-headed Cowbird, and American Goldfinch. Species that were found only on one plot were: Mallard, Woodcock, Great Horned Owl, Alder Flycatcher, Barn Swallow, Eastern Bluebird, Warbling Vireo, Northern Waterthrush, and Dickcissel.

The 10 most numerous species were: Catbird (483); Song Sparrow (451); House Wren (436); Rose-breasted Grosbeak (392); American Goldfinch (392); Rough-winged Swallow (368); Eastern Wood Pewee (296); Red-eyed Vireo (278); Brown-headed Cowbird (265); and Bluejay (238).

The number of species observed on a sample plot varied from 31 to 41, (Table 2) The number of individuals varied from 125 to 174 and the density varied from 705 to 870 birds per 100 acres. The average for the 14 plots was 37 species and 147 individuals.

TABLE II  
NUMBER OF SPECIES, INDIVIDUALS, AND DENSITY  
FOR EACH OF THE 14 CENSUS AREAS

Area	Species Observed	Individuals Observed	Density Birds/100 Acres
1	40	155	775
2	41	142	705
3	38	149	745
4	36	131	655
5	35	126	630
6	41	145	725
7	38	125	625
8	34	170	850
9	39	141	705
10	39	163	802
11	35	144	720
12	31	149	745
13	41	174	870
14	32	144	720
Average	37	147	735

Of the eight species observed in all sample plots, goldfinches and Rough-winged Swallows were confined to the river's edge. The other six species were concentrated within 60 yards of the river but several individuals were found on or near the bluff tops. Of the 10 most numerous species, Song Sparrows were the only ones found almost exclusively along the river. The other nine species were again concentrated along the river valley but occasionally were found some distance away. The river was also extremely important in the distribution of other species. The majority of all species were found near the river. Surprisingly, only a small number of birds were found on the bluff tops even though they were adjacent to cultivated fields and a large amount of edge was available.

Undoubtedly, estimates for the population of some species such as: Great Blue Heron, Belted Kingfisher, and Red-Tailed Hawks were too high. The error for Kingfishers and Great Blue Herons was due to their habit of flying up and down the river to feed, thus increasing the likelihood of an individual being counted in more than one area. For Red-Tailed Hawks, the error was due to expansion since it was believed that all redtails in the area were counted because none were ever observed out of a sample plot and they are a highly visible species. Estimate of the Ruffed Grouse population was probably in error due because the transect

method results in a low estimate (Guillion, 1967). This is likely true for other woodland species that do not sing or have poorly developed songs.

Variation in the number of species observed in a plot was related to amount of ecological diversity. In plot 12, only 31 species were observed compared to plots two, six and 13 where 41 species were noted. Plot 12 had a large open (five acres) area grown over with *Equisetum* sp. and raspberries which was almost devoid of birds. The other three plots possessed a wide variety of habitats. This was most clearly shown in plot 13 which not only had the greatest number of species but also the greatest number of individuals. This area contained a wooded Oak upland which led to a tall grass ungrazed meadow (which contained several clusters of trees and shrubs) which continued to the river. On the other bank, there was a gravel bar covered with Willow (*Salix* sp.) bordered by a spring fed rivulet which emerged from the base of a steep bluff. The sides of this hill were covered with Pines, Ironwood, and Elms. This gave way to an Alfalfa (*Medicago* sp.) field and a grassland meadow on the bluff top.

Plots that had low densities of breeding birds (four, five and seven) contained large portions of overgrazed meadows or woods. In all three plots, the overgrazed wooded portions had very little understory and that present was of little value to birds. MacArthur (1958) has pointed out the importance of vertical stratification in increasing the use of an area by different species of birds. An area lacking a shrub layer could not support as large or as diverse a population.

Ovenbirds are a good indicator of the general conditions. There were very few, if any, present on the upper younger wooded and grazed sample plots. Farther down the valley where the relief was greater and less logging and grazing had taken place, they were much more numerous. Four plots along the lower reaches of the river had 68 percent of the Ovenbirds.

The average density of birds per 100 acres was 735. This was similar to the 724 birds per 100 acres reported for a mature deciduous forest in West Virginia (Welty, 1963) and higher than the 522 reported for a young deciduous forest in the same state. Fawver (1947) found a density 216 birds/100 acres for a flood plain deciduous forest in Illinois.

More recently, Johnson (1970) found a density of 1,600 birds per 100 acres which included 22 species on the grounds of the Virginia Biological Station. This was a very high density and was due to the highly modified and parklike nature of the Station grounds and the fact that this study area only contained 10 acres. If this area had been expanded, the density would have been much lower. This was shown by Chandler's (1960) work where he reported a density of only 190 birds per 100 acres and only 16 species for the deciduous forest adjacent to the Station grounds. From these studies, we can see that the Kinnickinnic Valley area does have a high population of breeding birds.

The diversity, number of breeding birds, and the wide array of migrants make the Lower Kinnickinnic River Valley an extremely interesting area from an ornithological point of view. The high bluffs and diversity of habitats support not only a large number and variety of birds



but also makes the area extremely valuable from the scenic and geological point of view. These features make this an area worth visiting and worth preserving for the enjoyment of future generations.

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# Some Comments on Improving Wisconsin Christmas Counts

John Bielefeldt

*Mr. Bielefeldt is a 25-year-old amateur ornithologist from Waukesha County. He studied conservation communications while at the U. W.-Madison. He now works as an editor at the University. His primary ornithological interest lies in establishing indexes of present and historical abundance, especially for Waukesha County.*

*He says "... if my proposal is tried, it will obviously require a compiler to deal with the extra data ... I'll volunteer."*

Despite the barriers that Christmas Count methods present to any precise interpretation of their counts, the counts apparently can and will be used to measure at least the broader differences in species' status on a regional, annual, or historical basis (e.g., Moe, 1968).

A recent look at the manuscript field sheets and summaries of some Wisconsin Christmas Counts has prompted a few simple ideas on how reporting and interpretation of Christmas Counts could be improved.

- 1) Triple check all additions, since errors in adding totals are distressingly frequent.
- 2) Report party-hours and party-miles, clearly separating hours and distance afoot from those by car. If, for example, two observers in the same party walk together for  $1\frac{1}{2}$  miles and one hour, the report should indicate  $1\frac{1}{2}$  party-miles and one party-hour, not three party-miles or two party-hours. Compilers and party leaders apparently are not always aware of this definition of party-miles and party-hours, though **Audubon Field Notes** Editor Richard Plunkett has verified this interpretation. Parties which do not report time-distance data, or which fail to separate car and foot data, should be excluded from the count summary, as should the species' numbers they report.
- 3) Feeder counts, of the kind in which an indoor observer notes the species and numbers occurring at his bird feeder over the entire count day, muddle interpretation and should be excluded from the count report. (Even if an all-day feeder observer notes his hours — say six hours spend watching feeder — he travels no distance, thus compounding difficulties of interpretation on a birds per party-mile basis). Nevertheless, feeders probably deserve to be surveyed and any attempt to totally exclude their effect is impractical if not impossible. Feeders can be surveyed by making counts as a field party passes them, much as any other area is surveyed in transit. In this way feeder counts are incorporated in the time-distance counting framework.

Christmas Counts at different areas vary widely in number of observers afield, number of parties afield, total number of hours and miles spent afield, and amounts of time and distance traveled afoot versus amounts by car, among other factors. Quite obviously, direct comparison between areas or years of raw numbers of a species is an untenable method of examining changes in status or relative population levels.

Usually attempts to interpret local or yearly variation in a species' number on Christmas Counts use indexes of number per hour, number

per mile, or both (see Young, 1961 and 1965). While the current report format differentiates between party-hours (miles) by car and party-hours (miles) afoot, it does not separate birds recorded on foot from those recorded by car. However, it is entirely likely that the number of individuals of a species seen in one hour walking will be consistently different from the number seen in one hour driving — the potential reasons being fairly obvious, such as visibility and hearing restrictions in cars as well as rate-of-travel and habitat coverage differences.

Some preliminary data from my own experience demonstrate that the foot-car variation is indeed quite marked.

Tables 1 and 2 show analyses of a limited number of personal, single-observer winter counts. They present a combination of December and January-February figures; though the latter might differ from December figures because of snow cover, migratory movement, or other factors, the information should be fairly complementary. Moreover, these tables are intended to have illustrative value only.

Table 1. Mean Number Individuals Per Hour Afoot and Per Hour By Car, Waukesha County, Winters 1961-62 to 1969-70.

Species	$\bar{X}$ No./Hour, Afoot1	$\bar{X}$ No./Hour, By Car2	Species	$\bar{X}$ No./Hour, Afoot1	$\bar{X}$ No./Hour, By Car2
Blue Jay .....	1.6	4.1	Cardinal .....	2.4	1.2
Crow .....	1.9	8.5	Purple Finch .....	2.4	2.4
B.-c. Chickadee .....	2.6	5.4	Goldfinch .....	9.5	2.4
W.-b. Nuthatch .....	0.6	1.1	S.-c. Junco .....	7.4	10.2
Starling .....	0.7	20.3	Tree Sparrow .....	8.6	22.4

<sup>1</sup>18 counts, all at least 0.50 hours and 0.25 miles in duration.

<sup>2</sup>29 counts, all at least 0.75 hours and 4.5 miles in duration.

Table 2. Mean Number Individuals Per Mile Afoot and Per Mile By Car, Waukesha County, Winters 1961-62 to 1969-70.

Species	$\bar{X}$ No./Mile Afoot1	$\bar{X}$ No./Mile By Car2	Species	$\bar{X}$ No./Mile Afoot1	$\bar{X}$ No./Mile By Car2
Blue Jay .....	1.7	0.6	Cardinal .....	1.8	0.2
Crow .....	3.8	1.0	Purple Finch .....	2.2	0.4
B.-c. Chickadee .....	2.1	0.7	Goldfinch .....	6.9	0.3
W.-b. Nuthatch .....	1.1	0.2	S.-c. Junco .....	11.7	1.2
Starling .....	4.8	2.6	Tree Sparrow .....	21.4	3.0

<sup>1</sup>18 counts, all at least 0.50 hours and 0.25 miles in duration.

<sup>2</sup>29 counts, all at least 0.75 hours and 4.5 miles in duration.

"Car counts" are any made from a moving or stopped car, even including those in which the observers moved less than 0.05 mile away from the car. "Foot counts" are those in which total distance walked was greater than or equal to 0.10 mile. I believe such definitions accord approximately with common Christmas Census practices. Selection of areas to cover afoot was entirely subjective, so that it tended to favor heavily the wooded and marshy — open water habitats where more birds are usually found. Conversely, fields and residential areas were covered primarily by car. I believe such a selection practice, too, is usual with Christmas counters.

The samples of Tables 1 and 2 are quite limited, and quite possibly the numbers per hour or per mile are distorted by inordinate effects of counts in "high" or "low" years of species' winter abundance.

Nevertheless, these data clearly indicate that winter counting over one hour or one mile afoot is **not** equivalent to counting over one hour or one mile by car. Yet the interpreter of published Christmas Counts cannot consider this difference so long as Count reports lump species' totals by car and afoot into a grand total. To obtain any per party-hour (party-mile) figure for a species, he must add party-hours (miles) afoot and by car, and then must divide a species' total by this party-hour (mile) total. That method can yield figures which do not compare accurately with other areas' figures, since some areas' counts are made largely afoot, some mostly by car, and some in about equal proportions of each method.

Even if reporters did tally foot and car counts separately, publishing them separately is impractical. Instead we need some idea of the ratios between foot counts for each species, both per party-hour and per party-mile, so that afoot party-hours (miles) — lesser totals on most counts — could be converted to car-equivalent party-hours (miles). Interpreters could then manipulate reported times and distances and arrive at a "number of individuals per car-equivalent party-hour (mile)" for a studied species.

For example, suppose the figures of Tables 1 and 2 did present reliable data on the blue jay. If the mean number/hour afoot (1.6) is divided by the mean number/hour by car (4.1), a ratio of 0.4 is obtained. One hour afoot, then, will produce only 0.4 as many blue jays as will one hour by car. In other words, one hour afoot equals 0.4 car-equivalent hours.

One mile afoot, however, equals 2.8 car-equivalent miles, by a similar procedure, **for blue jays**.

A few years', or even one year's, separate tallying of birds counted afoot and by car on Wisconsin counts could probably provide the basis data needed to approximate the foot-car ratios. Perhaps a species' ratio will differ substantially between groups of observers, between areas, or between state regions. It may differ so much, in one way or another, that it is useless for interpretation, but this too would be well to know. If the ratios do prove sufficiently uniform, at least within a region, their publication would eliminate the interpreter's need to lump car and foot times and distances. Leaving aside the other biases inherent in count methods, usable ratios allow more accurate count comparison among areas and among years.

I propose that observers and compilers of the 1970 Christmas Count try to tally separately the foot and car counts of each species seen, using the definitions and methods described earlier and outlined below:

- 1) consider as "foot counts," any tally separately, by species, any counting in which the party or observer walks 0.10 miles or more;
- 2) consider as "car counts," and tally separately, by species, any counting made from moving or stopped cars, and any counting in which the observers move less than 0.05 mile away from the car;
- 3) select areas to cover afoot in the usual way — subjective choice of the observers.

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# **FIELD**

# **NOTES**

By DARYL TESSEN



## **The Autumn Season**

**August 16 - November 30, 1969**

Hot, dry weather opened the fall season this year. Heavy rains fell at the close of August, with the movement of a cool front through the state. During September there were occasional periods of heavy rainfall, with as much as four inches falling in a week (Waushara county) but generally the month was drier than normal with severe temperatures. Cooler, cloudy weather prevailed during the last week but a warming trend occurred at the outset of October. Temperatures during the first several days were 80° or better. However the remainder of the month was cold, wet and windy. The high winds frequently hampered many banders during the month. In Waushara county it was the coldest October in a decade (Chipman). Temperatures during the last half of October were 5° or more below normal in the state (March). The first hard statewide frost occurred on Oct. 13 with the northern part of the state experiencing three light snowfalls, the first occurring on Oct. 16 (Schimmels). On Oct. 22-23 most shallow ponds and marshes iced over. Precipitation during October was above normal in most areas, especially during the Oct. 10-20 period (March). A warming trend occurred after the first week of November with "Indian summer" conditions persisting between Nov. 5-10. This period was characterized by 50-60° temperatures and heavy fog. By mid-November the weather had changed drastically with cold, windy days persisting. The statewide freeze-up occurred during this time (Nov. 13-20). However there was very little snow on the ground at the close of the period with what little there was predominantly existing only in the northern counties.

The majority of reporters considered the migration to be unspectacular, primarily due to the absence of pronounced flights of certain bird groups. Due to the hot August weather no wave occurred until September 1-3, when a small movement passed through the state. There was only a slow trickle of migrants for the next two weeks. However three consecutive major waves then occurred: on Sep. 16-18, Sep. 22-24, and Sep. 30-Oct. 1. Smaller waves followed on Oct. 8 and Oct. 11. The last major wave occurred on Oct. 17-18 with a "select" wave, predominantly finches, closing out the migration on Oct. 21. These waves, or absence of them, fit the weather pattern during the autumn months;



that is, whenever a cold front moved through the state a good migratory wave pushed through the state, i.e., last half of September and middle of October. When warmer weather prevailed, there were few migrants reported, i.e., early half of September.

### Species Summary

**Hérons:** Similar situations prevailed again this fall with the Great Blue and the Common Egret; there were few reports of either species. Reasons are not yet clear as to the continual low number of observations.

**Waterfowl:** The Whistling Swan situation improved over last year. Numbers were up throughout the state. The two major areas of concentration included Green Bay, along Marinette, Oconto and Brown counties, and along the Mississippi River. Even more outstanding was the goose migration for all three species, Canada, snow, and blue, this fall. Canadas moved into the state in a major wave on Sep. 23-24 with several other waves occurring at intervals during October. By the end of October approximately 175,000 were estimated to be present in the Horicon Marsh area. In addition areas west and north of Horicon generally had higher populations than in 1968 with groups of Canadas scattered throughout the state (March). The numbers of snows and blues stopping in the state surpassed everything for the past eight years. A major statewide migration occurred between Oct. 15-20 with approximately 25,000+ snows/blues present on Oct. 20.

James March provided another extensive summary of the waterfowl picture in the state, including a description of habitat conditions, plus relative abundance of various species. Generally the picture was considerably better than in 1968.

"Habitat conditions were generally good although low water was a problem in certain areas. Most small potholes and marshes in the northwest were dry. The Crex Meadows area was the driest in years. Water levels on the state portion of Horicon Marsh were extremely low as the result of a summer drawdown and lack of September rainfall. Several other state projects, e.g. the Wood county area and the Mead Wildlife area, had water shortages. Food conditions on Lakes Poygan, Winnebago and Buttes des Morts, three additional diver concentration areas, continued to be poor. On the plus side, the chemical treatment and reflooding of Beaver Dam Lake, Dodge county, provided an attractive fall concentration site. Also, completion of the state's Grand River Marsh project created over 6,000 acres of excellent habitat.

The largest concentrations of dabbling ducks were present on the first weekend of October. . . . Wood ducks were also still plentiful on several areas, although this species probably was no better than 1968 and may actually have been down statewide. The total blue-wing flight probably was also smaller than in past years despite the mild fall. Mallard numbers were better than in 1968 with at least 9-10 areas having a thousand or more mallards sometime during October-November. A second peak in duck populations came in mid-October when the major diver flights occurred. Scaup were reported in Wisconsin as early as October 10, Canvasback by October 11, and Redheads were present also in early October. The major movements of divers, especially scaup, came about Oct. 15-20. The major Canvasback flight occurred between Oct. 22-Nov. 5. The "can" flight in 1969 was again primarily confined to the Mississippi

River with 20,000+ birds reported on the various Wisconsin pools about Nov. 5. Peak numbers of Canvasback on the Oshkosh area lakes probably did not exceed 2,000 birds and the Redhead peak was about this same level. . . . Greater Scaup were reported as especially common. . . . Diver flights along Lake Michigan were below average in 1969, although Green Bay had the best population of scaup, etc., in several years. A majority of the divers were gone by November 15 although remnant groups were still observed on open inland waters in late December. A notable exception to the good diver flights was a noticeable lack of ringnecks."

**Hawks:** A disappointment this fall with almost no major flights observed. Berger reports from Cedar Grove that there was a very poor movement during September with no pronounced broad-winged flight. However October was unusually good, so that they ended up with a raptor catch of 487, the second best in 19 years of banding there. Several observers reported poor flights of the Goshawk, Cooper's, Broad-winged, Rough-legged and the Peregrine Falcon.

**Shorebirds:** A poor flight this fall with numerous observers remarking on the scarcity of various shorebird species. The only concentration in the state this fall was at Green Bay. However numbers were below the unusually high concentrations observed there in 1968. The only good migration for any shorebird species this fall was that of the Stilt Sandpiper.

**Gulls:** Large numbers were reported along Lake Michigan as well as from various inland water bodies. The majority of gulls consisted of Herring and Ring-billed. Franklin's and Bonaparte's were disappointingly low in numbers. Most impressive was the sighting of Glaucous, Iceland and Great Black-backed Gulls in Green Bay in early October and the Little Gull in Manitowoc in mid-August.

**Terns:** For all four of the reported species this fall there was unanimity on the low numbers observed.

**Cuckoos:** Very few reports of both species this fall.

**Owls:** There were fewer observations than normal of the Screech and Saw-whet. On the positive side was the reappearance this fall of the Snowy and Long-eared and the observation of the Great Gray Owl.

**Woodpeckers:** Unusual is the large number of Flickers and red-heads during November and into December.

**Chickadees-Nuthatches:** An average fall for the black-capped after the unusually large numbers present last year. The boreal numbers however were drastically down with only one reported from Forest county. However a major movement of Red-breasted Nuthatches into the state occurred during the fall. It was numerous throughout the state, making the flight considerably better than that of last year.

**Thrushes:** Robins were present in very good numbers this fall. The majority of thrushes showed an increase in numbers over those of last year. Again the Bluebird remained at low numbers.

**Warblers:** A slight improvement over last year's migration but nevertheless still remaining subpar. Undoubtedly the presence of more pronounced fronts and somewhat cooler weather aided in the increase of observed species.

**Finches:** Another "finch" year best describes this bird group. Easily the most outstanding was the amazing invasion of Pine Siskins, and the

Red and White-winged Crossbills. The unprecedented movement that commenced during the summer continued through the fall. Reports came from throughout the state of all three species. Numbers of siskins ranged from small flocks to several hundred. Most outstanding is the movement of finches, predominantly siskins, through Cedar Grove on Oct. 21. By 1:00 p. m. over 50,000 had passed through! Crossbills varied in numbers from a few to flocks of 40 and 50. The Evening Grosbeak and Common Redpoll likewise had major movements into the state although of lesser proportion. In addition the major wave did not occur for either species until November when reports poured in from all over. Purple Finches were present in varying numbers, with some reporting it as scarce while others as numerous. At best its migration would have to be categorized as fair, better than that of last year with more present at the end of the period, but not outstanding enough to represent a major invasion. The only negative aspect to the finch picture this fall is that of the Pine Grosbeak and the American Goldfinch. The first was represented by only a smattering of reports, predominantly from the northern counties while the second was reported as fewer in numbers to scarce in many areas. Undoubtedly any movement of the Pine Grosbeak would be primarily restricted to the more northern sections of the state.

**Sparrows:** Easily a greater variety were observed this fall than most other years. However the migration lacked any major movements through the state, with the possible exception of the White-crowned, which experienced an unusually good flight. Considerably fewer in numbers was the Harris'.

### Interesting Species

281 species were recorded during the period, surpassing last year's outstanding mark of 278. Some truly exciting species were observed this fall. Most outstanding is the first state record of the Black-headed Grosbeak that appeared at Madison; the first state record of two Harris' Hawks sighted at Goose Pond; the third state record of the Groove-billed Ani; the appearance of the Great Gray Owl in Bayfield county; the eighth state record of the Little Gull at Manitowoc; the appearance of three other rare gull species, the Glaucous, Iceland, and the Great Black-backed; the appearance of the Northern Three-toed Woodpecker and Gyrfalcon from the north; Swainson's Hawk, White Pelican (two sightings each), Western Grebe, Black-billed Magpie, Red-shafted Flicker from the west; and Summer Tanager, a southern visitor to the state. Also noteworthy are the following species; Red-necked Grebe, Yellow-crowned Night Heron, Harlequin Duck, Surf and Common Scoters, Golden Eagle, King Rail, Willet, Western Sandpiper, Marbled Godwit, Ringed Turtle Dove, Barn Owl, Black-backed Three-toed Woodpecker, Bohemian Waxwing, Kentucky Warbler, Hoary Redpoll, and the LeConte's, Sharp-tailed and Lark Sparrows.

### The Season Summary

**Common Loon:** Observed in nine central and southern counties with the last observations occurring in Dane (Nov. 22, Robbins), Kenosha (Nov. 23, Hamers) and Waukesha (12 on Nov. 24, Gaurekes) counties.

**Red-throated Loon:** Two reports this fall, both in Ozaukee county: Oct. 18 (Gustafson) and Nov. 23 (Donald).

**Red-necked Grebe:** A single individual was observed in Nov. 21 in Dane county by the Ashmans.

**Horned Grebe:** Reported from ten counties with the observation period extending between Aug. 28 (Marinette county, Lindberg) and Nov. 30 (Ozaukee county, Gustafson).

**Western Grebe:** One of these western species was observed in Milwaukee on Oct. 27 by Donald.

**Pied-billed Grebe:** 43 were counted in Brown county on Sep. 3 by Bratley. There were six November departure dates, the latest Nov. 26th in LaCrosse county (Rosso).

**White Pelican:** Two observations this fall, both of two individuals, with the first occurring on Oct. 16 in Collins Marsh (Manitowoc county) by D. Olson and the other on Nov. 15 in Neenah (Winnebago county) by Roehr.

**Double-crested Cormorant:** This species continues to maintain the pattern of almost no observations exhibited in previous fall periods. This time there were three reports: Oct. 8 in Marinette county, Richter and in LaCrosse county between Oct. 19 and Nov. 18, Rosso and Leshar.

**Great Blue Heron:** Only three October and two November departure dates this fall, the fewest in several years. It was observed on Nov. 8 in LaCrosse county, Rosso, and on Nov. 22 in Kenosha county, Hamers.

**Green Heron:** There were five October departure dates coming from Fond du Lac, Marinette, Milwaukee, Sauk and Waukesha counties and an exceptionally late departure date, Nov. 8 in LaCrosse county, Rosso.

**Common Egret:** Again almost no reports this fall with no significant numbers being reported. Outagamie county, Aug. 25-Sep. 10 (Bradford); Brown county, Sep. 3 (Bratley); Kenosha county, Sep. 16 (Hamers); LaCrosse county, until Oct. 17 (Rosso).

**Black-crowned Night Heron:** In Brown county 35 were counted on Aug. 19 (Bratley) and 20 on Aug. 23 (Tessen). The two latest departure dates were Oct. 11 when 5 were observed in Dodge county (Gustafson) and on Nov. 9 in Brown county (Cleary and Columban).

**Yellow-crowned Night Heron:** Observed in LaCrosse county on Sep. 15 by Leshar and a careful study of one individual in Wood county on Oct. 8 by the Hebards and Roemer.

**Least Bittern:** Three reports: Aug. 23, Lincoln county (Rusch); Sep. 18, Waukesha county (Bratley); Sep. 21, Brown county (Cleary).

**American Bittern:** There were four October departure dates including Oct. 4, Outagamie county (Bradford); Oct. 5 and Oct. 11, Dodge county (Werner, Gustafson); and Oct. 13, Fond du Lac county (Knuth).

**Whistling Swan:** Eleven reporting counties with observations commencing on Oct. 23, Marinette (Richter) and Brown (Cleary, Columban) counties. Flocks were observed arriving in the bay off of Oconto county on Oct. 28 (Richter). "Numerous groups" were reported at Ferryville on the Mississippi River (Crawford county) on Nov. 8 by Dense. Still present in LaCrosse county at the beginning of December (Rosso).

**Canada Goose:** Present at the beginning of the period in Outagamie (Bradford) and Brown (Cleary, Tessen) counties. In the latter 63 were counted on Sep. 4 by Bratley. The first fall migrants were recorded in the state on Sep. 9 at Horicon Marsh (March). This was followed by arrivals on Sep. 10, LaCrosse county (Rosso); Sep. 14, Dane county (Ashmans); Sep. 19, Manitowoc county (Scholz); 150 on Sep. 20, Powell Marsh (March); and Sep. 22, Fond du Lac county (Knuth). The first initial major wave occurred throughout the state on Sep. 23-24 as indicated by the comments of March (Horicon Marsh), Harmes (Jackson county), Vincent (1,500 on the 24th in Price county), and Maxson (Rock county) and the wave of arrivals from throughout the state on these two dates. By Oct. 1 there were 110,000 at Horicon. Other major flights occurred on Oct. 4-5, 11-12 and 17-21 (March). Bratley counted 1,431 on Oct. 8 in Waukesha county; Donald observed flocks of 100 in Milwaukee between Oct. 17-21. Peaks include the following: Crex Meadows, 5,500 on Oct. 22 (Stone); Dike #17—7,000; Grand River—7,000; Pine Island—8,200; Eldorado Marsh—10,000; Neceeda—15,200; and Horicon where an estimated 130,000 were present on Oct. 28 with large numbers in the area immediately surrounding the Marsh (reportedly totaling around 175,000). There were still 86,000 present on Nov. 25 at Horicon with the major exodus occurring on Dec. 11-12. Only 9,200 were present by Dec. 15 (March). Canadas also lingered into December in Brown (Cleary, Columban), Fond du Lac (Knuth), LaCrosse (Rosso), and Ozaukee (Gustafson) counties.

**Snow and Blue Geese:** The best migration of these two species occurred in the state this fall since 1961 (March). Both species were observed in sixteen counties. The arrival date for the Snow was Sep. 23 (Crex Meadows, Stone) and for the Blue it was

Oct. 8 (Sauk county, Lange). March reports that after the major migration between Oct. 15-20 there were approximately 25,000+ total individuals of the two species in the state. Individually observed large numbers included for the Snow; 2,500 on Oct. 22 at Crex Meadows (Stone), and 1,000 on Oct. 19 in Fond du Lac county (Knuth). Large numbers of Blues included 1,500 on Oct. 22 at Crex Meadows (Stone), 425 on Oct. 23 in Waukesha county (Bratley) and 300+ on Oct. 18 in Sheboygan county (Gustafson). 2,000 Snows and Blues were observed in Fond du Lac county on Nov. 11-12 (Knuth) and 350 on Oct. 14-21 in Washburn county (Bailey). March reported individuals of both species present well into December in scattered areas of the state.

**Mallard:** According to March there were 9-10 areas in the state that had 1,000+ of this species sometime during October and/or November. In addition 5,000+ were present on Crex Meadows, Mead Wildlife area, Horicon, Grand River Marsh and the Mississippi River.

**Gadwall:** Last observed in November on the 2nd, Brown county (Cleary, Columban), the 7th, Fond du Lac county (Knuth), the 9th, Dane county (Ashmans) and still present into December in LaCrosse county (Rosso).

**Pintail:** Present at the end of the period also in LaCrosse county (Rosso).

**Green-winged Teal:** Likewise present into December in LaCrosse county (Rosso).

**Blue-winged Teal:** Numbers reported included 115, Sep. 2, Waukesha county (Bratley); 434, Aug. 19, Brown county (Bratley); and 1,000+, Oct. 15, Price county (Vincent). Last reported on Nov. 11 in Brown county (Cleary, Columban) except for LaCrosse where it was still present in early December (Rosso).

**American Widgeon:** A major migration occurred on Sep. 8 at Collins Marsh, Manitowoc county (March). Reports of individuals still present at the end of the period came from Dane (Ashmans), LaCrosse (Rosso) and Winnebago (Tessen) counties.

**Shoveler:** Observed at the beginning of the period in Brown, Dodge, Outagamie and Waukesha counties. 200 present on Oct. 23 in Fond du Lac county with the last individuals observed on Nov. 16 (Knuth).

**Wood Duck:** Late November—early December sightings occurred in Fond du Lac (Knuth) and Winnebago (Tessen) counties.

**Redhead:** Two individuals were observed in Brown county on Aug. 19 (Bratley). This observation was followed by a series of October arrival dates with a major migration arriving at Lake Puckaway on Oct. 13-14. Peaks of 1,500+ noted on Oct. 22 on Fox Lake (Dodge county) and only 2,000 on the "Oshkosh" lakes (March). Individuals were still present at the end of November in Winnebago county (Tessen).

**Ring-necked Duck:** According to March there were very few present this fall. This is further evidenced by the scarcity of reports this fall, totalling only six. Observations occurred between Oct. 8 and Nov. 9 except for lingering individuals in early December in LaCrosse county (Rosso).

**Canvasback:** Very few reports this fall. It was first observed on Oct. 4 in Dodge county (Werner). A migration moved into Lake Puckaway on Oct. 13-14 (March). It was next reported on Oct. 15 in LaCrosse (Rosso) and on Oct. 17 in Fond du Lac (Knuth) counties. The major migration occurred in the state between Oct. 22-Nov. 5 with 20,000+ total present on the Mississippi River primarily on Nov. 5 (March). The peak on the "Oshkosh" lakes was only 2,000 (March). It was present at the end of the period in LaCrosse and Fond du Lac counties.

**Greater Scaup:** This species was especially common during the fall throughout the state, with it present in the northwestern part of the state in good numbers on Oct. 14-16, which is unusually early (March). First observed on Oct. 2 in Fond du Lac county by Knuth with it still present at the end of the period. Other inland reports included Oct. 14, Outagamie county (Bradford) and Nov. 1-10, LaCrosse county (Rosso).

**Lesser Scaup:** First fall reports from LaCrosse county on Sep. 28 (Leshner), Fond du Lac county on Oct. 1 (Knuth) and Burnett county on Oct. 4 (Stone). Individuals were reported in early December in Fond du Lac (Knuth), LaCrosse (Rosso), Sauk (Lange) and Winnebago (Tessen) counties.

**Common Goldeneye:** Fall arrivals included Oct. 12, Fond du Lac county (Knuth); Oct. 19, Brown county (Cleary, Columban); Oct. 25, Outagamie county (Tessen); and Oct. 26 in Chippewa (Robbins) and Milwaukee (Gustafson) counties.

**Bufflehead:** First on Oct. 12 in Fond du Lac county (Knuth) followed by additional October arrivals from Chippewa, Dane, LaCrosse and Sauk counties.

**Old Squaw:** First in Milwaukee on Nov. 5 (Donald).

**Harlequin Duck:** One individual appeared in Racine county on Nov. 16 with it still present in December (Erickson, Gustafson).

**White-winged Scoter:** Two birds were observed in Ozaukee county first on Oct. 11 (Gustafson). Sightings continued through November with 33 counted on Nov. 26



(Donald)! Other reports included three individuals on Oct. 28 in Milwaukee (Gustafson); two on Nov. 8 in Bayfield county (Bratley); one on Nov. 22 in Kenosha county (Hamers).  
**Surf Scoter:** One male was observed on Nov. 26 in Ozaukee county by Donald.

**Common Scoter:** Two birds were noted in Milwaukee on Oct. 28 (Gustafson). One was seen on Nov. 8 in Ozaukee county (Gustafson). One was observed on the Mississippi River on Nov. 12 by Rusch. In Fond du Lac county two females were observed between Nov. 15-17 with one noted between Nov. 18-30 (Knuth).

**Ruddy Duck:** Present at the beginning of the period in Brown county (Tessen). Next reported in Outagamie county on Aug. 24 (Tessen) and in Fond du Lac county on Oct. 1. Individuals were still present at the end of the period in the latter county (Knuth). There were very few reports and no large concentrations this fall.

**Hooded Merganser:** August observations included Bayfield, Brown, LaCrosse, Price and St. Croix counties. The last fall observation comes from Dane county by the Ashmans on Nov. 21.

**Common Merganser:** An arrival date of Oct. 27, Fond du Lac county (Knuth).

**Red-breasted Merganser:** Likewise an arrival date from Fond du Lac county on Nov. 10 (Knuth). This is an unusually late first date. There were very few reports of the species this fall.

**Turkey Vulture:** The best fall for this species in at least six years as witnessed by thirteen reporting counties. Reported as present at the beginning of the period in Waukesha county (Bratley, Hoffmann) with 3 noted on Sep. 28 and last seen on Oct. 14. It was next observed on Aug. 18 in Sawyer county (Rusch); Sep. 3-13 in Dane county (Zimmermans); Sep. 6-Oct. 4 in LaCrosse county (Rosso); Sep. 12-Oct. 10 in Sauk county (Lange); Sep. 20 in Barron county (Goff); 3 on Sep. 30 at Princess Point (Reoman); Oct. 4 in Grant county (Ashmans); Oct. 5 in Pierce county (Olson); 6 on Oct. 8 at Cedar Grove (Berger); Oct. 9 in Milwaukee (Gustafson) and Outagamie (Bradford) counties; Oct. 10-11 in Chippewa county (Schimmels, Robbins). It was last reported on Oct. 18 in Sheboygan county (Gustafson).

**Goshawk:** More reports this fall than during the past several years, but the flight was nevertheless considered to be a poor one. Observations included the following: Milwaukee county, Oct. 8 (Donald), Nov. 15 (Strehlow), and Nov. 19 (Gustafson); Chippewa county, Oct. 19 (Robbins); Lincoln county, Nov. 1 (Rusch); Marinette county, Nov. 13 (Lindberg); Cedar Grove, 2 on Oct. 27, 5 on Nov. 14 (Berger); Columbia county, Nov. 19 (Rusch).

**Sharp-tailed Hawk:** Observations occurred between Sep. 1 and Oct. 18. Reporting counties included Brown, Chippewa, Fond du Lac, Kenosha, LaCrosse, Milwaukee, Rock, Sheboygan, and Waukesha. At Cedar Grove peak flights occurred on Oct. 8 (483) and Oct. 18 (285). A total of 85 birds were banded (Berger).

**Cooper's Hawk:** A very poor flight as evidenced by observations occurring in only six counties, including LaCrosse, Milwaukee, Outagamie, Rock, Sauk and Sheboygan. Individuals were noted between Sep. 12-Nov. 8. The only numbers reported were 25 at Cedar Grove on Oct. 18 (Gustafson).

**Broad-winged Hawk:** Present at the beginning of the period in Price county (Vincent). Additional reports from Barron, LaCrosse, Marinette, Milwaukee, Sauk, Sheboygan, Vernon and Vilas counties. There was no pronounced flight this fall (Berger).

**Swainson's Hawk:** Two reports of this western species this fall: in Jefferson county sometime during the first half of the period (Compton); one banded on Oct. 9 at Cedar Grove. (Berger)

**Rough-legged Hawk:** A remarkably early observation on Sep. 4 in Vernon county (Weber). The next report did not occur until one month later, on Oct. 5 in Pierce county (Olson). Berger commented on the poor flight of this species.

**Harris' Hawk:** A most unique observation of this species, which is restricted to the extreme southwestern part of the United States, was made on Sep. 1 of two birds at Goose Pond (Columbia county) by Van Ness and Williams. Read the details in "By the Wayside."

**Golden Eagle:** The only report this fall was of one individual at Cedar Grove on Oct. 9 by Barger.

**Bald Eagle:** Observed in thirteen counties which represents one of the larger number of counties to report in a fall period. They included: Barron, Columbia, Dane, Dodge, Forest, Juneau, LaCrosse, Marinette, Milwaukee, Price, Sheboygan, Vernon and Vilas. Numbers reported included 8 during the fall at Cedar Grove (Berger), 5a. and 3i. on Nov. 28 in Juneau county (Gustafson) and 11a. and 3i. on Nov. 21 in Vernon county (Leshner).

**Marsh Hawk:** 160 were counted on Oct. 8 at Cedar Grove (Berger). Last on Nov. 28 in Calumet county (Tessen).

**Osprey:** Only eight reporting counties during the fall. At Cedar Grove 6 were noted on both Sep. 6 and 15, where the last reported observation occurred on Oct. 11 (Berger).

**Gyrfalcon:** One individual (gray phase) was observed on Oct. 6 in Racine county by Steig.

**Peregrine Falcon:** A complete reversal of last fall's fine flight with only the following reports: Sep. 7, Dodge county (Ashmans); Oct. 7, Kenosha (Hamers) and Milwaukee (Donald); at Cedar Grove, one on Sep. 14 and four on Oct. 10 (Berger).

**Pigeon Hawk:** The observation period extended between Aug. 31-Nov. 4 including Barron, Dane, LaCrosse, Rock, Sheboygan and Waukesha counties. The only flight reported was of 28 on Oct. 17 at Cedar Grove (Berger).

**Sharp-tailed Grouse:** Fall observations of 25 at Crex Meadows (Burnette county) on Sep. 24 (Stone) and one on Sep. 26 in Chippewa county (Robbins).

**Bobwhite:** Fall observations in LaCrosse (Rosso), Rock (Mahlum), Vernon (Weber), and Waushara (Greenman) counties.

**Gray Partridge:** Reported as "very scarce" in Outagamie county by Bradford and Tessen where usually a large population thrives.

**Sandhill Crane:** A reversal from last fall with more reports than usual and good numbers noted in several areas of the state. Reports included Cedar Grove; Marquette, Waushara, Winnebago and Wood counties. Numbers included "many" the last week of September at Necedah (Personius); 82 on Sep. 24 in Burnette county (Stone); 37 on Sep. 24 in Waukesha county (Bratley); 140-150 on Sep. 28 in Green Lake county (Greenman); 72 on Oct. 1 in Jefferson county (Brakefield, Livengood); and last, 30 on Oct. 19 in the Oak Hill area (Compton).

**King Rail:** The only fall report was of two birds observed on Sep. 3 in Brown county (Bratley).

**Virginia Rail:** Last on Oct. 18 (Outagamie county, Bradford); Oct. 29 (Milwaukee county, Strehlow); and Nov. 8 (Kenosha county, Hamers).

**Sora:** October departure dates included the 2nd, Sauk county (Lange); the 12th, Brown county (Cleary, Columban); and the 18th, Milwaukee county (Strehlow).

**Common Gallinule:** The latest departure dates this fall included Oct. 2, Fond du Lac county (Knuth); Oct. 8, Milwaukee county (Strehlow); and 3 on Oct. 11, Dodge county (Gustafson).

**American Coot:** Numbers reported included 126 in Brown county on Sep. 3 (Bratley); 400 in Rusk county on Oct. 14 (Robbins); 390 in Waukesha county on Oct. 21 (Bratley); "hundreds" in Manitowoc county on Nov. 8 (Greenman). Present at the beginning of the winter period in Dane, LaCrosse, Milwaukee and Waukesha counties.

**Semipalmated Plover:** 35 counted on Aug. 23, 40 on Sep. 20 in Brown county (Tessen). Last observations were made in Racine county, Oct. 4 (Gustafson); Rock (Brakefield) and Sheboygan (Tessen) counties, both on Oct. 5.

**Piping Plover:** A single bird was observed on Aug. 16 in Marinette county by Lindberg.

**Killdeer:** Last observations included 16 on Nov. 1 in Milwaukee (Gustafson); Nov. 14, LaCrosse county (Rosso); 2 on Nov. 19 in Ozaukee county (Sundell); Nov. 30, Vernon county (Leshner); into December in Dane county (Ashmans).

**Golden Plover:** Nine reporting counties with 61 on Aug. 25 (Urdan) and 45 on Sep. 20 (Gustafson) in Racine county; 95 on Aug. 21 in Columbia county (Jaeger, Werner, Vogelsang); a "large flock" at the end of October in Langlade county (Schimmels). The last observation, three weeks later than all others, was made in Ozaukee county on Nov. 19 of a lone individual (Sundell).

**Black-bellied Plover:** Likewise nine reporting counties with no substantial numbers observed during the fall. Last report came from Racine county on Nov. 1 (Gustafson).

**Ruddy Turnstone:** The following reports this fall: present at the beginning of the period in both Milwaukee and Fond du Lac counties; a Sep. 3 observation in Brown county (Bratley). It was last observed in Milwaukee on Oct. 1 (Gustafson) which is late, and on Oct. 21 in Fond du Lac (Knuth) which is unusually late.

**American Woodcock:** A Nov. 15 departure date in Milwaukee county (Strehlow).

**Common Snipe:** Seven November departure dates, the latest being the 30th, Vernon county (Leshner).

**Upland Plover:** Three reports: Aug. 16, Outagamie county (Bradford); Aug. 19, Fond du Lac county (Knuth); Sep. 7, Rock county (Brakefield).

**Spotted Sandpiper:** One month later than all other departures this year, and a late date, is that of Nov. 11 in Brown county (Cleary, Columban).

**Solitary Sandpiper:** There were six October departure dates with the last almost two weeks later than all the others: Oct. 24, Waukesha county (Bratley).

**Willet:** One of this western species was observed in Milwaukee on Sep. 14 by Donald and Gustafson.

**Greater Yellowlegs:** November departure dates of the 1st, LaCrosse county (Leshner); the 5th, Brown county (Wierzbicki); and a very late 18th, Rock county (Brakefield).

**Lesser Yellowlegs:** Counts in the mid-fifties were tabulated in Brown county on Aug. 19 and Sep. 3 (Bratley). Late were observations on Nov. in LaCrosse county (Rosso) and the three on Nov. 8 in Columbia county (Orians).

**Knot:** One on Aug. 30 in Racine county (Gustafson); two on Sep. 3 in Brown county (Bratley); two on Sep. 10 in Fond du Lac county (Knuth); one on Sep. 11 in Milwaukee county (Gustafson).

**Pectoral Sandpiper:** Last on Nov. 1, Milwaukee county (Gustafson); Nov. 16, LaCrosse county (Rosso); and a late Nov. 22, Vernon county (Leshner).

**White-rumped Sandpiper:** There were more reports this fall than in the past six years: Aug. 23-24, Menominee county (Werner); Aug. 24, Outagamie county (Tessen); Aug. 30-31, Chippewa county (Robbins); Sep. 10, LaCrosse county (Rosso); and in Brown county, Aug. 31 (Robbins), Sep. 14 (Cleary, Columban), Sept. 20 (Tessen).

**Baird's Sandpiper:** Present at the beginning of the period in Barron (Goff) and Fond du Lac (Knuth) counties where observations continued through Sep. 4. Additional August reports included Brown, Columbia, Dane and Waukesha counties. Additional September sightings included Brown, Dane, LaCrosse, Marinette and Milwaukee counties. It was observed Oct. 5-8 in Rock county (Brakefield) and on Oct. 15 in Milwaukee county (Gustafson).

**Least Sandpiper:** Two extremely late departure dates, three to four weeks later than all others, were of single individuals on Oct. 25 in Outagamie county (Tessen) and Nov. 5 in LaCrosse county (Rosso).

**Dunlin:** A fall arrival date of Aug. 19 in Brown county (Bratley). 75 were counted in Brown county on Oct. 25 (Tessen). Mid and late November departure dates included the 11th, Brown county (Cleary, Columban), the 16th, LaCrosse county (Rosso), and the 27th, Vernon county (Leshner).

**Dowitcher:** Observed in the following counties during the second half of August: Brown, Chippewa, Columbia and Waukesha; early September reports from Barron and Dane counties. It first appeared on Sep. 6 in LaCrosse county with the last observation occurring on Oct. 4 (Rosso). Noted on Oct. 5 in Dodge county (Werner). The only report of substantial numbers comes from Brown county, as last fall. However the numbers peaked considerably below those of 1968 with 47 counted on Aug. 19 (Bratley), peaking at 75 on Aug. 23 (Tessen) with 35 still present on Sep. 10 (Tessen). Birds identified as Short-billed included 47 on Aug. 19, 75 on Aug. 23 and 6 on Sep. 3 in Brown county (Bratley, Tessen); as Long-billed only on Oct. 8 in Rock county (Brakefield). There were fewer reports this fall than the past two years.

**Stilt Sandpiper:** An excellent migration of the species this fall as evidenced by the following observations: single birds on Aug. 17, St. Croix county (Robbins); Aug. 25, Columbia county (Ashmans); Sep. 2 and 16, Waukesha county (Bratley); Sep. 17-Oct. 4, LaCrosse county (Rosso); Oct. 4-5, Chippewa county (Robbins). Numbers reported included: 11 on Sep. 24, Vernon county (Leshner); 14 on Aug. 17, Columbia county (Bratley); and from Brown county, 10 on Aug. 19, 15 on Aug. 23, 44 on Aug. 31, peaking at 74 on Sep. 3, with 3 on Sep. 20 (Bratley, Robbins, Tessen).

**Semipalmated Sandpiper:** 250 on Aug. 23 in Brown county (Tessen) where it had decreased to 75 on Sep. 3 (Bratley). Departure dates of the third week in September from Fond du Lac, Outagamie, Racine and Waukesha counties. Single individuals were observed on Oct. 8 in Rock county (Brakefield) and a late Nov. 5 in LaCrosse county (Rosso).

**Western Sandpiper:** Robbins observed single birds on Aug. 17 in St. Croix county and Sep. 19 in Chippewa county.

**Marbled Godwit:** This western shorebird was observed in Brown county this fall with one present on Aug. 19 (Bratley) and 15 on Sep. 20 (Tessen).

**Sanderling:** Very few reports for the species this fall. Reporting lake counties included Brown, Kenosha, Milwaukee and Racine. Inland reports from Outagamie county, Aug. 16 and Sep. 20 (Bradford) and Rock county, Oct. 5 (Brakefield). Last observation by Gustafson on Nov. 1, Racine county.

**Wilson's Phalarope:** Four reports: Aug. 21, Columbia county (Werner); Sep. 14, Brown county (Cleary, Columban); a late Oct. 1, LaCrosse county (Rosso) and a very late Oct. 18-20, Fond du Lac county (Knuth).

**Northern Phalarope:** Two reports: Sep. 1, Columbia county (Van Ness, Williams) and Nov. 30, Fond du Lac county (Knuth). The latter in only five days short of the state departure record.

**Glaucous Gull:** Most unique is the sighting of single birds in Brown county on the Fox River on Oct. 4 (Van Vondeven), Oct. 6 (Cleary, Paulson), and Nov. 25 (Cleary). See "By the Wayside".

**Iceland Gull:** Likewise from Brown county single sightings of an individual bird on Oct. 4 and 6 (Van Vondeven, Cleary, Paulson).

**Great Black-backed Gull:** Also from Brown county a single bird was observed on Oct. 4 and 6 (Van Vondeven, Cleary, Paulson).

**Franklin's Gull:** For the third consecutive fall there was no major movement into the state. Observations included: Milwaukee county, Sep. 14 (Donald); Fond du Lac county, Sep. 16 (Knuth); Brown county, Oct. 4 and 6 (Van Vondeven, Cleary, Paulson); and in Milwaukee again, Oct. 1, five on the 26th, and last Nov. 7 (Gustafson).

**Bonaparte's Gull:** Present at the beginning of the period in Brown county (Tessen) where observations continued until Oct. 6 (Cleary, Paulson). Also noted in Outagamie county, Aug. 24 (Tessen); Fond du Lac county, Oct. 24 and Nov. 10 (Knuth); LaCrosse county, Nov. 2 (Leshner); with small flocks still present into December in Milwaukee county (Donald, Gustafson).

**Little Gull:** The eighth state record occurred when one adult was observed in mid-August in Manitowoc (Brouchoud).

**Forster's Tern:** Remarkable is the increasing scarcity of fall observations for this species. This year only the following reports were received: Brown county, 4 on Aug. 31 (Robbins), 40 on Sep. 3 (Bratley), one on Sep. 20 (Tessen); Outagamie county, two on Sep. 20 (Tessen). Again this fall there were no October observations.

**Common Tern:** Like the previous species there were few observations during the period. 143 were counted in Brown county on Aug. 19 (Bratley). Latest departures included: Oct. 7, Marinette county (Lindberg); Oct. 12, Fond du Lac county (Knuth); Oct. 18, Brown county (Cleary).

**Caspian Tern:** A reversal from last fall with only three reports this year: 21 on Aug. 24 in Outagamie county (Tessen); Sep. 3 (Bratley) and Sep. 28 (Cleary, Columban) in Brown county.

**Black Tern:** As with the previous tern species there were considerably fewer observations than normal. 84 were counted by Bratley on Sep. 3 in Brown county with the last state observation likewise from that county, on Sep. 20 (Tessen).

**Ringed Turtle Dove:** One individual coming to a feeder during September and October in Milwaukee (Sheridan) and another one at a feeder on Sep. 30 in Two Rivers (Fencil).

**Yellow-billed Cuckoo:** Very few reports received this fall with the latest observations being on Oct. 23, Rock county (Mahlum) and Oct. 25, LaCrosse county (Leshner). These are very late dates.

**Black-billed Cuckoo:** Likewise few fall observations with all departures occurring by mid-September except for an observation on Oct. 14 in Vernon county (Weber).

**Groove-billed Ani:** An individual was seen for several days in late October along the Fox River near Portage at the home of Mr. & Mrs. John Slepicka. It was subsequently caught, dying several days later. This is only the third state record, the second occurring last fall (fide Cuff and Mathiak). See "By the Wayside".

**Barn Owl:** Reported only from Milwaukee county with observations occurring on Nov. 12 (Lemke, Sheridan) and Nov. 20 (Magulski).

**Screech Owl:** Observations during the period from these counties: Chippewa, Dane, Iowa, Milwaukee, Vernon and Waukesha.

**Snowy Owl:** This fall there were observations in three counties: Richland, Jefferson (Compton), and Manitowoc (Erdman). In all three cases no exact dates were given.

**Great Gray Owl:** One individual of this far northern species was observed in Bayfield county on Oct. 28 by Bratley. Read the details in "By the Wayside".

**Long-eared Owl:** These reports this fall: Aug. 16-Sep. 9, Rock county (Brakefield); one during the fall in Brown Deer Park (Basten), Nov. 22, (Gustafson) Milwaukee county; 2 on Nov. 23, Fond du Lac county (Knuth).

**Short-eared Owl:** Several were present at the beginning of the period in Fond du Lac county where they had been observed all summer. One was found dead on Sep. 7 with two still present on Nov. 16 (Knuth). In Milwaukee 2 and 3 were observed at the city dump during October and November (Basten, Donald, Robbins).

**Saw-whet Owl:** Generally a poor flight this fall. Only nineteen were banded all fall at Cedar Grove (Berger). One was banded by Peartree on Oct. 19 in Sauk county.

Other observations included: Sep. 20, Eau Claire county (Robbins); Oct. 15-21, Brown county (Wierzbiicki, Cleary, Columban); Oct. 18, Sheboygan county (Gustafson); Nov. 3-6, Ozaukee county (Liebherr). However Brouchoud had banded 58 at Manitowoc this fall.

**Whip-poor-will:** Only three reports this fall: Aug. 30-31, Grant county (Zimmermans); Sep. 9, Waushara county (Greenman); Sep. 28, Rock county (Brakefield).

**Nighthawk:** Two large migrations were observed this fall: "hundreds" flying over Appleton on Aug. 29 (Tessen) and 7,000 observed flying in front of a cold front during a 45 minute period in Kenosha county on Aug. 31 (Hamers). Two October departure dates this fall: Oct. 4, Grant county (Ashmans) and Oct. 5, LaCrosse county (Rosso).

**Chimney Swift:** Oct. 13, Kenosha county (Hamers).

**Ruby-throated Hummingbird:** The following October departure dates: Oct. 3, Kenosha county (Hamers); Oct. 4, Rock county (Brakefield); Oct. 6, Sauk county (Koenig); and a very late Oct. 18, Dane county (Ashmans).

**Belted Kingfisher:** End of the period reports from Fond du Lac and Waukesha counties.

**Yellow-shafted Flicker:** Reported as present at the beginning of the winter period in Iowa, LaCrosse, Milwaukee, Outagamie and Vernon counties.

**Red-shafted Flicker:** Apparently the same individual returned to the Klink yard, where it wintered last year, on Nov. 19 (Eau Claire county).

**Red-bellied Woodpecker:** Most northerly observation from Barron county by Goff.

**Red-headed Woodpecker:** No less than eleven counties reporting individuals present in early December: Barron (Goff), Brown (Cleary), Dane (Werner), Fond du Lac (Knuth), LaCrosse (Rosso), Outagamie (Tessen), Rock (Brakefield, Mahlum), Sauk (Lange), Vernon (Morse), Waukesha (Hoffmann) and Winnebago (Natzke).

**Yellow-bellied Sapsucker:** Three November sightings this fall: the 7th, Waukesha county (Bratley); the 21st, Columbia county (Baleys); the 27th, Milwaukee county (Gustafson).

**Black-throated Three-toed Woodpecker:** For the third consecutive fall there were two sightings: one on Oct. 4 in Douglas county (Decker) and one on Oct. 28 in Milwaukee county (Donald).

**Northern Three-toed Woodpecker:** The first fall observation in over six years comes from Compton of one bird sighted in Rhinelander on Nov. 30.

**Eastern Kingbird:** Last observed interestingly in a northern county, Barron, on Sep. 16 (Goff).

**Great Crested Flycatcher:** Sep. 27, Sheboygan county (Gustafson).

**Eastern Phoebe:** A remarkable number of October departure dates, twenty, from throughout the state. The latest were the 25th, Marinette county (Lindberg) and the 27th, Dane county (Lounds).

**Yellow-bellied Flycatcher:** Aug. 16-Sep. 2, Chippewa county (Robbins); Aug. 19, Brown county (Wierzbiicki); Aug. 28, Milwaukee county (Donald); Sep. 3, Manitowoc county (Albrecht).

**Acadian Flycatcher:** Sep. 5, Sauk county (Lange); Aug. 29-Sep. 15, Rock county (Mahlum). The latter date is only several days away from tying the state departure record.

**Trail's Flycatcher:** Three reports: Aug. 28, Marinette county (Lindberg); until Sep. 2, Chippewa county (Robbins); Oct. 2, Dane county (Ashmans).

**Least Flycatcher:** All departures occurred between Sep. 16-26 except in Sheboygan county, Oct. 5 (Werner).

**Eastern Wood Pewee:** Most departure dates fell between Sep. 15-28. However a young was observed being fed on Sep. 27 in Kenosha county by Hamers. This year there were four October departures: Oct. 2, Dane county (Ashmans); Oct. 7, Sauk county (Lange); Oct. 8, Wood county (Hebards, Roemer); Oct. 11, Ozaukee county (Gustafson).

**Olive-sided Flycatcher:** Only on Sep. 9, Rock county (Mahlum); Sep. 21, LaCrosse county (Rosso); Oct. 8, Wood county (Hebards, Roemer). The latter is an unusually late date.

**Tree Swallow:** A major flight was observed in Green Bay this fall; 335 were noted on Sep. 3 with the number increasing to 1,000 on Sep. 4 (Bratley). However on Sep. 20 there were 6,000+ observed (Tessen). 1½ weeks later than all other departures were those on Oct. 29, Fond du Lac county (Knuth) and Oct. 30, Milwaukee county (Gustafson).

**Bank Swallow:** Mid-September departures in Dane, LaCrosse, and Rock counties. Last on Sep. 20 by Cleary in Brown county.



**Rough-winged Swallow:** There were four September departure dates. However most remarkable were the October sightings. In LaCrosse county individuals were observed on Oct. 17 (Rosso) with 15 counted on Oct. 18 (Leshner). However one bird was observed on Oct. 29 by Knuth in Fond du Lac county. This is a state departure record.

**Barn Swallow:** Late departures from LaCrosse county on Oct. 1 (Rosso) and Dodge county on Oct. 11 (Gustafson). **Exceptionally late** observations occurred in Fond du Lac county on Nov. 2 (Knuth) and in Milwaukee county on Nov. 12 (Lemke, Sheridan). The latter is a state departure record.

**Cliff Swallow:** Very few reports this fall with it last observed in Brown county on Sep. 20 (Cleary, Columban).

**Purple Martin:** Exceptionally late dates of Oct. 4, LaCrosse county (Rosso); Oct. 11, Kenosha county (Hamers); Oct. 16, Milwaukee county (Donald).

**Gray Jay:** Easily the poorest fall in many years. Only the following reports: from Sep. 4 on in Price county (Hardy, Vincent); Nov. 8 and 30 in Forest county (Rill).

**Black-billed Magpie:** A bird was observed in Vilas county on Nov. 23 by Nicewander. This is the second straight fall this species has been observed in the state.

**Common Raven:** Reported in Bayfield, Chippewa, Forest, Marinette, Price, Rusk, Vilas counties and an unusual observation of one bird at Cedar Grove on Oct. 11 (Berger).

**Boreal Chickadee:** Another major disappointment this fall as it was only reported from Forest county: a flock on Oct. 12 (Richter); Nov. 8 and 30 (Rill). This is the poorest in some four falls.

**Red-breasted Nuthatch:** 27 reporting counties! The flight this year easily surpasses the major ones of last year and in 1965. Many reporters comment on its numbers with one word, "numerous." Maxson banded four during the fall in Rock county. It was present at the beginning of the period in Price county (Vincent). Next came August observations from Dane county (Aug. 19, Zimmermans) and Brown county (Aug. 25, Wierzbicki). This was followed with early September reports from Chippewa, Kenosha, Milwaukee, Sauk and Vernon counties. Seventeen counties reported many individuals still present in December!

**Brown Creeper:** Present at the beginning of the period in Barron county (Goff). Next observation was made in Price county on Sep. 16 (Hardy).

**House Wren:** Six October departure dates, the latest being on the 10th, Barron county (Goff).

**Winter Wren:** Reports from Brown, Chippewa, Columbia, Dane, Fond du Lac, LaCrosse, Marinette, Milwaukee, Outagamie, Ozaukee, Rock, Sauk, Sheboygan and Waushara counties. Last noted on Nov. 4 in Dane county (Emlen).

**Long-billed Marsh Wren:** Very few reports this fall with it last observed on Oct. 8 in Fond du Lac county (Knuth).

**Short-billed Marsh Wren:** Two weeks later than all other departures and an extremely late date is that of Nov. 2 in Sauk county (Lange).

**Catbird:** A total of sixteen October dates, the latest being the 18th, Milwaukee county (Strehlow) and the 20th, Manitowoc county (Albrecht).

**Brown Thrasher:** Nov. 26, Fond du Lac county (Knuth) and in early December, Milwaukee county (Gustafson).

**Robin:** Large migrations included 273 on Sep. 24 in Milwaukee county (Strehlow), hundreds on Oct. 14 in Waushara county (Chipman), and 1,500 on Oct. 17 at Cedar Grove.

**Wood Thrush:** Mid-October dates of the 11th in Kenosha county (Hamers), the 15th in Rock county (Brakefield) and the 18th in Waukesha county (Hoffmann).

**Hermit Thrush:** Nov. 2, Kenosha county (Hamers); one banded on Nov. 8 in Rock county (Maxson).

**Swainson's Thrush:** It was present at the beginning of the period in Chippewa county (Robbins). The next report is Aug. 22 in Milwaukee county (Donald). Two Oct. 18 dates, of an individual in Kenosha county (Hamers) and two birds in LaCrosse county (Leshner).

**Gray-cheeked Thrush:** The observation period this fall was between Sep. 6 (Chippewa, Robbins and Manitowoc, Scholz, counties) and Oct. 11 (Brown, Cleary and Waushara, Chipman, counties).

**Veery:** Oct. 18, Kenosha county (Hamers).

**Eastern Bluebird:** Numbers reported included 40 on Oct. 5 in Pierce county (Olson); 26 on Oct. 17, 14 on Oct. 18 in Outagamie county (Defferding); and 21 on Oct. 25 in Rock county (Maxson). Late were observations on Nov. 16, LaCrosse county (Rosso) and at the end of the period in Vernon county (Morse).

**Blue-gray Gnatcatcher:** Missed for the first time in over five years.

**Golden-crowned Kinglet:** First in Brown county on Sep. 18 (Cleary, Columban). Maxson banded 75 during the fall. End of the period reports from Chippewa, Dane, Forest, Manitowoc, Milwaukee, Rock, Sauk and Waukesha counties.

**Ruby-crowned Kinglet:** Reported as present at the beginning of the period in Barron county (Goff). Next observed on Aug. 19 and 25 in Outagamie county (Bradford) followed by a Sep. 1 arrival in Sauk county (Lange). 60 were counted in Milwaukee county on Oct. 27 by Strehlow. Maxson banded 55 during the fall with the last one on Dec. 6, Rock county. This fall there were numerous November sightings.

**Water Pipit:** A normal fall migration with observations commencing on Sep. 28, Columbia county (Baleys) and continuing through Nov. 14, Fond du Lac county (Knuth). Donald counted 100 at the Rainbow Flowage on Sep. 29. Additional reports from Chippewa, Racine, Vernon and Waushara counties.

**Bohemian Waxwing:** In Milwaukee county, single sightings on Nov. 16 (Fristers) and Nov. 23 (Gustafson).

**Cedar Waxwing:** End of the period reports in Brown, Chippewa, LaCrosse, Milwaukee, Sauk and Waukesha counties.

**Northern Shrike:** More than the normal number of fall sightings but considerably below the record numbers of last fall; Oct. 24 (Richter) and Nov. 8 (Lindberg), Marinette county; from Nov. 2 on in Chippewa (Robbins) and LaCrosse (Leshner) counties; Nov. 20, Cedar Grove (Berger); Nov. 21, Milwaukee county (Donald); Nov. 23, Rock county (Brakefield); Nov. 26, Winnebago county (Natzke).

**Loggerhead Shrike:** Aug. 19, Kenosha county (Hamers); Aug. 21, Columbia county (Werner); Sep. 1, Waukesha county (Hoffmann) were the only fall reports.

**Yellow-throated Vireo:** Almost three weeks later than all other observations were those in Sauk county, Sep. 30 (Lange) and LaCrosse county, Oct. 1 (Rosso).

**Solitary Vireo:** First observed on Aug. 24, Dane county (Ashmans). Three weeks later than all other observations were those in Dane county on Nov. 1 (Emlen) and Rock county where one was banded on Nov. 1 (Maxson). Both are late departures.

**Red-eyed Vireo:** Oct. 6, Sauk county (Lange).

**Philadelphia Vireo:** Arrived in the state on Aug. 25, Milwaukee county (Donald). A normal departure date of Oct. 15 in both Sauk and Rock counties. However two birds were observed in Milwaukee county on Nov. 12 by Lemke and Sheridan. This represents a new state departure record, the previous one being Nov. 6, 1965.

**Warbling Vireo:** Late September departures (the 27th and 28th) from LaCrosse and Dane counties which is about two weeks later than most other departures. However individual birds were sighted on Oct. 5 in Manitowoc (Albrecht) and Rock (Brakefield) counties which is a late date.

**Black & White Warbler:** No October sightings this year with the last individuals reported from Kenosha (Hamers) and Douglas (Robbins) counties on Sep. 28.

**Golden-winged Warbler:** There were only four reports for the species this fall with the last observation occurring on Sep. 14 in LaCrosse county (Rosso).

**Blue-winged Warbler:** Only observed in LaCrosse where it was seen between Sep. 6-15 by Rosso.

**Tennessee Warbler:** August sightings in Chippewa county where it was reported present prior to the fall season (Robbins); in Sauk county where one was banded by Cox on Aug. 16; and in Milwaukee county on Aug. 27 (Strehlow). Kemper reported good numbers present at Chippewa Falls. Last recorded in the state on Oct. 17 in LaCrosse (Rosso) and Waukesha (Bratley) counties.

**Orange-crowned Warbler:** A poor migration this fall with it reported from only eight counties. The observation period extended between Aug. 26 and Oct. 19.

**Nashville Warbler:** Almost two weeks later than all other reports is that of Nov. 4 in Rock county (Brakefield). This is only several days away from tying the state departure record.

**Parula Warbler:** Four reports: Sep. 1, Brown county (Wierzbicki); Sep. 23, Fond du Lac county (Knuth); and two late dates of Oct. 3, Rock county (Maxson) and Oct. 6, Brown county (Cleary, Columban).

**Yellow Warbler:** Observations from ten different counties with the last being on Oct. 6 in Rock county (Brakefield) which is a late date.

**Magnolia Warbler:** August dates from Chippewa (the 23rd, Robbins), Brown, the 26th, Wierzbicki), Milwaukee (the 28th, Donald) and Kenosha (the 31st, Hamers, counties. Last reported on Oct. 11, Sauk county (Lange).

**Cape May Warbler:** First observed on Aug. 21, Brown county (Wierzbicki) and Aug. 31, Chippewa county (Robbins); last on Oct. 1, Manitowoc county (Albrecht).

**Black-throated Blue Warbler:** These reports: Sep. 8, Milwaukee county (Donald); Sep. 8, Rock county (Maxson); Sep. 19-20, Brown county (Wierzbiicki); Sep. 20-23, Sauk county (Lange); 2 on Sep. 27, Milwaukee county (Strehlow); Sep. 28 (Bratley) and Sep. 30 (Hoffmann), Waukesha county; Oct. 1, Brown (Cleary) and Waushara (Gustafson) counties; Oct. 3, Rock county (Maxson); Oct. 4, Milwaukee county (Gustafson); Oct. 5, Cedar Grove (Tessen).

**Cerulean Warbler:** No reports this fall.

**Blackburnian Warbler:** Three October dates: Oct. 2, Sauk county (Lange); Oct. 3, Dane county (Ashmans); Oct. 4, LaCrosse county (Leshner).

**Chestnut-sided Warbler:** A week later than all other departures was that of Oct. 10, Rock county (Maxson).

**Bay-breasted Warbler:** The observation period this fall extended between Aug. 23, Milwaukee county (Strehlow) and Oct. 1, Brown (Wierzbiicki) and Waushara (Chipman) counties.

**Blackpoll Warbler:** First on Aug. 31, Chippewa county (Robbins) and last on Oct. 11, Kenosha county (Hamers).

**Pine Warbler:** Oct. 4, Chippewa county (Robbins).

**Palm Warbler:** Present at the beginning of the period in Price county (Vincent). Next reported on Sep. 3 in Manitowoc county (Albrecht, Scholz). Last observed on Oct. 28 in Dane county (Ashmans).

**Ovenbird:** October 3 and 4 departures from Ozaukee, Milwaukee and Waukesha; Oct. 10 in Brown county (Wierzbiicki).

**Northern Waterthrush:** A bird observed at a distance of 30 feet in Racine county on Nov. 9 was three weeks later than all other reports this year (Erickson). This is a very late date.

**Louisiana Waterthrush:** Four reports: 2 on Aug. 17, Sauk county (Bratley); Sep. 9, Milwaukee county (Strehlow); Sep. 30, Sauk county (Lange); Oct. 8, Wood county (Hebards, Roemer).

**Kentucky Warbler:** The first full observation in over six years comes from Hamers of a bird sighted in Kenosha county on Aug. 31.

**Connecticut Warbler:** Sep. 1, Waushara county (Chipman); Sep. 6, Columbia (Baleys) and Kenosha (Hamers) counties; Sep. 10, Milwaukee county (Donald); Sep. 11, Brown county (Wierzbiicki); Sep. 16-18, Rock county (Brakefield); Sep. 23, Sauk county (Lange); and Oct. 5, LaCrosse county (Rosso).

**Mourning Warbler:** Observed by five reporters with the last bird noted by Scholz on Sep. 25, Manitowoc county.

**Yellowthroat:** There were five mid-October departure dates plus Nov. 1, Kenosha county (Hamers) and a late date of Nov. 16, Milwaukee county (Michelics).

**Wilson's Warbler:** The observation period this fall extended between Aug. 23, Chippewa county (Robbins) and Oct. 6, Rock county (Maxson).

**Canada Warbler:** One month later than all other sightings, and a late date, is that of Oct. 15 in Barron county (Goff).

**Redstart:** A departure date of Oct. 24, Rock county (Maxson).

**Bobolink:** Ten observations during the early part of the period with the last report coming from Racine county of three birds sighted on Sep. 20 (Gustafson).

**Western Meadowlark:** Reported as present at the end of the period in Vernon county (Morse).

**Yellow-headed Blackbird:** These reports this fall: Aug. 17, St. Croix county (Robbins); Sep. 4, Columbia county (Werner); sightings until Sep. 28 with a maximum of six on Sep. 3 in Brown county (Bratley, Cleary, Tessen); sightings until Oct. 18 in Kenosha county (Hamers).

**Redwinged Blackbird:** Two major flights reported this fall: "many thousands" on Oct. 9 in Vernon county (Morse) and an "extremely large" flight on Nov. 18 in Rock county (Brakefield). Present at the end of the period in Dane (Ashmans) and Milwaukee (Strehlow) counties.

**Baltimore Oriole:** There were numerous departures during the first week of September with the latest being the 9th in Rock county. However a female bird was observed in an apple tree in Kenosha on Nov. 2 by Hamers.

**Rusty Blackbird:** Early September reports from Manitowoc (the 4th, Scholz) and Brown (the 7th, Cleary) counties. Last reported on Nov. 23 in Milwaukee county (Gustafson).

**Brewer's Blackbird:** "Large flocks" were observed on Sep. 21 and 27 in Waushara county (Greenman). Last reported on Nov. 5 in Milwaukee county (Strehlow).

**Common Grackle:** Present at the end of the period in Columbia (Baleys), Milwaukee (Strehlow), and Price (Vincent) counties.

**Cowbird:** Last on Nov. 22, Winnebago county (Natzke); Nov. 23, Kenosha county (Hamers); and Nov. 26, Brown county (Cleary, Columban).

**Scarlet Tanager:** One week later than the other reports were observations in Brown county (Oct. 9 (Wierzicki) and Rock county, Oct. 14 (Mahlum).

**Summer Tanager:** The third and fourth fall records for this species occurred when a bird was banded on Oct. 1 by Chipman in Waushara county and a female was observed on Oct. 16 by Sheridan in Milwaukee county.

**Cardinal:** The four northernmost counties reported this fall were Barron (present all period, Goff), Langlade (2 on Nov. 29, Schimmels), Price (Nov. 25, Vincent) and Washburn (Nov. 23, Bailey).

**Rose-breasted Grosbeak:** Almost four weeks later than all other reports is the sighting in Price county on Nov. 7 (Vincent).

**Black-headed Grosbeak:** The first state record for this western species occurred this fall when an individual appeared at the feeder of Mr. & Mrs. George Baker in the Wisconsin Arboretum on Nov. 11. It remained for the duration of the month and was subsequently seen by a large number of observers. Still present well into December.

**Indigo Bunting:** Oct. 9, Waukesha county (Bratley).

**Dickcissel:** Present at the beginning of the period in Chippewa county (Robbins); Aug. 31-Sep. 12, LaCrosse county (Rosso); observed until Sep. 22 in Rock county (Brakefield, Mahlum).

**Evening Grosbeak:** This fall there were observations in 23 counties by 29 reporters. Thus for the second straight fall there was a major movement into the state. However this year the movement commenced very slowly and did not reach significant proportions until November, as demonstrated by the following reports. The only August observations occurred in Price (Aug. 23, Hardy) and Bayfield (10 on Aug. 30, Bratley) counties. Likewise in September there were only two reports: Sep. 24, Ozaukee county (Liebherr) and Sep. 28, Douglas county (Robbins). In direct contrast to last year's major influx during October there were only the following reports: 2 on Oct. 5, Oct. 20 at Cedar Grove (Tessen, Berger); Oct. 25 in Brown (Cleary), Langlade (Schimmels) and Marinette (Richter) counties. However during November sixteen counties reported sightings, varying from a few individuals to 100 or more. As expected, the majority of counties reported numerous individuals present at the beginning of December.

**Purple Finch:** A fair movement into the state this fall with reports from 18 counties by 29 observers. Present at the beginning of the period in Langlade county (Schimmels). Observed during August in Price (Aug. 16, Hardy), LaCrosse (Aug. 23, Rosso), and Dane (Aug. 28, Ashmans) counties. September reports came from Brown, Kenosha, Manitowoc, Milwaukee, Outagamie, Rock, and Waukesha counties. Sightings continued from a variety of counties during October and November with some reporters commenting on good numbers present. Present at the end of the fall period in thirteen counties.

**Pine Grosbeak:** Six reports: 2 on Oct. 22, Rock county (Maxson); 3 on Nov. 8 with flocks observed on Nov. 22 (Richter); Nov. 20, Price county (Vincent); 2 on Nov. 22, Sawyer county (Rusch); 6 on Nov. 22, 2 on Nov. 28, Bayfield county (Bratley); 2 on Nov. 29, Langlade county (Schimmels).

**Hoary Redpoll:** One observed in Milwaukee county on Nov. 29 by Priebe and Donald.

**Common Redpoll:** For the second consecutive fall a major movement into the state with reports from 16 counties by 22 observers. The pattern was similar to that of the Evening Grosbeak; that is, not reaching large proportions until November. There were only three October reports: Oct. 16, Brown county (Cleary, Columban); Oct. 20, Manitowoc county (Albrecht); Oct. 25, Kenosha county (Hamers). Then came a wave of November sightings from throughout the state. Most of these counties indicated good and/or increasing numbers at the beginning of the winter period.

**Pine Siskin:** The pattern that was shown during the summer months continued straight through the fall period. The result is a major invasion throughout the state, undoubtedly one of the best ever for this species in the state. It would be redundant to list all the counties reporting the species present at the beginning of the period. Instead suffice it to say that the invasion increased during the first half of the fall period, peaking during the first three weeks of October. This is demonstrated by numerous October sightings and some large flocks sighted during that time: "numerous" during early October in Washburn county (Bailey); many 100+ flocks on Oct. 5-6 in St. Croix county (Olson); 210 on October 13, Waukesha county (Bratley); 200 on Oct. 12, 100 on Oct. 19, Rusk county (Robbins); 700+ on Oct. 18, Sheboygan county (Gustafson); 200 on Oct. 20, Kenosha county (Hamers); "large numbers" on Oct. 20-21, Milwaukee county (Donald); Maxson banded 181 during Oct. and Nov. in Rock county.

However, easily the most spectacular flight had to be that observed by Berger at Cedar Grove on Oct. 21. On that day, by 1:00 p.m. over 50,000 small finches had passed through, including redpolls, goldfinches, a few Purple but the greater majority consisted of Pine Siskins. This apparently was the climax to the invasion as numbers commenced diminishing generally throughout the state thereafter. Some areas reported them absent already by mid-November. Considerably smaller numbers than during October were observed into December in eleven counties.

**Red Crossbill:** The summer invasion continued throughout the fall months. Numbers ranged from a few to flocks of 50+. Reporting counties included Bayfield, Chippewa, Dane, LaCrosse, Langlade, Milwaukee, Price, Rock, Rusk, Sauk, Washburn, Waukesha and Waupaca. This represents one of the best movements in many years.

**White-winged Crossbill:** The same pattern existed for this crossbill species. The numerous sightings continued during the autumn months with numbers ranging from a few to flocks of 35 and 40. Birds were seen in the following counties: Bayfield, Chippewa, Forest, Milwaukee, Price, Rock, Washburn, and Waupaca.

**Rufous-sided Towhee:** At a feeder on Nov. 13 in Waushara county (Greenman) with one individual still present at the end of the period in Brown county (Cleary, Columban).

**Savannah Sparrow:** Oct. 24, Rock county (Brakefield).

**Grasshopper Sparrow:** One report: Aug. 17, Sauk county (Ashmans).

**LeConte's Sparrow:** Present until Oct. 5 in Chippewa county (Robbins). This is the only report this fall.

**Henslow's Sparrow:** One report: Aug. 17, Sauk county (Ashmans).

**Sharp-tailed Sparrow:** Two reports: two birds were observed at Wind Point (Racine county) in September by Erickson; one individual was seen on Oct. 8 in Dane county (Emlen).

**Vesper Sparrow:** Two weeks later than other reports were Nov. 5, Vernon county (Weber) and Nov. 8, LaCrosse county (Rosso).

**Lark Sparrow:** Two reports: Aug. 17, Sauk county (Ashmans); Oct. 4, LaCrosse county (Rosso).

**Slate-colored Junco:** Twelve arrivals reported between Sep. 19-30, the first being from Sauk county (Lange).

**Oregon Junco:** These reports: Sep. 27-29, Price county (Vincent); Oct. 2-4, Brown county (Cleary); from Oct. 6 on, Outagamie county (Tessen, Bradford); Oct. 9, Milwaukee county (Gustafson); Oct. 16, Vernon county (Weber); from Oct. 16 on, Dane county (Ashmans); Oct. 18, Chippewa county (Robbins); Oct. 24, Rock county (Brakefield); Oct. 26, Waukesha county (Hoffmann); from Oct. 29 on, Manitowoc county (Scholz, Albrecht); Nov. 23, LaCrosse (Rosso) and Fond du Lac (Knuth) counties.

**Tree Sparrow:** Arrival date of Sep. 28 in Douglas county (Robbins). Most arrival dates occurred during the second and third weeks of October.

**Chipping Sparrow:** Last on Nov. 2, Brown county (Cleary, Columban) and Nov. 3, Chippewa county (Robbins).

**Clay-colored Sparrow:** Present in Barron county through Aug. 21 (Goff) and Chippewa county through Sep. 6 (Robbins). Observed in Price county on Sep. 13 (Vincent) and Oct. 11 (Hardy); in LaCrosse county Oct. 4-15 (Rosso).

**Field Sparrow:** Departure dates of Nov. 7, Rock county (Mahlum) and Nov. 8, LaCrosse (Rosso) and Kenosha (Hamers) counties.

**Field Sparrow:** Departure dates of Nov. 7, Rock county (Mahlum) and Nov. 8, LaCrosse (Rosso) and Kenosha (Hamers) counties.

**Harris' Sparrow:** A poorer migration than the previous two years. Reports included: early October in Dane (Vogelsang) and Waukesha (Compton) counties; Oct. 4, Chippewa (Robbins) and Milwaukee (Donald) counties; Oct. 5-7, Barron county (Rosso, Lescher); Oct. 6-Nov. 2, Price county (Hardy, Vincent); Nov. 17, Milwaukee (Woodmansee); Nov. 23, Rock county (Brakefield).

**White-crowned Sparrow:** Another good migration this fall with sightings in seven counties by twenty-five reporters. Most reports covered several weeks to one month. The observation period commenced on Sep. 20 and continued until Nov. 23. Numbers reported included six on Sep. 30 in Milwaukee (Strehlow) and on Oct. 5 at Cedar Grove (Tessen). 16 were counted on Oct. 14 in Ozaukee county (Donald). Hamers reported a total of 57 seen during the period in Kenosha county.

**White-throated Sparrow:** Present at the beginning of the period in Price county (Vincent). Next observed in Dane county, Aug. 28 (Ashmans), Chippewa county, Sep. 2 (Robbins), and Milwaukee county, Sep. 6 (Strehlow). Birds lingered into December in Dane, Iowa, Price and Waukesha counties.



**Fox Sparrow:** The observation period extended between Sep. 20, Manitowoc county (Albrecht) and Nov. 23, at a feeder in Waushara county (Greenman).

**Lincoln's Sparrow:** First observed on Aug. 30 in Brown county (Cleary, Columban). Over a week later than all other departures was that on Nov. 5 in Rock county (Brakefield).

**Swamp Sparrow:** Departures of Nov. 1, Kenosha county (Hamers) and Nov. 4, Sauk county (Lange).

**Lapland Longspur:** Again this fall there were few reports: Sep. 28, Douglas county (Robbins); Oct. 5, Marinette county (Lindberg); Oct. 19, Chippewa (Robbins) and Kenosha (Hamers) counties; Oct. 25, Brown county (Tessen); several hundred on Nov. 26, Langlade county (Schimmels).

**Snow Bunting:** Another excellent movement into the state this fall. It was first observed on Oct. 17 in Oconto county (Richter), Oct. 18 in Forest county (Richter) and Oct. 19 in Chippewa county (Robbins). There were twelve additional reporting counties with it being reported as numerous during November in Washburn (Bailey).

#### CONTRIBUTORS

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#### RESOLUTION

WHEREAS, through the efforts of the Wisconsin Society for Ornithology and other conservation organizations in this state, and after public hearing, the Department of Natural Resources of Wisconsin has granted **complete** protection to all the winged birds of prey including all species of hawks, owls, eagles, and all fish eating birds to include the osprey, cormorant, kingfisher, great blue heron, etc.; and

WHEREAS, this society feels it desirable to place incentives on the strict enforcement of that protection;

#### NOW THEREFORE,

The Wisconsin Society for Ornithology, Inc., does hereby and by these presents make public offer of reward in the amount of \$50.00 to anyone whose information leads to the arrest, prosecution and conviction of any person illegally injuring or destroying any such bird in the State of Wisconsin.

July 18, 1970



# FIELD NOTES

By WILLIAM L. HILSENHOFF

## The Winter Season

December 1, 1969 - February 28, 1970

Snow fell over the entire state in early December, and remained throughout the rest of the winter. It forced birds to roadsides and feeders where they could be readily observed, and most observers felt that the winter of 1969-70 was excellent for observing birds.

The temperatures through December were seasonal, with no severe cold snaps, and many birds that normally migrate south lingered through the Christmas Count Period. Coupled with an invasion by many northern species, this produced a near record Wisconsin Christmas Count (see previous issue of **Passenger Pigeon**). The first two weeks of January, however, brought extremely cold temperatures, and many species either declined in number or disappeared altogether.

The winter produced several rarities. Two Nashville Warblers in Green Bay on Dec. 4 and 11 broke the previous late departure record by a full month. On the Christmas Counts King Eiders, an Osprey, Ringed Turtle Doves, and a Sora were observed for the first time, but none of these birds wintered. Other rarities seen on the Christmas Counts, but not thereafter, were a Rose-breasted Grosbeak, an American Bittern, a Harlequin Duck, and two Yellow-headed Blackbirds. After the Christmas period, a Lincoln's Sparrow was observed in Rock County on January 26 (See "By the Wayside"), and this was the first January record of this species in Wisconsin. The most remarkable rarity of all, however, was the Black-headed Grosbeak that spent almost the entire winter in Madison, frequenting the feeder of Mr. and Mrs. George Baker. This is the first documented Wisconsin sighting of this species. Through the gracious hospitality of the Baker's, many W.S.O. members had an opportunity to observe and photograph this bird at very close range. An article concerning this bird is in a previous issue of the **Passenger Pigeon**.

In addition to the rarities, several species that normally winter south of Wisconsin remained throughout the winter in unusually large numbers. Yellow-shafted Flickers, Red-headed Woodpeckers, Brown Creepers, Common Grackles, and Pine Siskins were notable examples. Several species from the far north were also unusually abundant. Red-breasted Nuthatches appeared in unprecedented numbers, especially in the northern half of the state. Common Redpolls, and Red Crossbills invaded the entire state, and Evening Grosbeaks were abundant in the northern two-thirds of the state. Several observers also remarked about the unusual abundance of Black-capped Chickadees and Blue Jays.

The new report-form that was mailed with the **Badger Birder** elicited an excellent response and provided excellent coverage of the state. There were reports by 112 observers from 48 counties, and the 141 species that were seen is an excellent total for the winter period. The observations are summarized below, with the emphasis being on January and February records, since the 65 Christmas Counts that were reported in a previous issue of the **Passenger Pigeon** have already documented the early winter bird populations.

### The Season Summary

**Horned Grebe** — 2 Christmas Counts.

**Pied-billed Grebe** — 3 Christmas Counts.

**Great Blue Heron** — 1 Christmas Count.

**American Bittern** — 1 Christmas Count.

**Mute Swan** — Three February reports, one Feb. 12 in Rock Co. (Thomas Ellis), one photographed Feb. 28 in Grant Co. (Fred Leshner), and two in Milwaukee Co. Feb. 28 (Daryl Tessen).

**Whistling Swan** — One in Dane Co. Jan. 10 (William Hilsenhoff).

**Canada Goose**: 10 Christmas Counts. Wintered in Brown, Ozaukee, Milwaukee, Dodge, LaCrosse, and Walworth Counties.

**Snow Goose** — 1 Christmas Count. One wintered in Winnebago Co. (Tessen).

**Blue Goose** — 2 Christmas Counts. Three wintered in Door Co. (Terry Hennen and Carol Rudy). Also remained until Jan. 12 in Brown Co. (Br. Columban and Ed Cleary).

**Mallard** — 37 Christmas Counts. Reported wintering throughout the state, and numerous in some southern counties.

**Black Duck** — 21 Christmas Counts. Wintered throughout the state, but most numerous in the south.

**Gadwall** — 4 Christmas Counts. One or two wintered in Milwaukee Co. (Dennis Gustafson). Other reports: Dane Co. Jan. 10 (Hilsenhoff), LaCrosse Co. Jan. 22 to Feb. 16 (Leshner), and Ozaukee Co. Feb. 28 (Tessen).

**Pintail** — 5 Christmas Counts.

**Green-winged Teal** — 3 Christmas Counts. One wintered in Dane Co. (Hilsenhoff), and one was seen Jan. 26 in Sheboygan Co. (Eleanor Kuhn).

**Blue-winged Teal** — 3 Christmas Counts. One wintered in Winnebago Co. (Tessen), and one found Feb. 10 in Milwaukee Co. (Mary Donald).

**American Widgeon** — 7 Christmas Counts. One remained in Dane Co. until Feb. 7 (Hilsenhoff).

**Shoveler** — 1 Christmas Count. This species wintered in Dane Co. (Hilsenhoff), with nine being observed Feb. 15.

**Wood Duck** — 6 Christmas Counts. Two to five in Winnebago Co. (Tessen), and two more in Dane Co. (Peter and Carolyn Connors, and O. B. Wynn).

**Redhead** — 5 Christmas Counts. Wintered in Brown (Columban & Cleary), Milwaukee (Donald), Ozaukee (Tessen) and Winnebago (Tessen) Counties.

**Ring-necked Duck** — 2 Christmas Counts. Wintered in LaCrosse county (Jerome Rosso). Also seen in Dane Co. Jan. 4 (Barbara Vogelsang), and Milwaukee Co. Feb. 10-26 (Gustafson).

**Canvasback** — 8 Christmas Counts. Wintered in Milwaukee Co. (Donald) and Ozaukee and Winnebago Counties (Tessen). One was seen in Adams Co. Feb. 1, and two were found Feb. 26 in Manitowoc Co. (Ray Casper).

**Greater Scaup Duck** — 6 Christmas Counts. Late winter reports came only from Milwaukee, Ozaukee, and Manitowoc Counties.

**Lesser Scaup Duck** — 11 Christmas Counts. Wintered in Winnebago Co. (Tessen) and LaCrosse Co. (Rosso). Also seen Feb. 1 in Adams Co. (Delbert Greenman).

**Common Goldeneye** — 33 Christmas Counts. Found throughout the winter in all areas of the state.

**Bufflehead** — 10 Christmas Counts. Wintering birds on Lake Michigan were observed in Milwaukee, Ozaukee, and Manitowoc Counties. One also wintered in LaCrosse Co. (Rosso), and another was sighted Feb. 12 in Oconto Co. (James Evrard).

**Oldsquaw** — 7 Christmas Counts. Wintered in Lake Michigan, with reports from Kenosha, Milwaukee, Ozaukee, and Manitowoc Counties.

**Harlequin Duck** — 1 Christmas Count.

**King Eider** — 1 Christmas Count.

**White-winged Scoter**—6 Christmas Counts. Probably wintered in Ozaukee Co. with six seen Jan. 11 (the Liebheer's), one Feb. 8 (Gustafson), and five Feb. 28 (Tessen). Five were also observed in Milwaukee Co. Feb. 27 (Gustafson) and on in Manitowoc Co. Jan. 2 (Casper).

**Ruddy Duck**—7 Christmas Counts. Two wintered in Milwaukee Co. (Gustafson), and three in Winnebago Co. (Tessen). Two were also found Feb. 15 in Dane Co. (Hilsenhoff).

**Hooded Merganser**—3 Christmas Counts. One wintered in LaCrosse Co. (Rosso). Other reports of single birds came from Waukesha Co. Jan. 24 (Don Hanbury, Gustafson), Juneau Co. Feb. 7 (Gustafson), and Dane Co. Feb. 4-28 (Connors).

**Common Merganser**—13 Christmas Counts. Remained in Douglas Co. until Feb. 8 (Bernard Klugow), and wintered as far north as Marinette Co. (Harold Lindberg). Also reported wintering in Milwaukee, Ozaukee, Dane, and LaCrosse Counties.

**Red-breasted Merganser**—7 Christmas Counts. One to seven wintered in Milwaukee Co. (Gustafson). The only other late winter reports were from Ozaukee Co. on Jan. 17 (Hanbury) and Brown Co. on Feb. 21 (Columban & Cleary).

**Goshawk**—5 Christmas Counts. Four late winter sightings were reported from Douglas Co. (Klugow), and others were seen in Brown Co. Jan. 29 (Columban & Cleary), Milwaukee Co. Jan. 15 (Elmer Strehlow) and Jan. 16 (Hanbury), Price Co. Feb. 11 (Maybelle Hardy), and Langlade Co. Jan. 13 (Evrard) and Feb. 28 (Lynn Schimmels).

**Sharp-shinned Hawk**—4 Christmas Counts. There were several reports in January and February, with many of the individuals apparently preying on birds coming to feeders. These reports came from Price, Brown, Juneau, Waushara, Manitowoc, Monroe, LaCrosse, Dane, Milwaukee, and Rock Counties.

**Cooper's Hawk**—9 Christmas Counts. Remained until Feb. 12 in Brown Co. (Columban & Cleary). Also seen in Waushara Co. Feb. 15 (Irma Chipman), Juneau Co. Feb. 1 (Tessen, Hanbury), and Milwaukee Co. Jan. 10 (Donald).

**Red-tailed Hawk**—38 Christmas Counts. There were numerous reports from the southern two-thirds of the state, but none from the far north.

**Red-shouldered Hawk**—4 Christmas Counts. Four wintered in LaCrosse Co. (Rosso). Others were found Jan. 10 in Milwaukee Co. (Donald), Jan. 26 in Winnebago Co. (Greenman), and Feb. 4 in Brown Co. (R. Hasterlik).

**Rough-legged Hawk**—33 Christmas Counts. The heavy snow cover appeared to drive this species farther south this winter. Although a few remained in the southern half of the state throughout the winter, they were reported as being very common only in Waushara and Wood Counties.

**Golden Eagle**—1 Christmas Count.

**Bald Eagle**—12 Christmas Counts. There were many late winter reports from throughout the state.

**Marsh Hawk**—7 Christmas Counts. One wintered in Waushara Co. (Chipman, Greenman). Reports from Rock Co. Feb. 23 (Mrs. Joseph Mahlum), and Feb. 28 from Grant Co. (Leshner, Rosso) and Iowa Co. (Connors) indicated that this species was migrating back into the southern counties during the last week in February.

**Osprey**—1 Christmas Count.

**Sparrow Hawk**—29 Christmas Counts. There were many observations from the southern half of the state, but they were not especially common this winter. One was seen as far north as Marinette Co. on Feb. 28 (Lindberg).

**Ruffed Grouse**—28 Christmas Counts. Reported from all but the extreme southeastern counties.

**Sharp-tailed Grouse**—3 Christmas Counts. Reported from Douglas Co. (Klugow), Lincoln Co. (Theodore Lokemoe), Langlade Co. (Schimmeis) and Burnette Co. (N. R. Stone).

**Bobwhite**—5 Christmas Counts. Late winter sightings were made only in LaCrosse Co. (Rosso) and Rock Co. (Mahlum).

**Ring-necked Pheasant**—33 Christmas Counts. Common in agricultural areas.

**Gray Partridge**—16 Christmas Counts. Found in the southern and eastern counties north to Oconto Co. (Evrard) and Shawano Co. (Schimmels).

**Turkey**—Fourteen were seen in Juneau Co. Feb. 1 (Tessen), and two on Feb. 7 (Gustafson).

**Virginia Rail**—One was seen in Dane Co. Jan. 3 (Hilsenhoff).

**Sora**—1 Christmas Count.

**American Coot**—10 Christmas Counts. About 75 wintered in Dane Co. (Hilsenhoff). Others wintered in Winnebago, Outagamie, and Ozaukee Counties (Tessen). Two remained until Feb. 7 in LaCrosse Co. (Rosso).

**Killdeer**—5 Christmas Counts. One was present Jan. 31 to Feb. 7 in Juneau Co. (Gustafson). Two that were sighted Feb. 28 in Crawford Co. (Lesh, Rosso) may have been early migrants.

**Common Snipe**—9 Christmas Counts. The only reports of wintering birds came from the far north and extreme south. Two wintered in Douglas Co. (Klugow), and two more in Rock Co. (Chet Skelly).

**Glaucous Gull**—1 Christmas Count. One was seen Feb. 27 in Douglas Co. (Klugow). One to two birds were present in Milwaukee Co. Feb. 26-28 (Gustafson).

**Herring Gull**—19 Christmas Counts. Wintered in Douglas, Brown, Winnebago, Manitowoc, Milwaukee, and Kenosha Counties, but numbers were low, especially in January and early February.

**Ring-billed Gull**—6 Christmas Counts. A few remained all winter in Milwaukee Co. and about 10 wintered in Kenosha Co.

**Bonaparte's Gull**—2 Christmas Counts.

**Mourning Dove**—45 Christmas Counts. This species wintered in good numbers throughout the southern two-thirds of the state. As far north as Lincoln Co. 35 were reported to have wintered (Lokemo).

**Ringed Turtle Dove**—2 Christmas Counts. In addition to those on the Christmas Counts, one was seen Feb. 28 in Milwaukee Co. (E. Sheridan).

**Screech Owl**—12 Christmas Counts. Reports came from several counties north to Eau Claire Co. (Paul Blanchard).

**Great Horned Owl**—16 Christmas Counts. Numerous reports from throughout the state.

**Snowy Owl**—Only two reports. One was seen in Lincoln Co. Jan. 12 (Lokemo), and another in Sheboygan Co. Feb. 8 (Pauline Trowbridge).

**Barred Owl**—14 Christmas Counts. Many were seen throughout the state.

**Long-eared Owl**—10 Christmas Counts. Found in Milwaukee Co. Jan. 10 (Matt Micheli), Dane Co. Jan. 15 (Connors), LaCrosse Co. Jan. 25 (Lesh, Rosso), and Green Co. Feb. 1 (Wayne Rohde).

**Short-eared Owl**—5 Christmas Counts. The only late winter sightings were in Winnebago Co. (Tessen) where they wintered, Dane Co. Jan. 11 (Tom Ashman), and Brown Co. Jan. 17-24 (Paul J. Kane) when 15 to 20 were observed.

**Saw-whet Owl**—1 Christmas Count. Four others were seen as follows: Dec. 6 Portage Co. (Frank Haeni), Dec. 27 Sheboygan Co. (Kuhn), Jan. 27 Buffalo Co. (Connors), and Feb. 23 Douglas Co. (Klugow).

**Belted Kingfisher**—17 Christmas Counts. There were reports of wintering birds from several counties in the southern half of the state, and also reports from Lincoln Co. (Lokemo) and Langlade Co. (Schimmls) in the north.

**Yellow-shafted Flicker**—29 Christmas Counts. This species wintered in unprecedented numbers in the southern counties and north to Waupaca Co. (D. R. Auld) and Outagamie Co. (Tessen).

**Pileated Woodpecker**—20 Christmas Counts. Seen in all areas of the state, except the extreme southeast.

**Red-bellied Woodpecker**—38 Christmas Counts. The distribution in the state is best defined by the Christmas Counts.

**Red-headed Woodpecker**—43 Christmas Counts. Unusually abundant all winter in the southern half of the state, with reports north to Brown and St. Croix Counties.

**Yellow-bellied Sapsucker**—6 Christmas Counts. One was observed in Rock Co. Jan. 15 to Feb. 15 (Skelly).

**Hairy Woodpecker**—60 Christmas Counts. Common throughout the state.

**Downy Woodpecker**—62 Christmas Counts. Common throughout the state.

**Black-backed Three-toed Woodpecker**—Four sightings were made in Douglas Co. (Klugow).

**Horned Lark**—24 Christmas Counts. This species wintered in the southern two-thirds of the state, with a major northward migration reported Feb. 13-15.

**Gray Jay**—4 Christmas Counts. January and February sightings were made in Menominee, Forest, Langlade, Oneida, Price, and Douglas Counties.

**Blue Jay**—65 Christmas Counts. Most observers reported very high numbers this winter.

**Common Raven**—12 Christmas Counts. There were numerous reports from the northern two or three tiers of counties, with one also sighted in Jackson Co. Feb. 18 (Rosso).

**Common Crow**—62 Christmas Counts. Wintered throughout the state, with numbers increasing in the north by late February.



**Black-capped Chickadee** — 65 Christmas Counts. Most observers reported exceptionally high numbers this winter.

**Boreal Chickadee** — 3 Christmas Counts.

**Tufted Titmouse** — 15 Christmas Counts. Numbers were down this winter throughout the normal range of this species.

**White-breasted Nuthatch** — 59 Christmas Counts. Common throughout the state.

**Red-breasted Nuthatch** — 51 Christmas Counts. This winter produced an exceptional invasion that reached even the extreme southern part of the state. In the northern counties this species was truly abundant.

**Brown Creeper** — 40 Christmas Counts. Wintered in unusual numbers throughout the entire state.

**Winter Wren** — 1 Christmas Count. The only others were seen Dec. 13 in Milwaukee Co. (Strehlow) and Dane Co. (Hilsenhoff).

**Catbird** — 1 Christmas Count.

**Brown Thrasher** — 7 Christmas Counts. Wintered in Brown Co. (Columban & Cleary) and Rock Co. (Skelly). Found Jan. 10 in Ozaukee Co. (Gustafson), and remained until Feb. 15 in Dane Co. (Mrs. F. W. Duffee) and until Feb. 17 in Marinette Co. (George Brabender).

**Robin** — 33 Christmas Counts. Wintered commonly in the southern half of the state, with reports also from Douglas, Bayfield, Marinette, Eau Claire, Langlade, and Lincoln Counties in the north.

**Varied Thrush** — 5 Christmas Counts. One wintered in Dane Co. (Dorris Baker) and another in Sauk Co. (Mrs. Fred Steckelberg).

**Hermit Thrush** — 2 Christmas Counts. One remained in Outagamie Co. Feb. 8-28 (Mrs. David Fulton).

**Eastern Bluebird** — 5 Christmas Counts. Two were seen in Grant Co. Feb. 21 (Rohde).

**Golden-crowned Kinglet** — 31 Christmas Counts. Most apparently left the state after the Christmas Counts, with January and February reports only from Rock, Milwaukee, Brown, and Douglas Counties.

**Ruby-crowned Kinglet** — 1 Christmas Count.

**Bohemian Waxwing** — The only documented report was the sighting of 12 in Brown Co. Dec. 7-11 (Columban & Cleary).

**Cedar Waxwing** — 23 Christmas Counts. Wintered commonly in the southern half of the state. Nineteen were present in Lincoln Co. Feb. 18 (Lokemoie).

**Northern Shrike** — 25 Christmas Counts. There were many reports from throughout the state. Brother Columban saw a shrike strike and kill a Blue Jay, and also saw another kill a Starling after a terrific battle.

**Starling** — 63 Christmas Counts. Abundant.

**Nashville Warbler** — Two were found frequenting a feeder in Brown Co. on Dec. 4 and 11 (Columban & Cleary). Their small size, yellow underparts and throat, gray head, and olive-green back readily distinguished these birds. This sighting exceeds the previous late departure record by a full month.

**Myrtle Warbler** — 1 Christmas Count. One was also seen in Walworth Co. Dec. 13 (William Perry).

**House Sparrow** — 65 Christmas Counts. Abundant.

**Meadowlarks** — 19 Christmas Counts. Reported wintering in nine counties north to Lincoln Co. (Lokemoie).

**Yellow-headed Blackbird** — 2 Christmas Counts.

**Red-winged Blackbird** — 22 Christmas Counts. Wintered in Milwaukee, Winnebago, and LaCrosse Counties.

**Rusty Blackbird** — 5 Christmas Counts. Seen in Winnebago Co. Jan. 3 (Tessen), Juneau Co. Feb. 1 (Tessen), and Rock Co. Feb. 10-23 (Mahlum).

**Brewer's Blackbird** — 2 Christmas Counts. Found in Dodge Co. Jan. 30 (Connors), LaCrosse Co. Feb. 7 (Leshner), and Brown Co. Feb. 9 (Columban & Cleary).

**Common Grackle** — 30 Christmas Counts. There were numerous reports of wintering birds in the southern half of the state. Two also wintered in Douglas Co. (Klugow).

**Brown-headed Cowbird** — 12 Christmas Counts. Reported wintering in ten counties north to Outagamie Co.

**Cardinal** — 56 Christmas Counts. Found throughout the state, but uncommon in the extreme north.

**Rose-breasted Grosbeak** — 1 Christmas Count.

**Black-headed Grosbeak** — One remained until Feb. 25 in Dane Co. (Baker) where it regularly visited the feeder of Mr. & Mrs. George Baker. This is the first verified record of this species in Wisconsin. For details, see the article in a previous issue of

the **Passenger Pigeon**.

**Evening Grosbeak**—42 Christmas Counts. Tremendous numbers invaded the northern two-thirds of the state, but only a few were encountered in the south.

**Purple Finch**—35 Christmas Counts. Wintered in normal numbers throughout the state.

**Pine Grosbeak**—16 Christmas Counts. Found only in the northern half of the state, and common only in the extreme north.

**Hoary Redpoll**—4 Christmas Counts. Eight wintered in Lincoln Co. (Lokemoec). They were also seen in Juneau Co. Jan. 31 (Gustafson), Brown Co. Feb. 4-28 (Mrs. D. E. Wolfe), Langlade Co. Feb. 23 (Schimels), and Marathon Co. Feb. 23 (Mrs. B. G. Trembl).

**Common Redpoll**—53 Christmas Counts. A tremendous invasion this winter blanketed the entire state.

**Pine Siskin**—33 Christmas Counts. This species was unusually common throughout the state all winter.

**American Goldfinch**—48 Christmas Counts. Although they were present all winter throughout the state, numbers were well below normal in most areas.

**Red Crossbill**—20 Christmas Counts. After being absent last winter, they were everywhere this winter. They were most abundant in the north, but were also reported to be "common" in some southern counties.

**White-winged Crossbill**—15 Christmas Counts. Although they were not nearly as common as the Red Crossbill, there were several reports from throughout the state.

**Rufous-sided Towhee**—4 Christmas Counts. Wintered in Milwaukee Co. (Donald, Gustafson), Dane Co. (Mr. & Mrs. Chet Bible), and Shawano Co. (Hafeman). Also sighted in Walworth Co. Jan. 10 (R. Shute), and remained in Brown Co. until Feb. 14 (Columban & Cleary) and Waukesha Co. until Feb. 20 (Jane Schallock).

**Savannah Sparrow**—3 Christmas Counts.

**Vesper Sparrow**—One was observed in Walworth Co. Jan. 8-9 (Shute).

**Slate-colored Junco**—59 Christmas Counts. Wintered in good numbers in the southern half of the state. One also wintered in Douglas Co. (Klugow) and another in Marinette Co. (Lindberg).

**Oregon Junco**—25 Christmas Counts. There were records of wintering birds from several counties in the southern two-thirds of the state.

**Tree Sparrow**—53 Christmas Counts. Although this species wintered north to Marinette Co. (Lindberg), numbers in most areas were generally considered to be below normal.

**Field Sparrow**—5 Christmas Counts. One appeared in Sauk Co. on Jan. 13 and remained until the end of the period (Mrs. Henry Koenig). Two appeared in Rock Co. on Jan. 29 and remained until the end of the period (Ellis).

**Harris' Sparrow**—One was observed in Waupaca Co. from Jan. 7 to the end of the period (Mr. & Mrs. Marlin Steinbach).

**White-crowned Sparrow**—2 Christmas Counts.

**White-throated Sparrow**—16 Christmas Counts. Wintered north to Sheboygan Co. (Trowbridge), Brown Co. (Wolfe), and Shawano Co. (Hafeman).

**Fox Sparrow**—7 Christmas Counts. Wintered in Milwaukee Co. (Donald), Marathon Co. (Mrs. Art Hundhausen), and Jackson Co. (Mrs. Maurice Keefe). Remained until Feb. 12 in Racine Co. (M. Stoffel) and until Feb. 14 in Rock Co. (Martin Stabb).

**Lincoln's Sparrow**—One was observed in Rock Co. on Jan. 26 (Mrs. John Brakefield). This is the first January record for this species in Wisconsin. See "By the Wayside".

**Swamp Sparrow**—11 Christmas Counts. Apparently left the state after the Christmas Count period.

**Song Sparrow**—27 Christmas Counts. Wintered in the southern half of the state. One was also observed Feb. 17-27 in Vilas Co. (L. Thomas).

**Lapland Longspur**—9 Christmas Counts. There were only two January reports. One was seen in Rock Co. Jan. 10 (Ellis) and two in LaCrosse Co. Jan. 14 (Rosso).

**Snow Bunting**—33 Christmas Counts. Although this species was found throughout the state, it occurred in numbers only in the north.

## NOTICE

Third Class mail—like copies of THE PASSENGER PIGEON—aren't forwarded anymore. Therefore, if you are changing your address it is important to advise the Membership Chairman at least three weeks before you plan to move. Otherwise, you will simply lose the issue and mistakenly blame the management and—besides—it costs the Society 20 cents for each copy returned as undeliverable.

MRS. EARL R. SCHMIDT, MEMBERSHIP CHAIRMAN  
450 SEVENTH STREET, HARTFORD, WIS. 53027

# By the Wayside...

On the afternoon of Sep. 1, 1969, at Goose Pond, Columbia county, Mr. Williams and I observed two Harris' Hawks for a duration of one hour and fifteen minutes. The hawks were buteos with a wing spread of approximately four feet; while in comparison to the Red-tailed, the bodies seemed slimmer, and certainly the tails seemed slimmer and longer.

## **SOUTHWESTERN SPECIES OBSERVED AT GOOSE POND**

The first visual impact was not only of size, but of the very dark over-all color, contrasting with the clearly chestnut thighs and hips, shoulders or upper wing coverts and linings of the wings, plus the broad pure white of the base of the rump and onto the base of the tail as well as the narrow white band at the tip of the tail.

For over an hour the hawks flapped slowly about the eastern end of the pond. They seldom perched or soared. (Instead) they usually worked about back and forth about 50 feet or less above the ground. . . . At the end of the viewing the hawks drifted over the rise and moved eastward.—Howard Van Ness, Cadott, Wis.

**Seasonal Editor's Note:** Because this bird is almost never found out of its southwestern home (Texas, New Mexico, Arizona and southern California) and this is obviously the first state record with no accompanying photograph and/or specimen, at the most it can be considered only a hypothetical record.

Mrs. Ed Paulson noticed a flock of gulls on the Fox River on Oct. 6, 1969 and called me. The area is approximately one mile south of the Fort Howard Paper Mill area. The mill is filling up this area of the river, building up a sort of causeway. Large numbers of gulls are attracted to the spot. This time the flock was made up of Herring and Ring-billed primarily, with some Franklin's and Bonaparte's. However amongst this flock were three very unusual gulls. One was large, larger than a Herring, and very white in appearance. Another was a very pale — ghostly color, and smaller than a Herring Gull; the third was very large, much larger than a Herring, with a slate color back and wings and a darkish tail at the end; a Glaucous, an Iceland and a Great Black-backed. The gulls were observed at a distance of approximately seventy-five. Both of us took turns observing with our 7x binoculars and writing down identification marks.—Ed Cleary, DePere, Wis.

## **RARE GULLS SIGHTED IN GREEN BAY**

One bird was observed on Nov. 28, 1969 at 4:30 p.m. at the junction of county highway C and the Brink Road about 10 miles northwest of Washburn. It was perched atop a jack pine along a jack pine plantation. Light was fading on this clear day, but the large size, earless streaked round head, gray facial disc with concentric circles, yellow eyes, white throat and streaked breast were clearly evident. Other observers included Alvin, Jon and James Bratley and Lad Tranmal.—Dave Bratley, Delafield, Wis.

## **GREAT GRAY OWL IN BAYFIELD COUNTY**

During the winter of 1969-70 I had seen Rough-legged Hawks, *Buteo Lagopus*, singularly in several spots in Wisconsin and Illinois. Since the

### AN UNUSUAL OBSERVATION OF ROUGHLEGS

advance of the spring migration has begun I have observed something that I have never seen before in areas of Rough-leg concentrations.

Section 6 of the township of Arpin, Wood county, is a typical open farmland area. There are very few trees in this area and a small patch of second growth at the most twenty feet high. There is a small amount of grassy area to the west of this area. In the center of the section are two large American Elms *Ulmus americana*, approximately five hundred yards apart. This area is presently being used as a pasture for beef cattle.

I had noticed several Rough-legs in the area and had counted as many as twenty-three within the mile block. One evening while checking traps just before dusk, I noticed several of the birds flying towards one of the large elms. Upon collecting all the traps I then drove to the nearest spot on the road to the elms. In one tree I counted seventeen and nine in the second tree. I then made a point of checking these roosts for several successive evenings and several times all the birds were in one tree. The numbers ranged from nine to twenty-six.

It has been several years since I have noticed this great a density of Rough-legs in the area. During the last density of this magnitude, the spring thaw was later and there was up to two feet of snow on the ground. This surely must have attributed to the success I had in trapping that spring (1964). This year there is no snow on the ground and hasn't been any here for some time.

Since there were so many Starlings, *Sturnus vulgaris*, in the pasture all the time, I feel that my lack of a greater catch was due to this fact. I had permanent traps out for two weeks and caught two birds. I did not check any pellets to see what the birds were feeding on, but the area must have had a prey density as well.

During the last two weeks, I have found three dead Rough-legs in this area. All appeared to have been hit by automobiles of a sort. I have also found two dead Screech Owls, *Otus asio*, on the road in the same area.

I would be interested in knowing if anyone has observed Rough-legs congregating to a single roost at night.—Don G. Follen Sr., Arpin, Wis.

On Nov. 7, 1969, I received a call from Mrs. John Slepicka of Portage, saying she had a freak bird. She and her four boys had captured

### THIRD STATE RECORD OF GROOVE-BILLED ANI

it in a brushy area about three miles north of Portage on the Fox River on Oct. 30. The bird had been around for several days singing and feeding in the brushy area. Once it was seen with a

grasshopper in its mouth. It was observed to have only one tail feather and its leg was broken and it had difficulty in flying. The bird died several days after its capture. I called Mrs. Slepicka and immediately went and picked up the bird. I agreed with Mrs. Slepicka's identification of the ani. Harold Mathiak answered my call and picked up the bird from my freezer on Wednesday, taking it to the Milwaukee museum.—Mrs. Leland Cuff, Portage, Wis.

On March 5, 1970 at two thirty while road trapping in the township of Arpin, Wood county, I had the fortunate experience of observing first-hand the copulation of Red-tailed

## TWO OBSERVATIONS OF RAPTORIAL COPULATION

and at that time I noticed a second bird in an oak tree just north of the road. I cut the engine and heard the soaring bird calling as I opened the window. I could see that both birds were Red-tails.

The female bird (the one in the tree) sat in an almost horizontal position looking back toward the road and the other bird. Then as if by some signal the male soared directly onto the back of the female and copulated. The entire act of copulation couldn't have lasted over eight to ten seconds. The male then stepped off to the left side of the female and began preening. The female also began to preen.

The second case was observed on March 21, 1970 in Arpin township. In this case the male (Kestrel, *Falco sparverius*,) was seen to be in a near hovering position behind the female, when he flew in and on to her back. In this case the male flew off to a nearby tree after about five seconds of copulating and preened. The female flew off the branch and into a house on an adjoining tree. On checking this house to straighten it, the female became very defensive. I suspect they will use the house as they have for other seasons.—Don G. Follen, Sr., Arpin, Wis.

## A LINCOLN'S SPARROW IN JANUARY

"I first noticed a sparrow similar to a Song Sparrow. It was smaller had finer streaks, a buffy breast, and no central spot on the breast. I was able to check it out with the use of binoculars and Peterson's Field Guide. I have them to feeders in October usually, but of course realize seeing one in January is rather uncommon."—Mrs. John Brakefield, Evansville, Wis.

TEAR OFF

## WISCONSIN EGRET-HERON NESTING SURVEY

SPECIES	Colony Location	Number of Nests		Age of Colony	Comments: Increasing or Declining?
		In Use	Not in Use		
GREAT BLUE HERON					
BLACK-CROWNED NIGHT HERON					
AMERICAN EGRET					



# Flicker in Wisconsin Winter

By JOAN KLINK

Every flicker that I see I watch carefully. Last year as 1968 was about to become a real snowy Wisconsin winter I observed a flicker at our feeding station. Mentioning it to my husband first brought little response. However on another day as I said "there is that flicker now", my husband with his keen sense of observation said "look, he has a red whisker" and as he flew away we also noted the red shaft. A Red-shafted Flicker at our feeder? We had seen this bird out west but had the feeling that it must be rare in this area.

Our house is located in a heavily wooded, sparsely populated section of Eau Claire, near the northern city limits and about 400 feet from the Chippewa River. We soon decided to invite Dr. Charles Kemper of Chippewa Falls to come see our bird. The flicker usually came daily around noon and sometimes we would see it in the early morning or late afternoon. It fed at our feeder, eating regular wild bird seed and sometimes would choose suet instead.

A day was chosen for Dr. Kemper to come and all were excited. We found that there was no authenticated record of this bird in Wisconsin. We were all planning for our flicker to feed at noon that day. Dr. Kemper came, set up his cameras and got all adjustments made, looked out the window and there was our flicker—a Red-shafted Flicker—now on film record. Paul Blanchard of Eau Claire also visited and made film records.

I last caught a glimpse of the bird on March 3, 1969 as I saw his red shaft as it flew over a nearby woodlot. That is, until today, November 19, 1969—a Red-shafted Flicker visited briefly at our feeding station, two red whiskers and that red shaft. It looks as if another exciting and interesting winter season is at hand. [Ed. Note: Mr. and Mrs. Klink saw this bird off and on during the winter but only on very cold days. It was last seen on Feb. 26, 1970.]

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TEAR OFF  
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# book reviews

AN EAGLE TO THE SKY. By Frances Hamerstrom. Iowa State University Press, Ames, 1970. xxi+142pp. \$4.95 (Hard cover.)

Few people have ever had the opportunity to view a golden eagle soaring in the heavens much less share with it bed and board. This extraordinary book, written by Dr. Frances Hamerstrom of Plainfield, Wisconsin, describes in delightful Hamerstromian tones an intimate relationship with the "king of birds" and the unusual bond that developed. While the text relates many observations on behavior — of both eagle and man — it also reveals a haunting love story that could only be written by someone in close harmony with nature.

This book brings out a philosophy rapidly disappearing from American culture and illustrates our failure to fully grasp the significance of an ecological conscience. AN EAGLE TO THE SKY is interlaced with the kind of wit and humor designed to drive home an ecological viewpoint, a technique developed by the author through years of relating with the natural community. The documented information on rearing and breeding of golden eagles is of scientific value and should be useful in further development of techniques to perpetuate this endangered species.

Selected passages reflect on the author's ability to share her unique experiences with a compassionate and understanding husband who provides just the right amount of encouragement. A clue to this interwoven relationship is found in the book's dedication passage which reads "To Frederick who has competed for my affections — and appearance sometimes to the contrary, successfully — with an eagle".

The book is divided into two parts. Part I is an in-depth account of Chrys, an adult golden eagle, and the cooperative efforts developed with Fran Hamerstrom to rear a family of eaglets. Throughout the section the reader rapidly identifies with the problems of parenthood. There is the ritual of "stick play" and nest building by both Chrys and Fran, of pacing the floor and of singing lullabies to a somewhat suspicious bird. While Fran admittedly could not carry a tune, fortunately she could remember two lullabies.

There are anxious moments as Chrys lays her first egg — not in the carefully constructed nest of sticks and breast feathers, but upon the frozen sands of central Wisconsin where the prairie chicken has found sanctuary. The successes and failures of additional breeding seasons unfold in succeeding chapters where Chrys gains a new mate — a tercel named Grendel. Artificial insemination, hot water bottles, incubators and adoption all play important roles in Chrys' life. While failures are inevitable, each episode strengthens our knowledge and adds to the sunny domesticity with Chrys.

Part II evolves as an emotional, heart-warming story about Nancy, a young tick-infested eagle "sprung" from captivity and certain death and reared in the sophistication of Hamerstrom's Eagle Rehabilitation Center.

This section does not dwell on domestic affairs but instead spins an intriguing web of experiences about Nancy with whom Fran shares "the wind, the wilderness and the hunt".

Again, words are carefully chosen to project the relationship that is formed between man and nature. Here, the reader experiences the flying of an eagle in yarak — topnotch condition. Choice phrases reflect Fran's attitude about life: "Next I scrubbed the kitchen floor (just where it needed it) . . ." Other phrases give way to a husband's subtle reaction: "Frederick had the bad grace to stand by his car laughing".

An extremely humorous section of the book reads like the silent movie days — so I'm told. Here, several moviemakers attempt to capture on film a fox hunt with the golden eagle. It makes the reader wonder where man got his intelligence.

As the final chapters unfold, with decisions made and promises kept, the reader begins to understand the strength of an eagle and of her companion. Thus it is with a gesture of trust and affection that a remarkable lady sends an eagle to the sky.

This book is generously illustrated. The artist Deann De La Ronde through her sketches shows remarkable insight into the ways of an eagle. Perhaps this is because she spent several months with the Hamerstoms — observing, listening and learning.

For those who have had the delightful opportunity to become acquainted with Fran Hamerstrom and her golden eagles, this book will rekindle fond memories. For those who have not met Fran, *AN EAGLE TO THE SKY* is an introduction to a rare and cherished experience. I highly recommend it.

C. D. Besadny  
Wis. Dept. of Natural Resources

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## PIGEONS AND SPIKES

Many methods have been devised to curtail the use of buildings by pigeons, particularly in the large cities. Vertical metal barbs are available from commercial manufacturers for placing on ledges to discourage pigeons from roosting (Anon. 1948. Control of vagrant domestic pigeons. Fish and Wildlife Service, Wildl. Leaflet 254:3). Recently a lady in Madison requested information on how to keep pigeons away from window sills. It was suggested that nails be driven through boards and the boards placed on the sills. The principle is ancient as I chanced to discover. In describing the temple in Jerusalem during the siege of the city by the Romans, 70 A.D., Josephus wrote: "On its top it had spikes with sharp points, to prevent any pollution of it by birds sitting upon it" (W. Whiston. 1868. The works of Flavius Josephus. Philadelphia. II:385). He also mentions (p. 382) that there were "many dove-courts of tame pigeons." These were built by Herod the Great after he became king of Judea in 37 B.C. He rebuilt the temple completely so that the spikes were probably installed at the time.—A. W. Schorger.

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# Corrections and Revisions To Wisconsin Bird Records

From time to time we will attempt to correct errors and update new records. These should be inserted promptly in available space so that your copy of fall, 1970 **Passenger Pigeon** will be up to date.

Someone has asked about the order of arrangement of the Wisconsin birds. We should have pointed out the birds are supposed to be arranged according to the latest AOU check list order.

Corrections to be noted in the Fall, 1970 issue:

A. On page 122 — add below Warbling Vireo, the Gray Vireo, and under spring arrival column insert May 11, 1964, Helmut Mueller. This is based on the following record recorded in the **Auk**, Vol. 83, No. 2, May 11, 1966, p. 303 and reprinted below.

**A Record of the Gray Vireo in Wisconsin.** — On 3 October 1964 we captured a Gray Vireo (*Vireo vicinior*) at the Cedar Grove Ornithological Station, 1.5 miles east of Cedar Grove, Sheboygan County, Wisconsin. The vireo was taken in a mist net set in a thicket of raspberry (*Rubus* sp.) and red osier dogwood (*Cornus stolonifera*). John Wiens prepared the specimen and determined it to be an immature female with an ovary 3 mm long and an incompletely "ossified" cranium. Measurements were as follows: wing chord, 65 mm; tail, 62.5 mm; culmen, 11.0 mm; weight, 12.0 g. The bird showed only a trace of fat. It appeared to be in excellent condition when captured. The specimen is UWZ 17216 in the Zoological Museum of the University of Wisconsin, Madison. The **A.O.U. Check-List of North American birds** (Fifth edit., 1957) lists no previous records of the Gray Vireo east of western Oklahoma and western Texas or north of central Utah. This incidental observation was made while the authors were engaged in a study of bird migration supported by the National Science Foundation (Grant No. GB-175).—Helmut C. Mueller, Department of Zoology, University of Wisconsin, Madison, Wisconsin, and Daniel D. Berger, Cedar Grove Ornithological Station, Route 1, Cedar Grove, Wisconsin.

B. On page 96 — Harris' Hawk — insert below Ferruginous Hawk. Under fall arrival insert Sep. 1, 1969. H. Van Ness. Under exceptional date column insert "hypothetical".

C. On page 103 — delete Nov. 28, 1968, Fred Leshner in the fall departure column and insert Nov. 25, 1967, John Bielefeldt.

D. On page 117 — the fall departure date for the Bank Swallow should be replaced by Oct. 9, 1931, Harry Anderson.

E. On page 117 — the fall departure date for the Rough-winged Swallow should be corrected to Oct. 29, 1969, Rockne Knuth.

F. On page 137 — under Fox Sparrow — the word "occasional" is upside down. The word F-eld Sparrow, insert letter i.

G. On page 125 — under Nashville Warbler — exceptional dates, insert Dec. 4, 11, 1969, Brother Columban and Ed Cleary.

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