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The Passenger Pigeon



Summer, 1987 — Volume 49, No. 2



A MAGAZINE OF WISCONSIN BIRD STUDY

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Cover: Eastern Bluebird photo by Stephen J. Lang

President's Message

I hope that this first correspondence with the WSO membership will be only one of eight in the next two years. The inception of this note by out-going president Noel Cutright is but one of the contributions he has made to your society in the last two years; Noel will continue in publicity as well as many other society concerns. Many thanks must go to retiring treasurer Catherine Cleary who spent many hours gleaning information from our financial records in order to bring our filing with the IRS up to date. Catherine has helped our new treasurer, Gwyn Tuttle Goy in the beginning of a modernization of our records. We all welcome Gwyn and new vice-president Randy Hoffman. Randy, a specialist in the DNR's Bureau of Endangered Resources provides WSO with an important link to the many recovery projects that that agency undertakes. Your voice will be more readily heard on conservation issues related to Wisconsin's birds.

By the time you read this, Stan Temple's new publication, **Wisconsin Birds - A Seasonal and Geographical Guide** will be available from the Supply Department. This is the first major publication based upon the Checklist Project; the data of which was collected in a very large part by WSO members. Late this fall the new edition of the WSO "yellow checklist" will be out. Sam Robbins is in the process of bringing the state's list up to date; this booklet with its migration graphs is invaluable to any field birder. But the most ambitious effort of writing is beginning once again as Daryl Tessen gears up for the third edition of **Wisconsin's Favorite Bird Haunts**. Past contributors will be contacted, but new authors who have areas which they feel are special should contact Daryl.

WSO's land holding in Sauk County, Honey Creek, is a blessing for our Society, but it seems that too few members know of its existence or whereabouts and even fewer have been willing to participate on the "Work Weekends". There is much fencing to be completed. Watch for inserts in the "Birder" concerning our property as well as a major article in the "Passenger Pigeon" on the natural history of this area. This fall begins an ambitious schedule of field trips planned by new Field Trip Chair, Tom Schultz. Tom has planned along with Jeff Baughman at least ten trips between September and June of 1988. Our field trips are always a success in terms of the communication and fellowship they encourage; in order to provide members with a means to communicate with fellow members on a more continuous basis Alex Kailing has printed up a new membership list which is now available for member use only. Details will be sent out in the "Birder".

In two years as president one can only hope to accomplish so much or to bear witness to the accomplishments of others and then be associated with the results-good or bad. The president of WSO has to act as a fill-in committee member, ready to help wherever it is needed as well as to handle some of the less popular jobs. But the president should also be somewhat visionary even though some of his ideas for the future may not be entirely original; they must still be expressed. One such idea is the job of atlasing Wisconsin's summer birds. Where will WSO fit into such a monumental task requiring many competent field people and major financing? We must also work to increase our membership and the exposure of WSO and education of the populace. WSO, while not an environmental lobbying group should become more involved in conservation issues that effect birdlife in our state if only that we let our opinion be known on an issue through sending an unsolicited letter. We have already been recognized in some circles as a group with a strong and valuable, well-informed opinion. Towards these ends, I encourage you to write or call me with any concern you may have about WSO or bird issues.

John Idzikowski
418 E. Plainfield Ave.
Milwaukee, WI 53207

Climatic Effects on Year-to-Year Variations in Migration Phenology: a WSO Research Project

By Stanley A. Temple and John R. Cary

Every spring the "Field Notes" published in *The Passenger Pigeon* chronicle the year-to-year vagaries of Wisconsin's spring weather, and there is frequently an *ad hoc* attempt to interpret the year's field reports in light of whether spring arrived early or late. Many bird watchers seem to assume migrant birds that have wintered to the south will arrive sooner than usual if spring comes early and later than usual if spring comes late. Similarly, winter visitors that migrate north in the spring are assumed to depart sooner in early springs than in late springs.

We used records from the Wisconsin Checklist Project to investigate the validity of this conventional wisdom about the phenology of spring migration. We report here our findings on year-to-year variations in spring arrival and departure dates for birds in southern Wisconsin and whether or not they are correlated with spring temperatures.

METHODS

To characterize the phenology of spring migration each year from 1982-86, we analyzed data that WSO members had contributed to the Wisconsin Checklist Project. The details of the checklist project have been described in depth elsewhere (Temple 1982, Temple and Cary 1987).

We analyzed records for three groups of spring migrants: (1) ten species that overwinter to the south and pass through Wisconsin on their way to breeding ranges north of southern Wisconsin, (2) twelve species that overwinter to the south and return to breeding sites in southern Wisconsin, and (3) three species that overwinter in Wisconsin and depart for breeding ranges to the north of southern Wisconsin. For these 25 species we used checklist data from southern Wisconsin -- south of the "tension zone" (Curtis 1956) -- to describe their spring migration phenology.

To decide when each species "arrived" or "departed" in each year, we examined the annual rise or fall in weekly reporting frequencies that corresponded to the increasing or decreasing abundance of these birds in southern Wisconsin. See Temple and Temple (1984) or Temple and Cary (1987) for examples of how reporting frequencies for migrants change during the spring migration. For each species in each of the five years, we noted the date on which the reporting frequency first reached 50% of the average value for that spring (March through May). We used this date as the indicator of the phenology of the year's migration for each species. We used this approach because the earliest reports each year represented only a few individuals whose migration timing was clearly different from the majority of the members of the species. A single peak in reporting frequency was often difficult to pin-point, especially when reporting frequencies rose and fell during the weeks spanning the migration period. Our approach provided a good indication that the migration movement for a species was well underway for a substantial proportion of individuals, and it made it easy for us to pin-point a specific date. An example, in this case for the Ruby-crowned Kinglet, is shown in Figure 1.

For each species we also calculated the average spring arrival or departure date from 1982 through 1986 and noted the range in dates over the five-year period.

To characterize the spring weather conditions each year we used the average daily temperatures recorded at the National Oceanographic and Atmospheric Administration's National Weather Service Office at Truax Field in Madison, Wisconsin. From these data we were able to calculate the average daily temperature during the four-week period prior to each species' arrival or departure date each spring.

Finally, we performed a correlation analysis, a statistical test, to see whether or not arrival or departure dates were correlated with spring temperatures. We calculated correlation coefficients (r) that revealed how well temperatures and migration phenology correlated with each other; a value of + or - 1.000 indicates a perfect correlation, lower values represent a less precise relationship.

RESULTS

We were fortunate that over the period, 1982-86, there was considerable year-to-year variation in spring temperatures. As an indication of this, the average daily temperatures in April of each year are shown in Table 1. There was an 11-degree difference between the coldest April (1982) and the warmest (1985).

There were also considerable year-to-year variations in the migration phenologies of some bird species, but other species exhibited almost no year-to-year variations in the timing of their migrations. It became obvious that birds in each of these two distinctive groups of species had at least one thing in common: the distance that they migrate. Long-distance migrants (species that travel more than 1,000 miles between the centers of their summer and winter ranges) showed little year-to-year variation in their migration phenology. On the other hand, short-distance migrants (species that travel less than 1,000 miles) showed much year-to-year variation. In Tables 2, 3 and 4 we show the average arrival or departure dates for each species and the range of variation over the five years of our study.

It is clear that short-distance migrants showed far more year-to-year variation in migration phenology than long-distance migrants. Over the five years, arrival dates of each long-distance migrant varied by only 3-12 days from year to year. In contrast, arrival and departure dates of short-distance migrants varied by 12-25 days from year to year.

As can be seen in Tables 2, 3 and 4, the arrival and departure dates of short-distance migrants were almost always correlated with spring temperatures during the month prior to their arrival or departure. In contrast, none of the long-distance migrants had arrival dates correlated with the temperature during the month prior to their arrival.

DISCUSSION

Clearly the answer to the question of whether or not spring migration phenologies are correlated with spring temperatures depends on the species of bird being considered. We have shown that there is a distinction between long-distance migrants and short-distance migrants.

The explanation for this distinction probably relates to the environmental clues that trigger migratory movements in these two types of birds. In most birds that have been studied the timing of migratory movements is primarily influenced either by changes in photoperiod (daylength) or by circannual rhythms (biological clocks having a periodicity of approximately one year). In addition to these basic timing mechanisms, temperature has been shown to be a secondary modifier of migration scheduling (Baker 1978, Gauthreaux 1980). Lacking any unusual temperature conditions most birds should, therefore, rely primarily on photoperiod or innate biological rhythms to trigger their migratory movements.

For long-distance migrants that winter in Central and South America, spring weather conditions on their winter range vary relatively little from year to year; and if they do vary, they are not likely to vary in concert with spring weather conditions in the north temperate regions of North America. Hence, these birds should rely primarily on photoperiod and innate biological rhythms that do not vary between years. Once these birds begin their migratory movement northward, they continue with only brief intermissions caused by weather. They should,

therefore, pass through or arrive in Wisconsin at nearly the same time each year, just as we found they do.

On the other hand, for short-distance migrants that winter in North America, spring weather conditions on their winter range vary considerably and are likely to parallel conditions on their north temperate breeding range; continent-wide weather patterns affect both areas in roughly similar ways. These birds will have the timing of their migratory movements modified each year by spring weather conditions in such a way that warm springs will promote early migrations and vice versa. Hence, these birds might be expected to arrive in Wisconsin on a schedule that is closely correlated with variations in local climatic conditions (which are not all that different from those in the areas where the migratory movement was initiated).

For winter visitors, it is obvious why their departure should be correlated with Wisconsin's variable spring weather. Their migration phenology should be the most closely correlated with spring climate, as, indeed, our results showed.

ACKNOWLEDGEMENTS

We appreciate the continued participation of volunteers in the Wisconsin Checklist Project. Without their cooperation this investigation would have been impossible. We also thank Anita J. Temple for keeping track of these volunteers and the 22,829 checklists they had submitted at the time we did our analysis. The Wisconsin Checklist Project is supported by the A.W. Schorger Fund of the Department of Wildlife Ecology, UW-Madison, and by the Beers-Bascom Professorship in Conservation which is held by the senior author.

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Table 1. Variations in the average daily temperatures during April over the years, 1982-86.

Conditions	Year	Average temperature (°F)
Coldest	1982	41.3°
	1983	41.6°
	1984	45.7°
	1986	49.8°
Warmest	1985	52.2°

Table 2. For birds that pass through southern Wisconsin on their way to more northerly breeding areas, a summary of their migration phenology from 1982-86 and its correlation with the average temperature during the previous month.

Species	Status*	Arrival Date**		Correlation with temperature (r)
		Average	Range	
Swainson's Thrush	LDM	4/30	4/23-5/2	No (-0.120)
Magnolia Warbler	LDM	5/3	5/1-5/6	No (-0.701)
Yellow-rumped Warbler	LDM	4/11	4/7-4/19	No (-0.768)
Bay-breasted Warbler	LDM	5/6	5/1-5/12	No (-0.480)
American Redstart	LDM	5/2	5/2-5/4	No (-0.507)
Hermit Thrush	SDM	4/5	3/29-4/12	Yes (-0.906)
Ruby-crowned Kinglet	SDM	4/6	3/26-4/15	Yes (-0.941)
Palm Warbler	SDM	4/23	4/18-4/30	Yes (-0.990)
White-crowned Sparrow	SDM	4/23	4/15-5/1	Yes (-0.914)
White-throated Sparrow	SDM	4/14	4/8-4/22	Yes (-0.979)

*LDM = long-distance migrants; SDM = short-distance migrants.

**Assumes that January 1 is a Sunday each year.

Table 3. For migrant birds that breed in southern Wisconsin, a summary of their spring migration phenology from 1982-86 and its correlation with the average daily temperatures during the previous month.

Species	Status*	Arrival Date**		Correlation with temperature (r)
		Average	Range	
Blue-winged Teal	LDM	3/27	3/23-3/30	No (-0.498)
Spotted Sandpiper	LDM	4/23	4/22-4/25	No (-0.248)
Common Nighthawk	LDM	5/5	5/3-5/7	No (-0.653)
Chimney Swift	LDM	4/28	4/26-4/29	No (-0.064)
Barn Swallow	LDM	4/21	4/19-4/25	No (-0.226)
Purple Martin	LDM	4/16	4/14-4/19	No (-0.194)
Red-eyed Vireo	LDM	5/7	5/3-5/12	No (-0.480)
Killdeer	SDM	3/10	3/1-3/16	Yes (-0.830)
Whip-poor-will	SDM	4/24	4/17-5/3	Yes (-0.887)
Eastern Phoebe	SDM	3/29	3/21-4/12	No (-0.695)
House Wren	SDM	4/25	4/19-5/3	Yes (-0.948)
Eastern Bluebird	SDM	3/15	3/1-3/25	Yes (-0.959)

*LDM = long-distance migrants, SDM = short-distance migrants.

**Assumes that January 1 is a Sunday each year.

Table 4. For winter visitors that migrate to breeding areas north of southern Wisconsin, a summary of their spring migration phenology from 1982-86 and its correlation with the average temperature during the previous month.

Species	Status*	Departure Date**		Correlation with temperature (r)
		Average	Range	
Purple Finch	SDM	5/10	4/25-5/18	Yes (-0.874)
Dark-eyed Junco	SDM	4/29	4/22-5/4	Yes (-0.933)
American Tree Sparrow	SDM	4/21	4/15-4/29	Yes (-0.897)

*SDM = short-distance migrants.

**Assumes that January 1 is a Sunday each year.

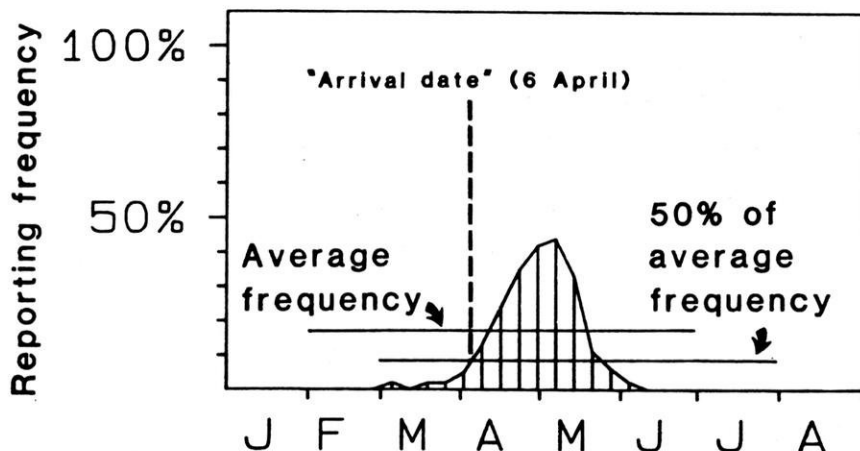


Figure 1. An example of how we used checklist data to determine the “arrival date” for birds each year (in this case for the Ruby-crowned Kinglet).

Save the Wetlands for the Cranes

Mary and
Charlie Nelson



Summary of Rejected and Accepted Reports Submitted to the Records Committee, Spring, Summer, Fall, Winter 1985, together with Reasons for Action

By Fred Leshner, for the WSO Records Committee

At the January 24, 1987 WSO Board of Directors' meeting, the board voted to publish in **The Passenger Pigeon** an annual summary of rejected and accepted reports submitted to the Records Committee, together with a brief summary of reasons for each action. This is to be done for the purposes of education and communication. This is the first such summary. Previous summaries printed in **The Passenger Pigeon** have not included reasons for rejection or acceptance. Those summaries were for 1982 (Vol. 45, No. 2, pp. 49-50), and 1983 (Vol. 46, No. 2, pp. 77-78). No summaries, to date, have been published of WSO Records Committee activities for 1979, 1980, 1981, 1984, and 1986.

Reports are arranged by seasons and under those reports rejected and those accepted. Spring and summer reports are combined. One new state record is accepted, a Royal Tern at Manitowoc June 18 and 21, and July 15. A photograph is in the WSO file of species documented by photograph. The remainder of the accepted reports are additional state records. No hypothetical records are included. All observers submitting rejected reports have been notified.

Observers who have questions about rejected or accepted reports should address their queries to the current WSO Records Committee chairperson. Do not address queries to the editor, assistant editor or associate editor of **The Passenger Pigeon**, or to the regional editor of **American Birds**. None of these people participate in the proceedings of the Records Committee and therefore none is able to answer queries.

Summaries for actions are not exhaustive. Summaries point out strengths and weaknesses in details reported, failures to eliminate similar species, exclusive use of field guide language (undesirable), and aids and hindrances of field conditions. At times poor writing fails to support a valuable record. Observers must submit legible reports, with generous margins to facilitate xeroxing.

Observers are encouraged to submit sketches -- made on the spot, signed and dated -- or photos.

The Record Committee hopes soon to print in **The Passenger Pigeon** a model report.

I. Spring/Summer 1985

A. Rejected Reports

- | | | |
|--|----------|------------------|
| Whooper Swan | 27 May | St. Croix County |
| Initial tameness -- 100 feet from road -- suggests an escape; escapes do not constitute a valid Wisconsin record. "The upper mandible was mostly lemon yellow" does not point out the shape of the yellow portion. The word "mostly" is vague. | | |
| Trumpeter Swan | 11 April | St. Croix County |
| Proximity to a group released from the Twin Cities area 30 miles distant suggests an escape. Lack of yellow spot on nares does not eliminate a Tundra Swan. | | |
| Laughing Gull | 24 April | Dodge County |
| Incomplete description of bill and head. Fails to eliminate similar species. | | |

California Gull	13 June, 14-26 June, 24 June, 17 June 14 June, 3 July	Manitowoc
-----------------	---	-----------

Unfortunately, major discrepancies among six reports on key features such as relative sizes, bill marks, leg colors, and mantle colors leave the committee no way to sort out differences among good faith accounts and possible atypical Herring and Ring-billed Gulls. No one writes of appearance in flight. No one describes standing posture, length of projecting tail and wings, or angle of wings and tail from the horizontal when standing.

Thayer's Gull	14 March	Superior
---------------	----------	----------

Not a typical first winter bird. Somewhat general description of bill coloration -- "black-tipped" -- suggests a first year bird which would show a somewhat whiter head and underparts than are described. The bird was said to be buffy grey all over, and the head was not separately described. Bill length and shape, other than "too small to be a Glaucous," are not described.

(Kumlein's) Iceland Gull	3,4 March	Milwaukee
--------------------------	-----------	-----------

Account relies heavily on size vaguely described, and makes no mention of bill length or shape, head shape, eye color, leg color, or head-breast streaking.

Arctic Tern	17 May	Manitowoc
-------------	--------	-----------

Report relies heavily on red bill color but some Common Terns can have an all red bill. Lacks attention to cheek vs throat/breast contrast. No analysis of "jizz". Shorter leg length than Commons not written up to exclude an artifact of light or substrate.

Arctic Tern	1 May	Manitowoc
-------------	-------	-----------

Unfortunately, the bird was not observed in flight, and the tail was atypically short. As with so many reports, a committee member comments: "Explain away the anomalies, ignore the missing and crucial field marks, and you have a fine report."

Great Gray Owl	1 March	Taylor County
----------------	---------	---------------

Too much irrelevant narrative. Lack of ear tufts never explicitly stated. Standard field guide language not convincing.

Great Gray Owl	11 March	Superior
----------------	----------	----------

"The specimen was found dead" is not a description which the committee can judge. The specimen has allegedly found its way to the Wisconsin DNR, somewhere. Without documentation and without the specimen, the committee must reject this report.

Scissor-tailed Flycatcher	11 May	Ozaukee Co.
---------------------------	--------	-------------

Fork-tailed Flycatcher cannot be eliminated on basis of documentation supplied.

B. Accepted Reports

The first four reports are accepted as Thayer's or (Kumlien's) Iceland Gulls. Field conditions and textual controversies lead the committee to an admittedly cautious position on these four reports, regardless of the facility with which some observers are able to identify Thayer's and Iceland Gulls in a variety of plumages.

- | | | |
|--|---------|-----------|
| 1. Thayer's Gull | 3 March | Milwaukee |
| 2. Thayer's Gull | 3 March | Milwaukee |
| 3. (Kumlien's) Iceland Gull - adult | 3 March | Milwaukee |
| 4. (Kumlien's) Iceland Gull - third year | 3 March | Milwaukee |
| Mississippi Kite | 25 June | Dane Co. |

A fine account, carefully and legibly organized, that eliminates similar species, providing ample, meticulous, relevant detail. Bravo!

- | | | |
|-------------------------|--|-----------|
| Laughing Gull, Adult(s) | 18 May, 14 May
16-23 June, 16-18 June | Manitowoc |
|-------------------------|--|-----------|

All at Manitowoc. Good photo of bird reported 16-18 June. Bird seen 14 May was compared with Franklin's gull present: "...the obvious spotting on the black primaries of the Franklin's was missing." Good head detail about the 18 May bird: "Hooded in very dark grey or black, with narrow white eye crescents above and below eye separated by a fairly broad gap at the rear. (Not 'goggle-like' or almost joined behind the eye as in Franklin's.)"

- | | | |
|---------------------------|------------|-----------|
| Laughing Gull, First year | 14-18 June | Manitowoc |
|---------------------------|------------|-----------|
- Comparison with a first year Franklin's Gull was possible. Details comparing the "hoods," primaries, necks, breasts, bellies, eye crescents, bills, tails, legs, wing coverts, and sizes were convincing.

- | | | |
|---------------------------------|----------|-----------|
| Common Black-headed Gull, adult | 28 April | Milwaukee |
|---------------------------------|----------|-----------|
- Fine sketches. Narrative includes size comparison with Bonaparte's Gulls present, plus details of brown hood and bill color.

- | | | |
|--------------------------|-----------|-----------|
| Lesser Black-backed Gull | 3,4 March | Milwaukee |
|--------------------------|-----------|-----------|
- All key features to eliminate anomalous Herring Gulls and hybrids are described.

- | | | |
|------------|----------------------|-----------|
| Royal Tern | 18, 21 June, 15 July | Manitowoc |
|------------|----------------------|-----------|
- New state record on basis of photos. Narrative accounts satisfactorily eliminate an atypical juvenile or first winter Caspian Tern.

- | | | |
|--------------------|------------|-----------|
| Chuck-will's-widow | 3, 10 July | Adams Co. |
|--------------------|------------|-----------|
- Observers were able to make ample comparisons between the singing bird's song and a taped song. Verbalizations offered as "chip, wee-oh, wee-oh."

- | | | |
|---------------------------|-------|------------|
| Scissor-tailed Flycatcher | 5 May | Monroe Co. |
|---------------------------|-------|------------|
- Eastern Kingbird 400-500 yards distant allowed indirect size comparison. Fine details about tail length to body size, angle of tail below the horizontal, forked tail and pink wing linings are provided.

- | | | |
|---------------------------|-------|---------------|
| Scissor-tailed Flycatcher | 7 May | Jefferson Co. |
|---------------------------|-------|---------------|
- Peach to slightly pink lower flanks were reported seen when the bird was perched. In flight the pink axilla was visible.

- | | | |
|------------------|----------|----------|
| Cape May Warbler | 23 April | Dane Co. |
|------------------|----------|----------|
- Record early date.

- | | | |
|-----------------|--------|----------------|
| Western Tanager | 19 May | Eau Claire Co. |
|-----------------|--------|----------------|
- Prominent wing bars eliminate Summer and Scarlet Tanagers, and bill shape eliminates orioles.

- | | | |
|-----------------|--------|----------|
| Painted Bunting | 10 May | Door Co. |
|-----------------|--------|----------|
- A definitive photo was provided.

II. Fall Reports, 1985

A. Rejected Reports

Clark's Grebe 13 October Ozaukee Co.
Extent of black cap not accurately described. "Dark hat" or "small dark hat" don't differentiate Clark's from Western, nor does "light color" vs "dark color".

Barnacle Goose 26 October Horicon Marsh
Rejected as a likely escaped bird.

Black-billed Magpie 14 November Appleton
Rejected for lack of detail about location of black and white, and as a possible asiatic exotic corvid.

House Finch 27 August Superior
The "neatly striped" head and back do not eliminate a Purple Finch; late summer juvenile Purples may have narrower stripes than adults. "Eye lines" in female Purples are variable.

B. Accepted Reports

Brant 21-29 November Manitowoc
Accepted largely on the basis of photographs.

Purple Sandpiper 17 November Milwaukee
Acceptable description of body size, shape, and color together with yellow legs.

Great Black-backed Gull 2 October Algoma
Size, plumage and behavior under good viewing conditions, together with opportunity to compare size with Herring Gulls provide an adequate record. Western Gull eliminated by the reporter.

Scissor-tailed Flycatcher 17 August Dane Co.
Photos and salmon-pink wing linings diagnostic.

III. Winter Reports, 1985-86

A. Rejected Reports

Thayer's Gull 20 January Milwaukee
Description lacks detail about dorsal and ventral appearance of wingtips. Only brief comparison with other gulls. "Head was speckled" is vague.

Thayer's Gull 20 January Milwaukee
Lacks comparison to nearby Herring Gulls, other than adjectives "smaller" bill and head, "larger" body, "more massive" head and bill. While these contrasts may be obvious when viewing the birds, such language is not helpful to an impartial jury. Remember, the language used to describe the bird is offered in lieu of a specimen or photo.

Black-headed Grosbeak 20 January Milwaukee Co.
Inadequate description: "The crown had black stripes, the bill was thick (grosbeak type), the back also had black stripes, the black wings had white wingbars and the breast was medium orange."

Black-headed Grosbeak 16 January Milwaukee Co.
Inadequate description: "The bill was large, with the upper mandible dark gray and the lower mandible almost white. The head was black except for a tan crown stripe, a white eye stripe, and a white stripe from the lower bill to the neck. The back appeared to have black and tan stripes."

B. Accepted Reports

Purple Sandpiper 7 December Milwaukee

Food Habits of the Red-shouldered Hawk in Wisconsin

By Robert J. Welch

Summer diet of the Red-shouldered Hawk (*Buteo lineatus*) has been described from Minnesota (Jacobs and Jacobs 1946), Iowa (Guthrie 1931, Bednarz 1979), Illinois (Baily 1932), Michigan (Craighead and Craighead 1956, Pettingill 1976), and other states (Baumgartner and Baumgartner 1944, Korschgen 1952, Mendall 1944) during the 1930s to the late 1950s in connection with investigations into the diets of controversial predatory animals. The U.S. Department of Agriculture (Fisher 1893), and U.S.D.I., Bureau of Biological Survey (McAtt 1935) have also contributed to these investigations. Errington (1933) briefly described food habits of one pair of Red-shouldered Hawks nesting in southcentral Wisconsin, however, the diet of the Red-shouldered Hawk in Wisconsin has not been adequately surveyed.

The purpose of this study was to describe the food habits and prey preference of the Red-shouldered Hawk in Wisconsin, to help identify prey species that may be involved in food-chain poisoning, and to determine the most reliable methods for studying the diet of the Red-shouldered Hawk, which often includes a wide variety of vertebrate and invertebrate prey. The actual diet of the Red-shouldered Hawk may or may not be accurately described by the available methods for studying food-habits.

STUDY AREA AND METHODS

Diets of nine nesting pairs of Red-shouldered Hawks were investigated from June 1973 to July 1979 in five counties of southeastern, east-central, central and west-central Wisconsin.

The nesting areas and study period are summarized as follows:

Ozaukee Co.; rolling hills and large areas of lowlands with occasional open water; Beech-maple uplands, cedar-tamarack lowlands; studied in 1977.

Ozaukee Co.; rolling hills adjacent to bottomlands of meandering major river; Maple-birch uplands, maple-elm bottomlands; studied 1976 and 1977.

Waushara Co.; slightly rolling hills with small pockets of lowlands and lakes; Oak-maple uplands, maple-birch lowlands; studied 1976 and 1977.

Waupaca Co.; generally low with occasional upland ridges and hills with lakes and small streams; Pine-oak uplands, birch-tamarack lowlands; studied 1973 through 1978.

Waupaca Co.; similar to preceding nest; Pine-oak uplands; tamarack-pine lowlands; studied in 1979.

Waupaca Co.; restricted bottomlands along major river adjacent to relatively flat uplands; Oak-maple uplands, maple-elm bottomlands; studied 1977 and 1978.

Portage Co.; slightly rolling hills with small isolated lowlands and bottomland of small creek; Maple-oak uplands, cedar hemlock bottomlands; studied 1976 and 1977.

Dunn Co.; extensive bottomlands with adjacent rolling uplands along major river; Maple-basswood uplands, maple-elm bottomlands; studied in 1978.

Nests were usually visited twice a week to collect pellets and prey litter of non-pellet origin, to identify fresh prey items, and to sample the contents of the nestlings' crops. Pellets and prey litter were removed at each visit to prevent the re-

counting of these prey items. Field observations were conducted from the ground with a spotting scope or binoculars at well-concealed vantage points from 1973 to 1979 at five active nests. An elevated blind, positioned from 3 to 10 meters away and slightly above the horizontal plane of the nest, was used for intensive observations at one nest from 1975 to 1978. Observations were made from 1 to 4 days per week from dawn to dusk during this period. Pellets were analyzed through the identification of hair (Hausman 1920, Williams 1934, 1938, Mathiak 1938, Koonz and Strandine 1945) and other remains of prey such as feathers and exoskeleton pieces after comparison with museum and private specimen collections.

Several methods were used to increase the reliability of the data and to avoid the bias of the pellet-analysis method (Errington 1930, 1932, Glading et. al. 1943). Methods used in the study of food-habits were separated into five categories:

1. Fresh prey, including whole prey items found at the nest and not over 2 days old, or observed being brought to the nest;
2. Prey litter, including disarticulated appendages, scraps of skin with feathers or hair, decapitated bodies, and skulls which did not originate from disintegrating or fresh pellets. Carcasses and appendages of the same species were pieced together to count the individuals;
3. Crop contents, including any items found in the crops of nestlings, which were also pieced together to count the individuals;
4. Total prey items of Non-Pellet origin, including the sum of items found as fresh prey, prey litter, and crop contents; and
5. Pellet Analysis, including the hair, feathers, fish scales, and arthropod exoskeleton parts found in the cast pellets within and below the nest.

RESULTS AND DISCUSSION

Food Habits

From 1973 to 1979 I recorded 318 individual prey items of non-pellet origin at nine Red-shouldered Hawk nests. The prey of the Red-shouldered Hawk in Wisconsin during the study period includes 54 different species, as listed in Table 1. The percentages of major prey groups are similar to other studies (Table 2) with mammals composing 52%; birds, 3%; reptiles, 9%; amphibians, 13%; fish, 3%; and invertebrates, 19%. Mammals, reptiles and amphibians were present at 100% of the nests; invertebrates, 78%, and birds and fish 55%. The vegetable matter, found either in crops or in pellets, were probably ingested incidentally. Prey was occasionally brought to the nest with small scraps of vegetable matter, which were probably picked up during the capture of the prey.

Comparison of Methods

Items in the fresh-prey category are categorized in Figure 1. Birds and fish were recorded less frequently as fresh prey than as prey litter. Mammals, amphibians, and invertebrates were found in comparable proportions in prey litter and crop contents. Reptiles were fairly represented in the crop contents, whereas fish and birds were poorly represented. Mammals were found in 100% of the pellets; birds and vertebrates in 3% each; and fish in 1%. Reptiles and amphibians were not recorded in the pellet analysis method.

One hundred forty-six (46%) of the 318 prey items of non-pellet origin were recorded as fresh prey, 81 (25%) of the items as prey litter, and 91 (29%) of the items as crop contents. Totally or partially unidentified items comprised 12% of the fresh prey; 26% of the prey litter; and 33% of the crop contents. Of the non-pellet items, 22% were unidentified items; 56% of the pellet-analysis items were unidentified.

The pellet-analysis method provided fair qualitative and very poor quantitative

information for the diet of the Red-shouldered Hawk, whose diet consists of high levels of reptilian and amphibian prey. Reptiles and amphibians were not represented well in the pellets of hawks because of their strong gastric acids and digestive system (Errington 1930, Glading et al. 1943). Many of the mammalian, avian, and arthropodal remains were in a condition which prevented positive identification.

Crop contents had the highest number of unidentified items of the three types of non-pellet items. Errington (1932) believed that the crop-examination method was the best food habits technique because it provided relatively fresh samples unsubjected to the digestive processes. However, Errington and Breckenridge (1938) questioned its level of reliability because unidentified masses of flesh could be either carrion or prey. The crop-examination method provided a substantial portion of the non-pellet samples, and items recorded during the late nestling period were often in a condition that made it possible to identify the items to the species level. Most crops contained identifiable items in the late nestling period, when the young are able to tear apart fresh prey before swallowing it. During the early-nestling period, when the adults skin and either debone or break the bones of the food items prior to feeding the young, most of the crop samples contained compacted masses of torn meat which lacked sufficient hair, feathers, or intact bone for me to identify the items.

Prey litter was an important source of remains of birds, fish and invertebrates that were not often found in the crop contents, pellets, or as fresh prey. Often species, not previously recorded, were first found in the prey litter. Fair quantitative and good qualitative data were obtained by examining prey litter. Prey litter had less unidentified items than crop contents, which was probably due to the condition of the prey-litter items, which enabled identification to the family, genus and species levels.

Fresh prey observed while being delivered to the nest had the lowest proportion of unidentified items due to the fresh and whole condition of the items. Certain items which were torn apart before delivery or were observed from a distance could not be positively identified to the species level. In some cases, a prey item could be identified only to the class level because of the position of the adult standing on the nest. Excellent qualitative and quantitative data were obtained through this method, but intensive studies of a small number of nests is required to obtain a sufficient sample size.

Food Chain Contamination

No studies have been conducted to determine if pesticide residues occur in Red-shouldered Hawks in Wisconsin or the probable sources of food-chain contamination. Pesticide contamination has been found to be present in the eggs and probably caused the thinning of egg shells of the Red-shouldered Hawk in Maryland (Henny et al. 1973), southern Ontario (Campbell 1975), Quebec (Anderson and Hickey 1972), southern California (Anderson and Hickey 1972, Wiley 1975), southern Texas (Wade, unpublished), and Florida (Anderson and Hickey 1972). The levels in the eggs or changes in egg shells were considered "relatively low" by Henny et al. (1973); although the critical level of tolerance, where these contaminants are considered an ecologically significant factor affecting reproductive performance, has not been defined specifically for the Red-shouldered Hawk. Balcomb (1983) reported secondary poisoning in two adult Red-shouldered Hawks in Maryland as a result of the insecticide (FURADAN 10 R granules, with 10% CARBOFURAN, active ingredient) being applied in the seed furrow when planting field corn. The present levels of contamination described by these studies have not been attributed to a reduction in hatchability, fledging success or overall recruitment rates.

Pesticide residues and toxic metals have been found in minnows, Bullhead (*Ictalurus spp.*), Yellow Perch, Bluegill, Sunfish, Red Squirrel (*Tamiasciurus hudsonicus*), and Crayfish that were collected from areas near active Red-shouldered Hawk nests in Wisconsin (Kleinert et al. 1967, Kleinert and Degurse 1972, Kleinert et al. 1974, Knuth 1979). Poisons present in both terrestrial and aquatic prey species of the Red-shouldered Hawk may present a potential threat to the survival of breeding adults using habitat associated with agricultural use of pesticides. However, no direct evidence of food-chain poisoning or pesticide contamination has been reported in the Red-shouldered Hawk in Wisconsin.

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Table 1. Percent occurrences of food items collected at nine active Red-shouldered Hawk nests in Wisconsin from 1973 to 1979.

Food Item ^a	Percent occurrences by indicated methods				
	Fresh Prey	Nest Litter	Crop Exams	Total Non-Pellet	Pellet Analysis
	(n=146)	(n=81)	(n=91)	(n=318)	(n=309)
Masked Shrew	2	0	0	1	0
Arctic Shrew	1	0	0	1	0
Short-tailed Shrew	5	1	3	3	3
Eastern Chipmunk	14	15	19	16	67
Red Squirrel	0	1	0	t	t
Deer Mouse	5	0	0	2	0
White-footed Mouse	3	0	0	1	0
Unidentified Peromyscus spp.	0	0	5	2	40
Total Peromyscus spp.	8	0	5	5	0
Meadow Vole	13	19	14	15	89
Boreal Red-backed Vole	9	0	0	4	4
Meadow Jumping Mouse	1	0	0	1	0
Unidentified Mammals	4	6	10	6	10
Total Mammals	57	42	52	52	100
Common Grackle	0	1	0	t	0
Red-winged Blackbird	0	4	0	1	0
Northern Oriole	0	1	0	t	t
Unidentified Meadowlark	0	1	0	t	0
Total Icterids	0	4	0	1	0

Indigo Bunting	0	0	0	0	t
Field Sparrow	0	0	1	t	0
Unidentified Empidonax Flycatcher	1	0	0	t	0
Unidentified Birds	0	4	0	1	3
Totals Birds	1	8	1	3	3
Western Painted Turtle	t	0	0	t	0
Five-lined Skink	t	0	0	t	0
Northern Water Snake	1	0	0	t	0
Eastern Garter Snake	4	1	2	3	0
Smooth Green Snake	8	0	3	4	0
Northern Red-bellied Snake	0	0	1	1	0
Unidentified Snake	0	3	0	t	0
Total Snakes	13	4	6	9	0
Total Reptiles	14	4	7	9	0
American Toad	5	11	3	6	0
Green Frog	1	1	1	1	0
Northern Leopard Frog	2		2	1	0
Wood Frog	1	1	3	1	0
Unidentified Frog	2	2	2	1	0
Total Frogs	6	4	9	6	0
Spotted Salamander	1	1	1	1	0
Total Amphibians	12	16	13	13	0
Unidentified Minnows	0	0	2	t	0
Yellow Bullhead	t	0	0	t	0
Yellow Perch	t	1	0	t	0
Unidentified Sunfish	t	3	0	t	0

Brook Stickleback	t	1	0	t	0
Unidentified Fish	0	0	0	0	1
Total Fish	3	5	2	3	1
Snails -					
Helisoma spp.	t	0	0	t	0
Campeloma spp.	0	1	0	t	0
Earthworm	1	1	1	1	0
Harvest Spider	t	1	1	1	0
Eastern Crayfish	1	9	3	4	0
Unidentified Crayfish	3	5	5	3	t
Total Crayfish	4	14	8	7	0
Unidentified Centipede	0	1	1	t	0
Unidentified Dragonfly Anax spp.	0	0	1	t	0
Giant Water Bug	t	0	0	t	0
May Beetle - Adult	t	4	2	1	t
Larvae	t	0	1	1	0
Unidentified Beetle	0	0	1	t	t
Total Beetles	2	4	4	3	2
Unidentified Sphinx Moth Larvae	t	1	0	1	0
Unidentified Moth Larvae	t	1	4	1	0
Total Moths	2	2	4	2	0
Unidentified Grasshopper	2	0	1	1	t
Field Cricket	t	0	1	t	t
Total Orthoptera	3	0	2	1	t
Total Invertebrates	13	24	22	19	3
Leaf Parts -					
Betulaceae	0	0	1	t	t
Unidentified Grass Leaves	0	0	0	0	t

Wild Celery Leaves	0	0	1	t	0
Total Vegetable Matter	0	0	2	1	t

SUMMARY

Total Vertebrates	87	75	75	80	100
Total Invertebrates	13	24	22	19	3
Total Vegetable Matter	0	0	2	1	t
Overall Total	100	99	99	100	103

a - The following references were used to identify food items (Baker 1928, Becker 1983, Borror and White 1970, Brockman 1968, Burt and Grossenheider 1964, Conant 1975, Fassett 1951, Robbins et al. 1966, Roberts 1974, Vogt 1981).

t - trace

Table 2. Comparison of studies reporting percent occurrence of prey items of non-pellet origin in the diet of the Red-shouldered Hawk from north-central and north-eastern United States.

Location of Study	a Method	Sample Size		Percent Occurrence of Food Items								c Refer- ences
		Food Items	Nests	b								
				M	B	R	A	F	I	V		
Michigan	FP, PL	573	29	21	27	7	22	0	22	0	A	
Maryland	FP, PL	43	17	32	19	38	9	0	2	0	B	
New York	FP, PL FO, ST	?	16	58	8	3	18	3	13	0	C	
Massach.	FP, FO	46	4	72	4	4	20	0	t	0	D	
Connect.	FP, PL FO	68	1	53	12	7	28	0	0	0	E	
Iowa	FP, PL FO	?	8	51	2	2	26	0	19	0	F	
Wisconsin	FP, PL CE, FO	318	9	52	3	9	13	3	19	t	Study	

a - Sampling Methods - FP = Fresh Prey, PL = Prey Litter, FO = Field Observations, CE = Crop Exams, ST = Stomach Samples

- b - Food Items - Mammals (M), Birds (B), Reptiles (R), Amphibians (A), Fish (F), Invertebrates (I), Vegetable (V).
- c - References - (A) Craighead and Craighead 1956, (B) Stewart 1949, (C) Ernst 1945, (D) Portnoy 1974, (E) Root and DeSimone, unpublished-1978, (F) Bednarz 1979
- t - Trace

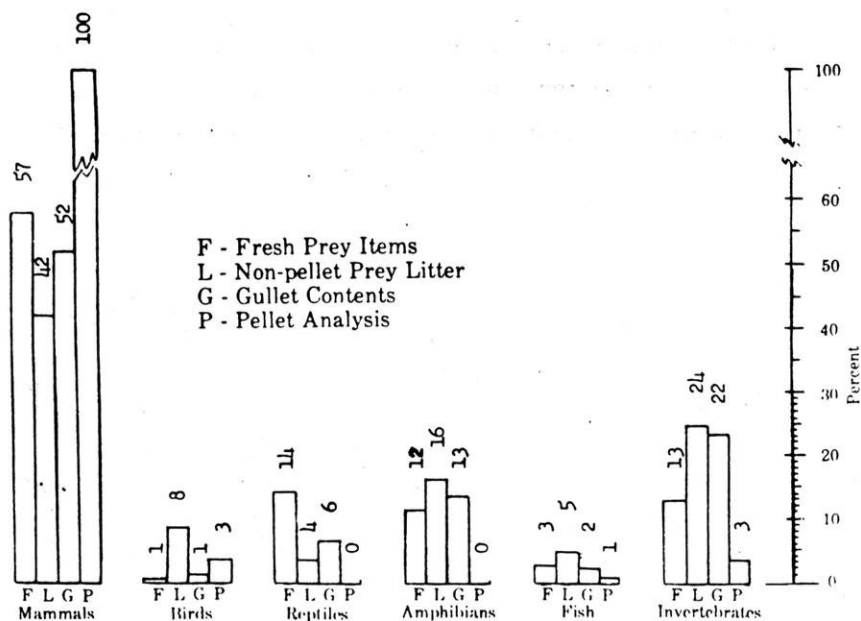


Figure 1. Percent representation of major prey groupings in the sampling techniques used to determine the food habits of the Red-shouldered Hawk in Wisconsin, 1973-1979.



Variably patterned clutch of Red-shouldered Hawk eggs

Photo by R.J. Welch



4-day-old-young of Red-shouldered Hawk.

Photo by R.J. Welch



4-day-old hatchling with egg tooth showing. "Guard Hair" type down protection for spring rains.

Photo by R.J. Welch



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Photo by Paul Blanchard

Common Loon Management Guide

By John F. Olson and Gary Zimmer

Common loon (*Gavia immer*) management is and will continue to be a challenge. Biological, physical, chemical and social factors combine to determine the needs of common loons. The following guide helps address key concerns in management of the species. It was designed as a practical tool to aid biologists, lake associations, lake shore owners, and concerned individuals in understanding and managing the common loon in northern Wisconsin.

The guide is structured as a dichotomous key with sixteen (16) main steps. Each numbered step requires an either/or selection. After having done so, proceed on to the numbered step as indicated on the far right. Depending upon the lake in question, you may complete the guide in two steps or as many as eight.

- 1A. LAKE WITH LOONS PRESENT THROUGHOUT THE SUMMER .2
- 1B. LAKE WITH NO LOONS, OR LOONS ARE INFREQUENT VISITORS6
- 2A. OBSERVED LOONS EXHIBIT TERRITORIAL BEHAVIOR IN MAY OR JUNE.....3
- 2B. OBSERVED LOONS ARE NON-TERRITORIAL (lake is used for feeding and/or staging)7
- 3A. OBSERVED LOONS ARE SUCCESSFUL BREEDERS4
- 3B. OBSERVED LOONS ARE UNSUCCESSFUL BREEDERS11
- 4A. HABITAT CHANGE OR INCREASED HUMAN DISTURBANCE NOT EXPECTED. BLUE RIBBON LAKE! - DO NOT TOUCH!Continue to monitor
- 4B. HABITAT CHANGES OR INCREASED HUMAN DISTURBANCE EXPECTED. RED ALERT LAKE!5
- 5A. LAKE ASSOCIATION PRESENT. Contact and inform. Attempt to reduce human disturbance and detrimental habitat changes through education and landowner cooperation. Alert conservation wardenContinue to monitor
- 5B. NO LAKE ASSOCIATION PRESENT. Contact resource manager and local cooperators. Educate landowners and other lake users to reduce disturbance and detrimental habitat changes. Alert conservation wardenContinue to monitor
- 6A. HABITAT CONDITIONS FAVORABLE. Identify level of human disturbance and distance to other "territorial" lakes. (Management may increase use.)Continue to monitor
- 6B. HABITAT CONDITIONS UNFAVORABLE. (Lakes with high human use or poor water quality fit this category.)Continue to monitor
- 7A. NEST AND BROOD HABITAT AVAILABLE8
- 7B. NEST AND/OR BROOD HABITAT UNAVAILABLE10
- 8A. HUMAN DISTURBANCE HIGH5
- 8B. HUMAN DISTURBANCE LOW9
- 9A. ESTABLISHED LOON TERRITORY ON ADJACENT LAKE(S). Territorial birds may depend upon this lake as an important feeding or staging

- water. Management to be directed at maintaining lake use for feeding and staging Continue to monitor
- 9B. NO ESTABLISHED LOON TERRITORY ON ADJACENT LAKE(S). Increase observations during May and June. Review all physical parameters, especially water quality, to determine limiting factors Continue to monitor
- 10A. NEST HABITAT LACKING, QUALITY BROOD HABITAT AVAILABLE. Potential for installation of nesting platform. (Public awareness important prior to platform installation.) Maintenance and observation of platform use is critical. Continue to monitor
- 10B. BROOD HABITAT LACKING, NEST HABITAT AVAILABLE. Do not install nesting platform. Maintain lake as loon feeding or staging area ... continue to monitor
- 11A. NEST ATTEMPTS DOCUMENTED (IN RECENT YEARS) 12
- 11B. NEST ATTEMPTS NOT DOCUMENTED 15
- 12A. NEST AND BROOD HABITAT FAVORABLE 13
- 12B. NEST AND/OR BROOD HABITAT UNFAVORABLE 14
- 13A. HUMAN DISTURBANCE IS HIGH 5
- 13B. HUMAN DISTURBANCE IS LOW. Increase observations during nesting season. (Predation may be causing loss of nests.) Document unsuccessful nesting for three consecutive years before considering placement of nest platform Continue to monitor
- 14A. NEST HABITAT LACKING, BROOD HABITAT AVAILABLE. Loons may be nesting in poor habitat, resulting in low nest success. (Areas with high levels of disturbances.) Management may include closing areas near nest sites to human use during nesting. Installation of artificial nest platform should be considered as last solution. Maintenance and observation of platform is critical. Alert conservation warden. Continue to monitor
- 14B. BROOD HABITAT LACKING, NEST HABITAT AVAILABLE. Do not install nesting platform. Maintain lake for loon use. (Some lakes in this category do produce young but in most cases have low fledging rates. Reduction of human disturbance is essential to enable young to survive.) Contact and inform landowners, lake users and conservation warden Continue to monitor
- 15A. NEST AND BROOD HABITAT FAVORABLE 16
- 15B. NEST AND/OR BROOD HABITAT UNFAVORABLE 10
- 16A. HUMAN DISTURBANCE HIGH. Reduction of disturbance may increase nest success. Potential nest areas may be closed to human use during nesting. Inform lake association, lake users and conservation warden. (Probability of success - low) Continue to monitor
- 16B. HUMAN DISTURBANCE LOW. Reevaluate all parameters to determine reason for lack of nesting. (Lake may be used as feeding or staging area only.) Continue to monitor

GLOSSARY

Brood habitat - shallow coves or bays protected from prevailing winds, having ample supplies of small fish, and a portion of the shoreline in wetland vegetation (for cover). Usually they are an area lacking lakeshore development and heavy recreational use.

continue to monitor - maintain observations of lake and loon with increased emphasis upon determining the "fitness" of a water body for common loons. Such factors as human disturbance, shoreline vegetation, water clarity, and fish presence are a few examples.

favorable food conditions - the presence of the naturally - occurring and size class distribution of fish in a lake. Loons need an ample supply of small fish to feed their young and themselves.

nest habitat - a shoreline site suitable for nesting. Generally on a gentle slope and located on an island, a marshy cove, or a backwater, preferably away from human disturbance. Overhead cover, substrate, and water depth near the nest are variable.

nest platform - an artificial structure resembling a small log raft designed of wooden poles, floatation material and quantities of nest material. Platforms are designed and placed as a substitute nesting island for common loons. In Wisconsin a permit is required for placement.

poor water quality - high acidity (low pH), turbidity, heavy algal blooms, and/or toxic pollution leading to sparse or absent fish populations, or significantly reducing water clarity to hinder loon feeding.

staging - the loose flocking of loons (and other waterfowl) during the late summer or fall. Flock size varies from five to over 100 and generally persists less than one week.

successful breeder - a pair of loons that hatches at least one egg.

territorial behavior - defense of all or part of a lake by an individual loon or mated pair. Activities include patrolling, aggressive interactions with other loons, and frequent calling (especially yodels) in late April, May, and June. A territorial pair of loons will maintain their presence most or all of the summer.

ACKNOWLEDGEMENTS

We would like to thank several individuals for their encouragement and constructive review, especially R. Anderson, J. Belant and P. Strong.

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Wisconsin Great Gray Owl Update

By Don G. Follen, Sr.

In late December of 1965, I trapped and banded a Hawk Owl (*Surnia ulula*), and less than half a mile from that very site I observed my first Great Gray Owl (*Strix nebulosa*). I can remember my great excitement during this occurrence. It seemed unbelievable that a Great Gray Owl (henceforth referred to as GGO) would be "down here" in Central Wisconsin. I do not remember why, but we did not trap the bird.

In the winter of 1968/69 came the GGO "invasion" of Wisconsin, with birds being first misidentified as Barred Owls (*Strix varia*), and later correctly identified as GGOs. A total of four birds were observed, scattered about Wisconsin: Juneau, Taylor, Sauk and Chippewa Counties (**Passenger Pigeon** 31:231-235; 31:177; 32:25, 169; 35:43, 81). Additional observations included a GGO on March 4, 1966 in Douglas County, and a bird sighted between February 26 and 29, 1968, in Iron County. Supporting these observations was a specimen found dead in Douglas County on November 1, 1965. These were the first observations of GGOs in Wisconsin since 1891 - a period of 74 years.

After watching Dr. Robert Nero give his presentation in Duluth, Minnesota on the work he had been doing on the Great Gray Owl in Manitoba and northern Wisconsin, my smoldering fire was rekindled. From that time I started making sorties into what seemed like the most likely place to find GGOs: Northwest Wisconsin. I started to ask questions, used the media to request all records of observations of GGOs, and soon started to get results. Our requests included any photographs, tape recordings, specimens found fresh or not so fresh, or information from anyone, anywhere throughout Wisconsin or neighboring states who might have seen a mounted GGO in someone's home, a bar or a restaurant. The results have been helpful, and enough thanks cannot be given to those who contributed.

In December of 1976, retired Wisconsin DNR Warrden Tony Jelich of Solon Springs told me he saw a GGO north-northeast of town along Highway P, and where the Boise Brule River crosses, one had flown into the side of his car. The bird had hit the road and Tony stopped, but as he approached, the bird took wing and flew west over a willow bog. On December 12, Bob Nero wrote to say that a friend, Pat Caldwell of Winnipeg, had observed a GGO a few miles north of Solon Springs. On July 17, 1978, Art Clark, the Area Ranger for Wisconsin DNR-Brule called to say a friend had definitely just seen a GGO sitting on a high line pole just north of Moose Junction, in west-southwest Douglas County. This immediately suggested the possibility of breeding in the area. Unfortunately, due to my occupation, I was unable to get there until a month later.

On August 19, 1978, my wife Mary and I stopped at a wayside (north entrance) and decided to listen for awhile. Before we got the window open, I heard a Great Gray and said, "My God! They are really here - do you know what that means?" That evening and the next, we observed two adults and four young, the first evidence on record of the probable nesting of the GGO in Wisconsin (**Passenger Pigeon**: 41:53-57). Many more reports came in the winter of 1978/79. In 1979, we picked up a mounted specimen in Washburn County near Trego. They had had the bird since late winter of 1969 when it was found by a mailman below a fence some distance from the roadway, a couple of miles north of where we retrieved it. On August 19, 1979, we verified a GGO on the opposite side of the state near Hiles, in Forest County. This bird had been around all year, and continued to be seen for months. Subsequent years offered many observations and specimens.

In 1979, we initiated an artificial nest platform study that had been suggested by

Dr. Nero. We concentrated our efforts in those areas in Douglas County from which the most observations had come. We also put up platforms around areas in Forest and Marinette Counties in the northeast. Because of my time-consuming job, it became very difficult to monitor the project. We did find pellets on two platforms and GGO feathers. One nest in north-central Douglas County produced two young Great Horned Owls (*Bubo virginianus*). On one occasion, we flushed from a platform a bird (GGO) which we assumed to be a female. We have not had a verified nesting, however. For several years we did not have the time to monitor the nest platform sites. That part of the study has been weak.

From that point on, we continued annually to do what we could: collect photos, feathers, mounts, dead birds, and chase for each bit of evidence we could find. Some areas, like the Brule River Basin, repeatedly had observations nearly around the year, and some of the observers appeared to be able to find them at will. Nearly all of the bird counts tallied GGO in the area. This is a unique ecosystem, and the primary one that I would suspect likely to sustain a viable population of GGOs. Birds observed only in winter are less apt to be residents and may be wanderers or part of a dispersion flight.

On December 6, 1981, we picked up a bird in Taylor County that was emaciated, and upon examination proved to have been shot through the wing tip. This was our first central state specimen. This area has since produced nearly as many records as any area in Wisconsin. On May 4, 1984, a specimen was picked up only fifteen miles from my home, near the Mead Wildlife Area, by manager Tom Meier. It proved to be a female in egg laying condition. On December 21, 1984, a bird was reported near Clayton in Polk County, Wisconsin. On December 23, we trapped and marked this bird, which meant that we now had a bird we could readily identify and from which we could get some information. On February 19, 1985, a second bird was banded near Medford in Taylor County. Slowly but surely, more and more valid records are being gathered.

During the past decade we received between 181 and 200 reports, from 41 counties. Of this number, several are of the same bird but from different observers. Twenty-four are specimens of various ages, all from Wisconsin; nineteen are individual birds so identified by photos; one report of several "gray" owls hunting over a marsh was obviously of Short Eared Owls (*Asio flammeus*); and at least 40 were undoubtedly Barred Owls (*Strix varia*). We cannot give positive numbers, but we feel 50 to 60 of our records are bonafide Great Gray Owls, and for another 54, there as insufficient identification information.

It is fitting in this paper to relate a few of the little things which make this type of information gathering difficult:

Many people, including very competent birders, are not willing to stick their necks out. If they are unfamiliar with the GGO, they will just assume their sighting is of a Barred Owl. Some people are strongly opposed to bird banding.

Pulpers, loggers and sand and gravel operators are reluctant to report for fear that if we do find anything rare or unusual, restrictions on habitats will be enforced which may jeopardize their livelihood. County employees often traverse the best habitat for all species, but seem never to see anything, even though we have made numerous requests. Lastly is the disappointment that comes after a report comes in, call after call is made long distance and the parties say they have shot two or more rolls of film. Strangely indeed, the vast majority of these just "didn't turn out," even though the individual may have been an amateur photographer or even a professional.

Our work will continue at an increased pace. With the founding of the Wisconsin

Foundation for Wildlife Research, Incorporated, we will be able to provide much more in-depth field work at all times of the year. We will also have two additional individuals in the areas with access and knowledge of Northern Wisconsin. Our work is not easy. We also have other species in the same areas which require intense monitoring. Our intentions are to continue with the hope of receiving some major funding for these important and knowledge-building projects.

ACKNOWLEDGEMENTS

A sincere thank you to Dr. Robert W. Nero, a man whose inspiration drove us on, and who openly shared his knowledge by editing papers, giving advice on habitats, platform construction and site placement, passing on reports that he received from Wisconsin or from out-of-state observers, and who gave financial help. To Steve Loch and Bob Bohm of Minnesota, Evelyn Bull of Oregon, and Tim Osborne of Alaska; thank you's for sharing their information. A most sincere thanks to all of those who openly gave us reports of observations, shared their prints and slides with us, helped us secure specimens and donated money toward an intellectual benefit. A very special thank you to Mr. Dick Hilliker and Mr. Max Andrae of Consolidated Papers and Wisconsin River Power Company for providing token financial assistance and a heartfelt special thank-you for the generosity of the late Dr. Ralph Allan and his widow Ellen - these folks have made the financing possible to get us out on our way, and at least give us enough to cover the year. And finally, my warmest thanks to my family.

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Passenger Pigeon: 41:53-57 A Probable Breeding Record of Great Gray Owls in Wisconsin. Follen Sr., D.

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Common Loon Breeding in St. Croix County

By James Evrard and Bruce Bacon

Wisconsin Department of Natural Resources

Common Loons (*Gavia immer*) nested in St. Croix County historically. Kumlein and Hollister (1903) stated that the species was a common breeder throughout Wisconsin, but disappeared as a nesting species from St. Croix County and the southern 2/3 of the state following white settlement during the late 1800's. Recent loon records in St. Croix and adjacent counties was summarized by Faanes (1981). He reported summering birds near Roberts in the south-central part of the county but no broods were seen. He did report sightings of several broods for adjacent Washington County in Minnesota. Paul Strong (pers. comm.) of the Sigurd Olson Institute, which maintains loon records in Wisconsin, could provide breeding records for adjacent Polk County, but not for St. Croix County. Records maintained by the Wisconsin Society for Ornithology also failed to provide any evidence of recent loons breeding in St. Croix County (R.K. Anderson pers. comm.).

The Wisconsin Department of Natural Resources (WDNR) initiated a waterfowl research project in St. Croix and southern Polk Counties in 1982 (Evrard and Lillie 1983). In that year, we observed a pair of Common Loons during the breeding

season near Star Prairie, St. Croix County, on Bierbrauer Lake, a Waterfowl Production Area (WPA) wetland acquired with federal duck stamp funds and managed by the WDNR. No young were seen and the adults were observed on only that wetland.

In 1983, we again observed a Common Loon pair during the breeding season on Bierbrauer Lake but no young were seen. In mid-July, we also recorded an adult loon on Amschler Pond, another WPA wetland about 1.5 miles south of Bierbrauer Lake. The following year in 1984, we observed a pair of Common Loons on Amschler Pond although no young were seen. The pair also used a connecting WPA wetland, Volkert Pond. Single adult loons were also seen on Bierbrauer Lake.

In 1985, 2 pairs were observed during the breeding season, 1 on Bierbrauer Lake and the other on Amschler Pond. No broods were seen. Single adult loons were recorded on 3 other WPA wetlands, Volkert Pond, Oakridge Lake, and Swiggum Pond. Common Loons continued to expand their range and numbers in 1986. Pairs were observed on Bierbrauer Lake, Amschler Pond, and Flaters Pond. Single loons were seen on Volkert Pond, Oakridge Lake, and Hanten Pond, all WPA wetlands.

Proof of breeding was finally established when we observed a brood of 2 newly-hatched young loons on Amschler Pond on 5 June 1986. We searched a small island in the wetland but failed to find the nest. The young were seen with the adults several times during the next few weeks. On 29 June, a single adult and a single young were seen on Volkert Pond which is connected to Amschler Pond by an underwater culvert beneath a paved town road. On 1 July, both adults and both young were again seen on Amschler Pond. We subsequently observed the pair with their young on both wetlands.

A young loon was found crossing the roadway on 8 and 9 July although it was flightless and incapable of walking upright. On both occasions, we helped the bird to water. Unfortunately, on 10 July we found a young loon that had been killed on the road by a vehicle. Only 1 young was seen on Amschler Pond thereafter with the last observation on 20 August.

Common Loons are using St. Croix County wetlands that are classed as prairie potholes, highly productive, relatively small, shallow bodies of water surrounded primarily by undisturbed grasslands. These wetlands, although subject to periodic winterkill, support populations of minnows and larger fish (Mausser 1985). This is not considered typical Common Loon habitat for northern Wisconsin but is similar to the restored brush prairie-wetland habitat of the Crex Meadows Wildlife Area that supports a breeding population (Evrard 1978). The wetlands are basically free from man's disturbance during the breeding season since they are in publicly-owned waterfowl management areas. Privately-owned wetlands are subject to a wide variety of disturbance from agricultural and recreational activities, possibly preventing their use by breeding loons.

The Common Loon has returned as a breeding bird to St. Croix County. With continued WDNR acquisition and management of wetland habitat, the loon should expand its numbers and range in the county.

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Bald-Eagle Osprey Annual Report of Nesting Success of the National Forests of the Eastern Region - 1986

Osprey

The May surveys found 232 nests occupied by pairs of Ospreys. One hundred and eighty-five young fledged. All other counts are higher than last year's. Rates are up slightly. Increases are attributed to gains in the Nicolet and Superior NFs.

1986

The National Forests of the Eastern Region monitored the breeding activities of Bald Eagle and Ospreys for the 24th consecutive year. Aerial surveys to determine activity at nest sites, called occupancy surveys, were accomplished in April and May. Nests where breeding activity was observed were visited again close to fledging time in July to count the number of young eagles and Ospreys. These latter surveys are called productivity surveys.

Survey performance for the years 1974 through 1984 was remarkably consistent from one year to the next. This made monitoring information easily and accurately available from this date. Last year the record was interrupted when the Superior National Forest suspended most survey activities in the Boundary Waters Canoe Area (BWCA). This year the Forest did the occupancy survey for eagles in the BWCA as before but attempted the productivity survey by ground reconnaissance only. Seven eagle nests observed in previous years were not found by this new approach. The Osprey survey is suspended altogether in the BWCA.

Bald Eagle

The inventory of nests being examined on the National Forests has remained very stable for the last six years at approximately 450 nests. The total of 451 for 1986 was no exception. The number of breeding areas on the Forests' inventories has increased steadily from around 280 to the current year's 321.

The productivity surveys in 1986 found 244 breeding areas occupied by adult eagles. This is considerably higher than in any previous year of the surveys. The gains are attributed to increases in the Chippewa and Superior NFs. Successful nestings and numbers of young fledged per pair also increased in totals though rates remain unchanged. There is some variation among Forests. The low performance in the Ottawa NF, which had been increasing over the years, showed a reversal this year.

Bald Eagles are now being reported during the breeding season in other National Forests in the Eastern Region. Two pairs have been nesting in Crab Orchard National Wildlife Refuge in recent years. These nests are within the boundary of the Shawnee National Forest in southern Illinois. This year each of these pairs raised one young. Nesting Bald Eagles have also been reported near the boundary of Monongahela NF in West Virginia and the Mark Twain NF in Missouri.

Last year, in a cooperative State of Indiana Department of Natural Resources -- Forest Service pilot project, a hack site was established on Monroe Reservoir in the Hoosier National Forest. In 1985 three young eagles were hacked from this site. This year seven young birds were brought from Wisconsin to be released on the Reservoir.

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Bald Eagle Nesting Status — 1986 U.S. Forest Service, Eastern Region

Forest and STATE	VERIFIED 1985	NESTS 1986	AREAS OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS	YOUNG PRODUCED
Hiawatha	11	9	12	6	3	5
Huron-Manistee	15	17	14	9	6	9
Ottawa	67	65	40	38	16	26
MICHIGAN	93	91	66	53	25	40
Chippewa	204	209	136	112	85	136
Superior	84	84	63	42	31	46
MINNESOTA	288	293	199	154	116	182
Chequamegon	34	37	28	21	13	19
Nicolet	41	30	26	16	11	22
WISCONSIN	75	67	54	37	24	41
REGION TOTALS	456	451	319	244	165	263

Osprey Nesting Status - 1986
U.S. Forest Service, Eastern Region

Forest and State	VERIFIED 1985	NESTS 1986	AREAS OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS	YOUNG PRODUCED
Ottawa	12	13	16	9	6	9
Hiawatha	26	30	33	29	20	32
Huron-Manistee	0	0	0	0	0	0
MICHIGAN	38	43	49	38	26	41
Chippewa	126	171	0	124	51	82
Superior	63	73	71	48	27	40
MINNESOTA	189	244	71	172	78	122
Chequamegon	4	4	4	3	1	2
Nicolet	28	36	28	19	13	20
WISCONSIN	32	40	32	22	14	22
REGION TOTALS	259	327	152	232	118	185



One young exercising. Oldest small one on other side.

Photo by Kurt Basseuner

Bald Eagle Nesting Trends
U.S. Forest Service, Eastern Region

YEAR	VERIFIED NESTS	TOTAL BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG	
			No.	%	No.	%	Per Successful Nest	Per Occupied Nest
1964	156		64	50	36	56	51	1.4
1965	204		113	63	62	55	88	1.4
1966	265		113	57	46	40	67	1.7
1967	304		110	53	42	38	63	1.5
1968	323		119		66	55	98	1.9
1969	344	166	129	78	72	56	109	1.5
1970	294	189	124	66	64	52	107	1.7
1971	327	188	128	68	77	56	115	1.5
1972	356	238	167	70	97	58	155	1.6
1973	382	264	171	65	99	58	163	1.6
1974	381	257	170	66	89	52	119	1.3
1975	398	285	176	62	117	67	192	1.6
1976	414	260	178	68	126	71	187	1.5
1977	421	265	197	75	138	70	212	1.5
1978	435	264	192	73	127	66	202	1.6
1979	432	269	188	70	132	70	222	1.7
1980	456	282	192	68	136	71	235	1.7
1981	458	277	202	73	140	69	223	1.6
1982	446	288	202	70	136	67	220	1.6
1983	459	296	222	75	148	67	257	1.7
1984	458	294	218	74	140	64	231	1.7
1985	453	314	209*	67	136*	65	216*	1.6
1986	451	321	244	76	165	68	263	1.6

* Eagle nests in the BWCA were not surveyed for success.

Osprey Nesting Trends U.S. Forest Service, Eastern Region

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG Per Successful Nest		Per Occupied Nest
			No.	%	No.	%	No.		
1965	79		37	59	10	27	11	1.1	.30
1966	94		28	45			5	1.3	
1967	137		43	61	12	28	23	1.9	.53
1968	152		73		21	29	27	1.3	.37
1969	183		72		28	39	55	2.0	.76
1970	157	93	84	90	42	50	74	1.8	.88
1971	140		66		34	52	55	1.6	.83
1972	205	130	111	85	59	53	97	1.6	.87
1973	226	154	127	82	21	38@	36	1.7	.65@
1974	252	140	140	100	73	52	118	1.6	.84
1975	238	157	115	73	59	51	102	1.7	.97
1976	249	154	117	76	70	60	120	1.7	1.03
1977	254	197	159	81	89	56	147	1.7	.92
1978	316	193	144	75	63	44	84	1.3	.58
1979	303	304	194	64	104	54	176	1.7	.91
1980	305	308	224	73	136	61	262	1.9	1.17
1981	307	314	220	70	112	51	192	1.7	.87
1982	320	294	217	70	141	65	229	1.6	1.06
1983	357	321	208	65	126	61	207	1.6	1.00
1984	343	327	248	76	125	50	222	1.8	.90
1985	309*	355*	228*	64	107*	47	181*	1.7	.79
1986	327*		232*		118*	51	185*	1.6	.80

@ Chippewa NF incomplete data excluded from calculations.

* Osprey nesting surveys were not made in the BWCA

ANNUAL NUMBER OF SUCCESSFUL NESTS

**USFS R-9 Bald Eagle and Osprey
Average Annual Nesting Success**

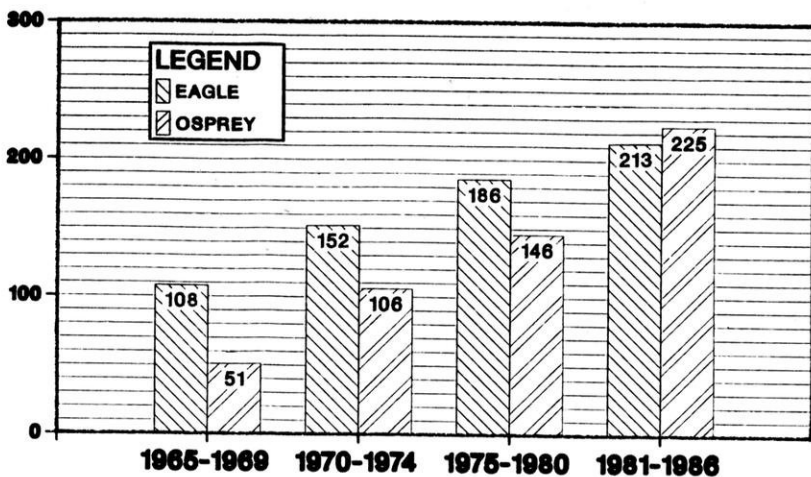


Photo by Stephen J. Lang.

FIELD

NOTES



The Summer Season

June 1 - July 31, 1986

By Tom Soulen

The season started cool, with a low of 24 at Harrison on June 2. Two days later the temperature reached 91 at Iola. And so much of the summer continued, with a fairly regular progression of cooler and warmer spells, none of very long duration. Nearly every week there were one or two days with temperatures in or near the nineties, and at least through early July there was at least one day per week when freezing temperatures were recorded somewhere in the state. Much of July was characterized as being somewhat cooler than normal, and some observers commented that clouds and cool weather generally prevailed through much of the season.

As the season began, rainfall amounts were low enough to cause concern among farmers, especially in the north. By the second week in June, however, some areas in the northwest received heavy rains, and closer to the end of the month the north central and northeastern counties experienced their first significant rainfall in some time. July provided more general rains, and farmers in some southern areas found harvesting crops to be hampered by wet field conditions. Although some thunderstorms during the season were severe, widespread damage was not reported.

In all, 258 species were reported during the season. The report that follows gives information on 128 of them. An additional 86 that are not mentioned were common and distributed generally throughout the state. The remaining 44 species, generally reported from 10 to 25 counties, are listed here along with the number of counties in which each was recorded: Double-crested Cormorant (20), Least Bittern (14), Great Egret (16), Black-crowned Night Heron (11), American Black Duck (11), Ring-necked Duck (14), Osprey (21), Bald Eagle (23), Sharp-shinned (18) Cooper's (16) and Red-shouldered (19) Hawks, Ring-necked Pheasant (18), Northern Bobwhite (11), Virginia Rail (20), Sora (22), Common Moorhen (15), American Coot (19), Upland Sandpiper (19), American Woodcock (23), Herring Gull (22), Caspian (9), Common (18) and Forster's (13) Terns, Screech (7) and Great Horned (21) Owls, Whip-poor-will (20), Common Raven (24), Blue-gray Gnatcatcher (22), Hermit Thrush (20), Blue-winged (10), Golden-winged (16), Nashville (22), Northern Parula (11), Chestnut-sided (25), Black-throated Green (22), Blackburnian (15), Black-and-White (22) and Canada (17) Warblers, Northern Waterthrush (16), Henslow's (17) and White-throated (14) Sparrows, Yellow-headed (23) and Brewer's (22) Blackbirds, and Pine Siskin (15).

There were several very unusual sightings during the season. Almost unbelievable was the report of another Royal Tern in Manitowoc, the same location as Wisconsin

sin's first record last year. A Rufous Hummingbird put in a very rare summer appearance for 2 days in Ozaukee County. Several species continued their annual or almost annual appearances of the last few summers: Laughing Gull, Least Tern and Chuck-will's-widow. There were records of American Avocet, Whimbrel and Parasitic Jaeger in Manitowoc. Also unusual were a Western Grebe in Horicon Marsh, a Black Scoter in Forest County, a Buff-breasted Sandpiper in Douglas County, and a Snowy Owl in Ashland and Bayfield Counties.

Among the passerines, the Yellow-throated Warbler was located again along the Sugar River in the Avon Bottoms in southwestern Rock County; it may well be becoming a regular summer resident there. A Prairie Warbler spent at least part of the summer near the Cedarburg Bog in Ozaukee County for the second year in a row. Several observers were treated to the sight of a male Western Tanager in Milwaukee on June 2. House Finches were reported from 3 eastern counties, with at least 15 noted in the Milwaukee Area. There were several surprising reports of Lincoln's Sparrows, with no less than 24 being counted in a bog in Outagamie County and 2 rather southern reports, from Jackson County and Ozaukee County (attempted nesting in the Cedarburg Bog). Winter Wrens also fledged young at this latter southerly location.

Only 14 of those submitting reports routinely estimated abundances of a number of species compared to previous years. There were limited comments on a few species by some additional observers. Even though our report forms and our usual techniques of summer birding may not encourage the most scientific methods of documenting changes in populations, the collective impressions of several observers may at least alert us to species that might bear further watching. There were 18 species that at least three observers reported were less obvious this year than last: American Bittern, Blue-winged Teal, Ring-necked Pheasant, both cuckoos, Common Nighthawk, Hairy Woodpecker, Eastern Phoebe, Great Crested Flycatcher, Purple Martin, Tree and Bank Swallows, Brown Thrasher, Warbling Vireo, American Redstart, Bobolink, Eastern and Western Meadowlarks. The good news was that no less than 7 observers reported Eastern Bluebirds to be more common this year than last.

Coverage of the state was not quite as good as it has been in some recent summers, although it still was markedly better than was the case some years ago. This year's total of 65 contributors was only slightly below the record highs (for summer) of the past few years. No less than 30 counties received the major coverage of people who resided in them or visited them frequently, and only 5 counties provided no reports: Kewaunee, Pepin, Pierce, Richland and Rusk.

Here is the seasonal summary:

Common Loon: Reported in July in Jackson and Monroe Counties (Epstein). Other observations were in 16 more northern counties.

Red-necked Grebe: Noted June 4 in Columbia Co. (the Leglers) and July 17 in Fond du Lac Co. (Mossman). Ziebell found 21 birds and 45 eggs in Winnebago Co. June 19 and 3 young on July 19.

Western Grebe: A bird first reported at Horicon Marsh, Dodge Co., on June 12 (Mueller) was there at least through July 24 (Frank).

American White Pelican: A single bird was observed in Vilas Co. July 8 (fide Spahn).

American Bittern: It may be because of the distribution of active observers this season rather than the birds, but only 3 of the 23 counties in which this species was observed were in the southern third of the state.

Cattle Egret: A bird was present in Winnebago Co. June 20-28 (Ziebell). Other reports came from Brown Co. July 8 (Peterson, 10 birds) through 13 (Tessen) and Dodge Co. July 24 (Frank).

Yellow-crowned Night Heron: Three birds were seen well in Crawford Co. June 21 (Merz). Noted also in Columbia Co. June 6 (Lisa Hartman, Mossman) and July 14 (same observers, plus Polk).

Mute Swan: Observed July 8-17 in Winnebago Co. (Ziebell, 2 birds) and throughout the season in the usual Ashland/Bayfield/Douglas Co. area.

Green-winged Teal: Only 4 of the 12 reporting counties were southern: Columbia, Crawford, Manitowoc and Winnebago.

Northern Pintail: Noted only in Columbia, Dodge and Dunn Counties this season.

Northern Shoveler: This species was reported from 8-10 counties during the summers of 1982 to 1984. Observers found it in only 3 counties last year, and the same was true this year: Barron, Chippewa and Racine.

Gadwall: Noted in Bayfield, Brown, Burnett, Manitowoc, Milwaukee, and Winnebago (Ziebell, 6 young July 19) Counties.

American Wigeon: This year's reporting counties were Dodge, Douglas, Dunn and Winnebago.

Canvasback: Noted only in Chippewa and Dodge Counties.

Redhead: Observers located this species in Columbia, Dodge, Dunn, Jefferson, Milwaukee and Winnebago Counties.

Greater Scaup: Present until June 7 in Sheboygan Co. (the Brassers).

Lesser Scaup: Reported from these counties: Ashland/Bayfield, Columbia, Dodge, Dunn, Milwaukee, Oneida and Winnebago.

Black Scoter: Very unusual was one reported from Forest Co. July 5 (Reardon).

Common Goldeneye: Noted only in Iron Co. (Butterbrodt).

Hooded Merganser: This species was reported from Columbia, Jackson, LaCrosse, Manitowoc, Winnebago and 8 more northern counties.

Common Merganser: Observed only in Ashland/Bayfield, Douglas, Forest, Iron, Oneida and Vilas Counties.

Red-breasted Merganser: Recorded in Ashland, Bayfield, Door, Manitowoc and Sheboygan Counties.

Ruddy Duck: Noted in these 6 counties: Chippewa, Columbia, Dodge, Dunn, Jefferson and Winnebago.

Turkey Vulture: A nest with 2 nestlings was discovered in Adams Co. July 3 (Lisa Hartman, Mossman). Observed in 25 additional counties representing most regions of the state.

Northern Goshawk: Reported only from Forest (D. Johnson) and Iron (Butterbrodt) Counties.

Merlin: Present most of the period in Jackson Co. (T. Risch).

Peregrine Falcon: The only observations were at a nest in Buffalo Co. June 7 (Polk) and of a female present throughout the period in Sauk Co. (Swengel).

Gray Partridge: Noted in Columbia, Iowa, Marinette and Waupaca Counties.

Spruce Grouse: A single report, from Forest Co. June 8 (D. Johnson).

Greater Prairie Chicken: Observed throughout the period in Burnett (Hoefler) and Taylor (Robbins) Counties.

Sharp-tailed Grouse: There were observations in Burnett, Douglas, Florence, Jackson, Taylor and Wood Counties.

Wild Turkey: This species was noted in Crawford (Merz), Jackson (T. Risch), Marinette (Lindberg) and Sauk (the Leglers) Counties.

King Rail: The only report was of a bird heard in Dane Co. July 30 (Swengel).

Sandhill Crane: Noted in 29 counties in all, with southwestern and extreme northwestern ones least well represented.

Black-bellied Plover: Still present the first few days of June in Columbia (Peterson) and Dane (Sutton) Counties. A fall migrant had reappeared in Dane Co. by July 28 (Sutton).

Lesser Golden-Plover: A bird in breeding plumage was observed June 17 on Long Island, Ashland Co. (Epstein).

Semipalmated Plover: Spring migrants remained until June 18 in Manitowoc Co. (Sontag). The first fall report was July 21 in Eau Claire Co. (Polk), with birds appearing in several additional locations within the next few days.

Piping Plover: Two birds were seen in Ashland Co. on June 17 (Epstein, Matteson, Strand).

American Avocet: One bird was noted in Manitowoc Co. July 29 (Sontag).

Greater Yellowlegs: Birds were seen in several locations during the first week in June, latest in Manitowoc Co. June 7 (Sontag). It is difficult to know whether an individual in Ozaukee Co. June 19 (Woodmansee) was a spring straggler or an early fall migrant. The first certain fall migrants appeared in Chippewa Co. June 28 (Polk) and in 3 other locations July 6-7.

Lesser Yellowlegs: Still present in early June in Burnett (Hoefer) and Jackson (T. Risch) Counties. An observation in Ozaukee Co. June 19 (Woodmansee) was followed by others in Columbia Co. June 22 (Cederstrom) and in 4 additional counties within the next week.

Solitary Sandpiper: Fall migrants appeared in Dane Co. June 29 (Cederstrom), Jackson Co. June 30 (T. Risch) and Taylor Co. July 1 (Robbins).

Willet: One bird was present in Manitowoc Co. June 26 (Sontag).

Whimbrel: Present through June 26 in Manitowoc Co., with 3 birds on June 10 (Sontag).

Ruddy Turnstone: Lingered longest in Manitowoc Co., until July 7 (Sontag). Had returned to Milwaukee Co. by the end of July (Idzikowski).

Red Knot: One bird did not leave Winnebago Co. until June 28 (Ziebell).

Sanderling: Had returned to Manitowoc Co. by June 28 (Sontag).

Semipalmated Sandpiper: There appeared to be overlap of spring and fall migrants in Dane Co. (Cederstrom). Most departures occurred by June 10, and migrants returned to several locations by July 13.

Least Sandpiper: Several were still present June 10 in Burnett Co. (Polk). The earliest fall migrants appeared June 28-29 in Chippewa, Dane, Jefferson and Manitowoc Counties.

White-rumped Sandpiper: Lingered until June 16 in Chippewa Co. (Polk) and June 28 in Manitowoc Co. (Sontag). One was present in Jackson Co. July 9 (T. Risch), and migrants had appeared in Eau Claire Co. by July 25 (Polk).

Baird's Sandpiper: Noted in Eau Claire Co. July 18 (Polk) and Douglas Co. July 24 (R. Johnson).

Pectoral Sandpiper: The earliest migrants were noted July 16 in Dunn Co. (Polk), July 19 in Douglas Co. (R. Johnson, Semo), and July 20 in Dane Co. (Cederstrom). Appeared in 3 additional counties July 26-29.

Dunlin: Remained until July 7 in Manitowoc Co. (Sontag).

Stilt Sandpiper: Observed first in Chippewa Co. June 28 (Polk), with birds reaching Manitowoc Co. July 4 (Sontag) and Racine Co. July 6 (De Boer).

Buff-breasted Sandpiper: One bird was observed well in Douglas Co. July 25 (R. Johnson).

Short-billed Dowitcher: Lingered until June 4 in Chippewa Co. (Polk). Fall migrants appeared July 2-6 in Manitowoc (Sontag), Racine (De Boer) and Dane (Cederstrom) Counties.

Long-billed Dowitcher: Reported from Outagamie Co. July 13 (Tessen) and Dane Co. July 30 (Swengel).

Dowitcher sp.: Most dowitcher reports received in recent summers have not indicated the basis for the identification, even though the reports submitted are of one species or the other, rather than dowitcher sp. Although the 2 species can be separated by a variety of characters, our knowledge of migratory patterns of the 2 species is still sufficiently skimpy that we would benefit from whatever documentation could be provided. Therefore, please indicate briefly the basis for your identification whenever possible (e.g., call note, specific plumage characteristics). If you are not certain, please don't arbitrarily assign your observation to one species or the other; such assignments will only confuse our efforts to clarify the migratory status of the 2 species.

Wilson's Phalarope: Present for much of the period in Chippewa (Polk) and Columbia (Cederstrom) Counties. Mid- to late June reports from several additional counties (Jackson and Winnebago) could have been of summering birds.

Red-necked Phalarope: One report, from Jackson Co. July 12 (T. Risch).

Parasitic Jaeger: One individual was present June 24-27 in Manitowoc Co. (Sontag).

Laughing Gull: One bird was identified carefully in Manitowoc Co. July 5 (Sontag). Accepted by the Records Committee. See By the Wayside.

Franklin's Gull: Noted June 2 in Columbia Co. (Peterson), until June 5 in Sheboygan Co. (the Brassers), and through June 26 in Manitowoc Co., with 9 present there on June 2 (Sontag).

Little Gull: Seen by a number of observers in Manitowoc Co.; Sontag counted 12 there on July 6.

Bonaparte's Gull: Almost 500 were present in Manitowoc Co. June 9. Noted in 3 additional Lake Michigan counties.

- Glaucous Gull:** One individual was present June 20-30 in Manitowoc Co. (Sontag).
- Least Tern:** A bird was observed carefully in Douglas Co. June 19 (Stephan). Accepted by the Records Committee. See By the Wayside.
- Royal Tern:** It's hard to believe, but last year's first Wisconsin record was followed this year by a report from the same location, the Manitowoc harbor, where Sontag observed a single bird July 6. Accepted by the Records Committee. See By the Wayside.
- Yellow-billed Cuckoo:** Reported from somewhat fewer counties (15) than in the past few years.
- Snowy Owl:** An individual was present until June 22 in Ashland/Bayfield Co. (Verch).
- Long-eared Owl:** Noted in Jackson Co. July 2 (Mossman).
- Short-eared Owl:** Reported from Polk Co. July 1 (Mossman) and Taylor Co. July 7 (N. Risch).
- Northern Saw-whet Owl:** Present throughout the period in Ashland/Bayfield Co. (Verch) and July 7-25 in Milwaukee Co., with 2 birds there on July 20 (Woodmansee). Noted through July 1 in Sauk Co., with an immature present June 1 (Swengel). Also reported from Wood Co. June 28 (Robbins).
- Chuck-will's-widow:** Present for the second season in a row near the Humphrey residence in Adams Co. Heard this year by K. Leupke, Robbins, and Peterson, at least through July 2.
- Rufous Hummingbird:** A very unusual summer report June 13-14 in Ozaukee Co. (Vogt). Accepted by the Records Committee. See By the Wayside.
- Red-bellied Woodpecker:** A bird in Douglas Co. July 26 was unusual (R. Johnson). Reported from 25 additional counties, most of them quite a bit further south.
- Black-backed Woodpecker:** Apparently nested in Douglas (R. Johnson, Semo) and Forest (Epstein) Counties. Noted also in Ashland (Epstein), Florence (Mossman), Lincoln (Robbins) and Vilas (Spahn) Counties. The larger than usual number of reports was not totally unexpected, considering last winter's numerous observations in the Midwest.
- Olive-sided Flycatcher:** Still present in Milwaukee Co. in early June (Idzikowski). Two in Ozaukee Co. July 14 were unusual (Swengel). Noted in 8 additional, northern counties.
- Yellow-bellied Flycatcher:** Still present in Manitowoc (Sontag) and Milwaukee (Frank) Counties June 9. Several were in Jackson Co. July 3 (Epstein). Also reported from 8 northern counties.
- Acadian Flycatcher:** Noted in 7 southern and western counties.
- Willow Flycatcher:** Reported as being resident in 3 areas in Taylor Co. (Robbins). Most of the remaining 24 counties in which this species was noted were considerably further south.
- Western Kingbird:** The only 2 observations were of birds in Monroe Co. through June 1 (Epstein) and Grant Co. July 15 (Roethe).
- Gray Jay:** Noted in 8 northern counties.
- Boreal Chickadee:** A nest was discovered near Three Lakes Oneida Co., by members of the Evanston North Shore Bird Club (D. Johnson). Additional birds were noted by a number of other observers in June in Forest and Oneida Counties.
- Red-breasted Nuthatch:** A bird in Jefferson Co. June 19 was unusual (Hale). Noted also in Manitowoc Co. June 10 (the Leglers), between June 28 and July 3 in Adams and Wood (Robbins) and Jackson and Monroe Counties (Epstein, Mossman), in Trempealeau Co. July 25 (Hunter), and in 17 more northern counties.
- Brown Creeper:** Reported from Columbia, Juneau and 13 more northern counties.
- Winter Wren:** Nested and fledged young in Cedarburg Bog, Ozaukee Co. (Idzikowski). Adults were observed feeding 3 young in Winnebago Co. July 2 (Ziebell). Also noted in Jackson Co. July 3 (Mossman), Sauk Co. (Swengel), Sheboygan Co. through June 7 (the Brassers) and in 17 more northern counties.
- Golden-crowned Kinglet:** A bird in Manitowoc Co. June 10 was south of the usual range of this species. Noted in 10 additional counties within range.
- Ruby-crowned Kinglet:** Lingered until June 1 in Milwaukee Co. (Woodmansee). The only other reports were from Forest (D. Johnson) and Iron (Butterbrodt) Counties.
- Gray-cheeked Thrush:** Migrants were observed July 26 in Oneida Co. (the Engbergs).
- Swainson's Thrush:** Still present in Sheboygan Co. June 9 (the Brassers). There were more reports from the last half of June than usual, from 5 northern counties.

- Loggerhead Shrike:** Two nestings in Eau Claire Co. produced 4 and 6 young (Polk). Nesting birds were noted also in Polk and St. Croix Counties July 1 (Mossman). Single birds were observed in Shawano Co. June 4 (Peterson) and Dunn Co. July 19 (Polk).
- White-eyed Vireo:** The only report came from Sauk Co. July 14 (Swengel).
- Bell's Vireo:** There were June and early July reports from Columbia and Dane (Mossman) and Iowa (the Leglers, Roethe) Counties. Swengel counted 11 individuals in Columbia Co. July 15, two of them barely able to fly.
- Solitary Vireo:** A bird observed in Jackson Co. July 29 might have been a migrant (Swengel).
- Philadelphia Vireo:** A July 10 report from Douglas Co. was unusual (R. Johnson). No other observations.
- Tennessee Warbler:** Still present in Monroe Co. June 2 (Epstein). The presence of this species June 9-16 in Oneida Co. was unusual (the Engbergs).
- Magnolia Warbler:** Still present in Milwaukee Co. June 10-16 (Woodmansee). Noted in Ozaukee Co. July 12 (Woodmansee) and in 5 northern counties.
- Cape May Warbler:** Observed only in Douglas (Semo), Langlade (D. Johnson) and Oneida (Swengel) Counties.
- Black-throated Blue Warbler:** Recorded by several observers in Forest Co. and also in Ashland/Bayfield (Verch), Florence and Marinette (Mossman), Oneida (Swengel) and Shawano (Peterson) Counties.
- Yellow-rumped Warbler:** The southernmost reports came from Manitowoc Co. June 10 (the Leglers) and Jackson Co. June 28-July 2, where it was said to be fairly common (Epstein, Mossman, T. Risch). Noted in 14 northern counties.
- Yellow-throated Warbler:** A bird was observed in the Avon Bottoms in Rock Co. on July 2 (Peterson, the Leglers).
- Pine Warbler:** In addition to reports from 19 more northern counties, 2 were in Waukesha Co. June 21 (Soulén).
- Prairie Warbler:** A bird was present again near the Cedarburg Bog in Ozaukee Co., from the beginning of the period (Cowart) at least until July 12 (Frank).
- Palm Warbler:** Observed in Ashland/Bayfield Co. (Verch) and in June by a number of observers in Forest and Oneida Counties.
- Bay-breasted Warbler:** One was noted on Forest Co. June 9 (Swengel).
- Cerulean Warbler:** Among the 9 counties from which this species was reported during June were Forest (Epstein) and Marinette (Mossman).
- Prothonotary Warbler:** Noted in these counties: Columbia, Crawford, Grant, Juneau, LaCrosse, Polk, Rock and St. Croix.
- Worm-eating Warbler:** The only 2 reports came from normal Sauk Co. locations: Baxter's Hollow June 14 (Sontag) and Hemlock Draw June 16 (the Leglers).
- Louisiana Waterthrush:** Noted in Adams (Mossman), Jackson (T. Risch), Juneau (Mossman, Swengel) and Sauk (several observers) Counties.
- Kentucky Warbler:** Present in Crawford Co. June 29-July 20 (Merz); also recorded in Grant Co. June 8 (the Leglers).
- Connecticut Warbler:** In addition to migrants in Milwaukee Co. in early June (Idzikowski), there were June reports from these northern counties: Douglas, Iron, Langlade, Lincoln, Oneida, Price and Vilas.
- Hooded Warbler:** Noted in Sauk Co. June 3 (Swengel) and in Shawano Co. June 18-July 8 (Peterson).
- Wilson's Warbler:** Still present in Milwaukee Co. in early June (Idzikowski).
- Yellow-breasted Chat:** Reported only in Green Co. June 3 (Peterson) and Jefferson Co. July 7 (Cederstrom).
- Western Tanager:** A male was seen June 2 in Milwaukee Co. (Cowart, Mary Donald, Dennis Gustafson, Hanbury, Roger Sundell).
- Northern Cardinal:** The northernmost counties in which this species was observed were Barron (Goff), Lincoln (Frank), Marathon and Taylor (Robbins), Marinette (Lindberg) and Sawyer (Polk).
- Dickcissel:** Noted in somewhat fewer counties (10) than some years, with Barron and Marinette being the most northern.

Field Sparrow: The most northern reporting counties were Barron, Lincoln and Taylor.

Lark Sparrow: Reported from these counties: Dunn and Eau Claire (Polk), Grant June 16 (Cederstrom), Iowa June 29 (the Leglers) and Sauk June 2 (Swengel).

LeConte's Sparrow: Noted in Ashland, Bayfield, Burnett, Douglas, Jackson and Vilas Counties.

Sharp-tailed Sparrow: Birds were heard in 2 locations in Burnett Co. July 5-6 (Soulen).

Lincoln's Sparrow: An astounding 24, mostly singing males, were found June 13 in a bog in Outagamie Co. (Mossman, Lisa Hartman); a nest with 4 eggs was found there June 1. Nesting was also attempted in late June in the Cedarburg Bog, Ozaukee Co., a very southerly location (Idzikowski). A singing male near Bear Bluff in Jackson Co. was also unusual (Epstein). The other 6 counties reporting were in more normal range.

Dark-eyed Junco: Noted in Forest, Iron and Vilas Counties.

Orchard Oriole: Reported from these counties: Columbia, Dunn, Eau Claire, Green Lake, Lafayette, Monroe, Ozaukee and Sauk.

House Finch: Reported from 3 counties: Calumet (Rudy), Milwaukee (Frank, Idzikowski) and Racine (De Boer).

Purple Finch: Might an observation in Milwaukee Co. July 23 (Woodmansee) have indicated migratory movement of this species?

Red Crossbill: After last year's bumper crop, there were only 2 reports this summer: Vilas Co. June 20 (Spahn) and Douglas Co. July 26 (R. Johnson, Semo).

Evening Grosbeak: Noted in Ashland, Barron, Bayfield, Douglas, Iron, Oneida, Price and Vilas Counties.

CONTRIBUTORS

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Red-eyed Vireo photo by Don Vincent

By the Wayside...



Laughing Gull at Manitowoc

An adult summer plumage bird was found on the containment shore with numerous other gulls and terns. The bird was observed with 7x50 binocs and photographed with 600mm + 2X teleconverter under excellent light. The large sized/dark backed gull stood out from the other gulls present. The bird was slightly smaller (1-2") than the Ring-billed Gulls and presented the characteristic profile of the Laughing Gull, with large "typical" gull like bill (gonys evident). The bill was also wider along its length with a slight droop like appearance at the tip. The bill was dark red. The eye crescents were evident and distinctly divided, forming the dark anterior angle of the eye. The hood was complete to the hind neck. The legs were also dark.

The bird stretched several times, displaying the dark mantle and inner and outer wing. Only the trailing edge of the secondaries and primaries from p4 - p 10 was white. The underwing showed dark primaries, especially 1 - 6 or 7. At no time did the white of the trailing edge cut across the tips of the primaries. The rump and tail were white without even a suggestion of a subterminal band on the tail.

Although no direct comparison with Franklin's Gull was possible, the much larger profile of the Laughing compared with the Bonaparte's Gulls in the immediate area, the bill shape and size, and the appearance of the wings were sufficient to exclude the Franklin's Gull from consideration.

Charles Sontag

Wisconsin's Second Royal Tern

The single bird was found on the containment shore with a group of Caspian Terns and the other "residents" of the containment area. The bird was found while searching through the Caspian Terns for a possible Royal Tern. It was the white forehead and orange bill that stopped this search. The bird was standing in front of the Caspians, which made its smaller size (about 1-1½ inches smaller than the Caspians) evident. The small size was also reflected in its shorter legs. The bird was preening during the entire period of observation (about 5 min.), stopping only occasionally to look around and stretch its wings. Moments before it flew, it raised its head and crest, pointed its bill and looked back and forth. It stretched its wings one last time and flew directly at me to within 20 feet of where I was sitting on the containment wall.

The time of observation was sufficient to observe the critical field marks. This

bird appeared quite "text book" compared to the bird observed last year in Manitowoc. The bird was a "downsized" Caspian Tern, slimmer with an orange bill and white forehead. Although the Elegant Tern also has these field marks, the shape of the bill was much more like a Caspian Tern than an enlarged Common Tern. Also, the shape of the head was much more like a Caspian Tern, which would exclude the Elegant Tern. The tail was more deeply forked than the Caspian Tern -- not the truncated tail of a Common Tern, which is the way the Elegant Tern appears to me.

The mantle and upper wing surfaces of the bird were gray with the first 5-6 primaries of the upper wing surface darker than the remaining primaries and secondaries. The underside of the wing appeared quite light with only the first primary appearing dark, giving the impression of an outline along the leading edge of the primaries. The tips of the primaries were also dark, which continued the outline effect.

Charles Sontag

Least Tern in Superior

I was returning to Superior, from Duluth, via the Highbridge (SR 53 and Interstate 535) which spans St. Louis Bay and connects the two cities, a divided highway. I was driving in the outer lane at approximately 40 mph when I noticed that one of the birds flying slightly to the right and in front of my car was unusual. The bird was less than 8 feet from me, and remained in clear view and to my right for perhaps one minute before it crossed directly in front of my car (I had slowed down to 10 mph by then as there was little traffic) and flew to the other side of the bridge and out of sight. I was able to identify the following without use of binoculars: definite (bright) yellow bill and yellow legs, white forehead with a black crown and black streak extending from the crown through the eye (I could see this clearly when the bird passed in front of me), black-edged wings from the wing-tips up the outer primary flight feathers, forked tail, white belly and neck, pale grey back and tail. The bird was small in comparison to a Common Tern (there were also 2 Common Terns flying near, as well as gulls and pigeons), perhaps 8-9 inches in length, and had a dipping, very buoyant type of flight when flying beside the bridge. Because of some traffic noise and half-open car windows, I did not hear the call. A Least Tern had been sighted previously on 9 June 1986 by myself, Larry Semo and Parker Backstrom in Duluth, Minnesota, over a mudflat area adjacent to the St. Louis Bay and only several miles from the Highbridge, and was seen again a few days later, also in the Duluth area. I had also just recently returned from spending 3 weeks on a small lake in Florida that was frequented by Least Terns on a regular, daily basis, so I was familiar with this species. When I saw the Least Tern on the Highbridge, I had already crossed the state line and was proceeding on the Wisconsin side.

Jane Stephan

Rufous Hummingbird in Ozaukee County

Location: Sighted two miles west of Cedarburg, Wisconsin at the feeder of Vince and Linda Vogt; 9429 Sherman Road, Cedarburg, Wisconsin 53012

Date: June 13 and 14, 1986

Time Seen: From noon June 13 through nightfall on June 14.

Description: Reddish-Brown back and head, light brown and white chest, dark greenish brown wings. When excited, displayed a brilliant orange-red throat.

Description of Voice: Zeeee

Description of Behavior: Drank from the feeder every 10-15 minutes. Very aggressive towards other birds, especially the Ruby-throated Hummingbirds. The Rudy-throated Hummingbirds which normally frequent the feeder were chased and kept away by the Rufous Hummingbird during these two days.

Seed and suet feeders are located near the hummingbird feeder, and the Rufous Hummingbird attacked any birds that came to those feeders.

The Rufous Hummingbird was very tame towards people. We were able to observe the bird at a distance of two feet and took many pictures.

Distance: We were able to observe the bird at the feeder and perched on a tree limb from as close as 2 feet.

Photo Equipment: Minolta AF-Tele, 60mm lens

Weather: Clear, warm days, southwest wind.

Previous experience with this and similar species: We have both male and female Ruby-throated Hummingbirds visiting our feeder regularly. This was our first sighting of a Rufous Hummingbird.

Vincent Vogt

Cattle Egret Near Marshfield

On May 30, 1987 Mrs. David Johnson called me to say tht they had been observing an unusual, large white bird in a field near their home at 138 Staadt Rd., Marshfield, Wisconsin (TN. 26N.R.3E. Sec. 26). Mrs. Johnson described the bird as, "All white looking, darkish legs, long-skinny neck, long-pointed bill, bigger than a duck and about eighteen to twenty inches high". My thoughts immediately began to range, Snowy Egret, Cattle Egret, immature Little Blue Heron or some thing I wasn't familiar with.

I then called Phillip Luepke in Marshfield and gave him the details and location. Phil returned the call at 0930 to say it was a Cattle Egret (*bubulcus ibis*) in breeding plumage and that it was foraging in a freshly cut hay field across the road just west of the Johnson farm.

I arrived at the Johnson farm about 1045 and observed a bird as follows. About twenty inches in height, bill dull yellow and about three inches long, has an erect crown of yellowish-russet colored feathers. When the bird turned and raised it's head it showed some of the same color yellow on the ventral surface of the neck and upper breast and a slight sprinkling on the lower back. The sky was partly cloudy albeit sunny at the time and viewing conditions were optimum. The egret was feeding along the windrows of freshly mown hay and as it stood on top of one windrow I could see the legs were a yellowish-pink in color.

According to Mrs. Johnson, the bird stayed for that day but was gone after the adjacent farmer harvested the hay off the field.

I had called several other birders and put it on the 'hot line' of the Chequamegon Bird Club and many members were able to observe this unusual bird.

Don G. Follen Sr.

Mockingbird in Wood County

While checking bluebird boxes in southwestern Wood County on May 27, 1987 at 0800 hrs. on a cloudless day one mile north of Babcock (T.21N R.3E, Sec. 2), I spotted a bird on the tip of one of the many White Spruces (*Picea glauca*)

that surround a pond. I steadied by 60X zoom scope and studied the bird. The bird was the size and shape of the Brown Thrasher (*Toxostoma rufum*) but was gray in color. There were indistinct wing bars on each wing. The eye was light in color and the singing was a series of chirps, warbles at times near fluted calls over and over but not repeated like the Brown Thrasher.

Since I am very familiar with shrikes I knew it was not one but indeed a Northern Mockingbird (*Mimus polyglottos*) a bird which I had occasion to observe twice before in Wisconsin (**Passenger Pigeon** 30:18-19, 1968).

I left the area for approximately one hour and returned to take necessary notes. I located the bird feeding, flying into a large White Oak (*Quercus alba*) and it again resumed singing. I watched and listened to the mockingbird for approximately twenty minutes before continuing on my way. While this is not the first of the species that I have encountered in Central Wisconsin (Chuck Sindelar and I banded two of three flying young on July 20 and two adults on July 22, 1966 near Stevens Point -- Portage County, Wisconsin) and two of this species was observed several times near a cemetery south of Arpin (T.24N R. 4E Sec. 33) during the spring of 1985.

ACKNOWLEDGEMENT

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Don G. Follen Sr.

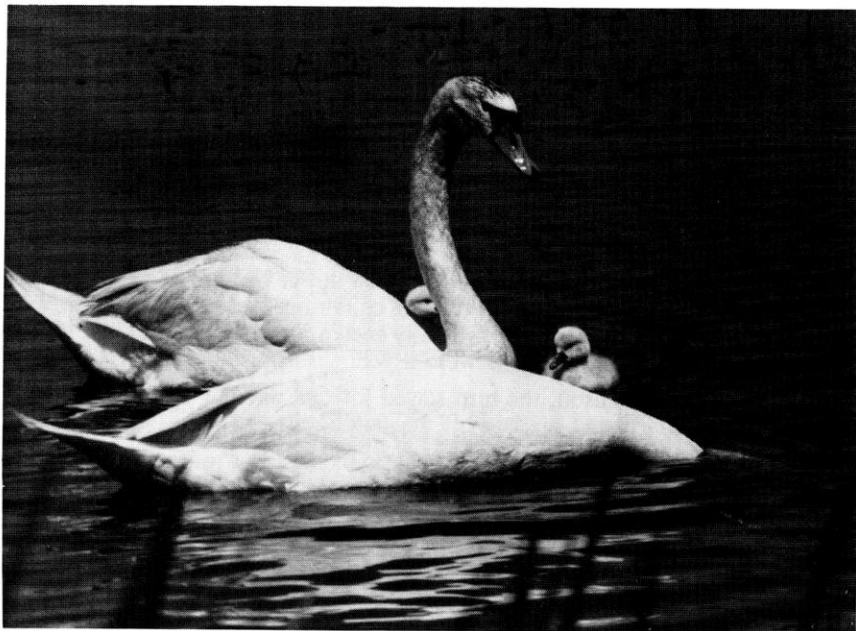


Photo by Don Vincent.

IN MEMORIAM

Cleveland Putnam Grant

(1904 - 1985)

Cleveland Putnam Grant, who established an international reputation as a naturalist, lecturer and photographer during a career that covered more than half a century, died on August 23, 1985 from injuries suffered in a fall while working outdoors. Grant, 81, died at St. Mary's Hospital in Madison. He suffered a spinal cord injury when he fell while pruning a tree on the property at his Mineral Point home on August 19, according to a family member.



Cleve Grant was born on January 18, 1904 in Eau Claire, WI. Following graduation in 1925 from Oberlin College in Ohio, Mr. Grant was employed as a curator on the education staff of the Field Museum of Natural History in Chicago. By 1932, however, his hobby of making intimate motion pictures of wild birds and animals had become his vocation. Mr. Grant, joined by his business partner and wife, Ruth Halverson Grant of Mineral Point, WI whom he married on January 7, 1939, spend the summers filming in Northern Wisconsin, the Rockies, Canada, the Yukon, Alaska, and Southern Africa. He produced and edited his own films and would tour the entire United States and Canada lecturing on the behavior of birds and animals in their natural habitat. Occasionally he was on the program of the Audubon Society.

The public best knew Mr. Grant as one of the principal contributors of "shot-in-the-wild" footages to Walt Disney's True Life Adventure films in the 1950s, including "Vanishing Prairie," "Secrets of Life" and "White Wilderness." Among his original most well-known North American films are: Heart of the Wild; Yukon Indian Summer; Rams of the Rimrocks; Birdwatchers Holiday; Land of Early Autumn; Adventures with American Big Game; and, Spring and Summer on the Prairies. In 1963, Cleve Grant was the camera man for the Milwaukee Public Museum's expedition to Angola. He returned to Africa on six independent filming safaris which provided the material for his more recent films, including: Camera Gunning Across Africa; Lost Eden of Africa; Kalahari Safari; Garden of Africa; Reflections at an African Water Hole; Lion Pride; and, African Elephant.

Mr. Grant is survived by his wife, Ruth H. Grant who resides in Mineral Point, and by his daughter, Phoebe J. Grant who is General Manager of the Furniture Division for Rowe Marketing Group in Chicago, IL.

A memorial fund for Cleveland P. Grant has been established at the International Crane Foundation in Baraboo, WI. The ICF is a non-profit organization with the mission to preserve and breed the world's cranes. ICF has the most complete collection of cranes in the world, including all endangered species. Donations in Cleve Grant's memory may be sent directly to the Foundation, Route 1 - Box 230C, Baraboo, WI 53913 to the attention of Ms. Joan Fordham, Administrator. There was no formal memorial service; the interment was in a Grant family plot at Kensico Cemetery, Valhalla, NY.

Excerpted from the **Milwaukee Journal** and the **Democrat Tribune**.

Book Review

Distributional Checklist of North American Birds (Volume 1: United States and Canada), David DeSante and Peter Pyle; Artemesia Press, P.O. Box 119, Lee Vining, CA 93541; 1986. 51 black-and-white drawings by F.H. Bennett Jr. and Keith Hansen. 442 pp. \$30 postpaid.

What would be your chances of contacting 150 of North America's premier ornithologists, each an expert on the status of birds in the expert's home state or province, and obtaining from each a succinct and authoritative appraisal of the status of every species known to have visited the expert's state or province? What would be your chances of obtaining this appraisal in language that would use the same agreed-upon terminology in each of 50 United States, 10 Canadian provinces, and two Canadian territories?

They've done it! David DeSante and Peter Pyle worked out a system of definitions of status: permanent resident, breeding summer resident, non-breeding summer resident, winter resident, transient (occurring within its established range during migration), vagrant (occurring outside its established range), and extinct. For each season in which a given species is present in a given state or province, a species would be categorized as (a) common or abundant, (b) fairly common, (c) uncommon, (d) rare, or (e) extremely rare. The term "accidental", familiar to some of us, is avoided in this volume -- perhaps because it has been defined in too many variant ways in other publications. It is adequately covered in the "extremely rare" category, defined as "10 or fewer records."

DeSante and Pyle then contacted two or more persons from each state or province -- persons most familiar with the accepted all-time bird list for their region. Usually this included persons who had published, or were in the process of publishing, a state or province book or checklist. Wisconsin's consultants were Daryl Tessen, Philip Ashman, and this reviewer. We note with interest that two former Wisconsinites were consultants for other states: George Hall (West Virginia) and Craig Faanes (North Dakota).

Each consultant was asked to describe each species for his/her state or province, according to the definitions of status listed by the authors. It is to the everlasting credit of each of 156 consultants, plus the patience and persistence of the authors, that these results were forthcoming.

So here at a glance are the accepted lists for Hawaii, Alaska, Yukon Territory, Northwest Territory, 10 Canadian provinces, 48 adjacent United States, and the District of Columbia. Wisconsin's grand total stands at 400, tops in the Upper Midwest. Wisconsin's total of known breeding species (237) falls three short of New York's 240, but otherwise outnumbers all other states east of the Mississippi River.

Some will find this book a convenient medium for keeping annual or life lists for each state or province visited. This must have been high on the list of the authors' purposes, for the space reserved for each species in each state measures 1/2" x 3/8", with one-third of each space devoted to coded status symbols. The coded symbols are necessarily complex, and the authors are to be commended for including the explanation of code prominently inside the front and rear covers. But I would have preferred giving equal space to the coded status reference and to the area in which the reader might enter a personal reference. The code could then be in larger type, and I could put away my magnifying glass.

Will Wisconsin readers learn much that is new about the status of Wisconsin birds? Probably not -- if they are acquainted with the 1975 edition of **Wisconsin Birds -- Checklist With Migration Graphs**, and with recent issues of **The Passenger Pigeon**. What we consider the authoritative Wisconsin list lost one species in DeSante and Pyle's listing when they treated as a "possible escape" the 1929 record of a White-cheeked Pintail in Winnebago County. The authors came close to crediting Wisconsin with a California Gull record based on a 1952 Utah publication, until they learned that a key-punch error in recording a banding recovery had credited Wisconsin with a Washington recovery.

Will Wisconsin readers learn more about the status of birds in other states and provinces? Definitely! Do you plan to spend a month in Arizona next February? This volume will tell you which species are most likely (abundant and common) in that state in winter. Where should you go if you want to meet up with a White-headed Woodpecker? Your best bets would be Oregon and California (fairly common), while Washington, Nevada and Idaho (uncommon) are possibilities.

Members of state records committees will find this work helpful in determining the amount of extra-limital wandering engaged in by vagrants that wander to new areas. When the storm-displaced Sooty Tern was found dead in Columbia County in 1984, was this the first inland record for North America? No, there are previous instances in Arkansas, Tennessee, West Virginia and Ontario. When a Rosy Finch was photographed in Dunn County in 1981, was this a first east of the Mississippi River? Not quite. This volume lists previous discoveries in Michigan, Ohio and Maine. Had this kind of information been available in 1935 and 1956 when European Goldfinch specimens were obtained near Milwaukee, it might have been more apparent that these must have been released or escaped individuals. DeSante and Pyle list none except those introduced in the New York region in the nineteenth century.

The authors go to great lengths to distinguish between native and introduced species -- a subject far more complicated in some southern and western states than in Wisconsin. When I looked for the Wisconsin listings for the Mute Swan and House Finch, I could not find them. They, along with the Rock Dove, Ring-necked Pheasant, Gray Partridge, European Starling, House Sparrow and Eurasian Tree Sparrow -- are buried (needlessly, I think) in a separate section of introduced birds. The question of introduction (deliberate planting, accidental passage by boat or vehicle, natural wandering by descendants of displaced ancestors) is more a matter of history than of present status. It is complicated by Wisconsin's Wild Turkeys (native population extirpated, introduced population now present) by Canada Geese along the eastern seaboard (native population in winter, introduced birds as year-round residents). It is complicated by such interlopers as Monk Parakeets, Ring Turtle Doves and Red-crested Cardinals -- accepted on some state lists, rejected on others (Wisconsin included) -- because release/escape seemed highly probable. In states like Wisconsin we would be better served by one full list than by separate lists of native and introduced species.

Esthetically speaking, the 51 black-and-white drawings by F.P. Bennett Jr. and Keith Hansen are fascinating. They suggest behavior, activity. I want to add mentally to each picture a comment that one of the participants is making. In one pose, a Wood Stork is reassuring a White Ibis and two Roseate Spoonbills: "Go ahead and feed, you guys; I'll keep watch." Says one Emperor Goose to her hen-pecked husband: "What a lousy spot you chose for our breakfast! Look, our cousins are leaving." Says Mama Black Rail to her four chicks: "Come on, kids, let's get a sip of water while the cloud is dimming the moon for a moment." I had trouble with the insect about to be devoured by a Whip-poor-will, until it occur-

red to me the six-legged critter was saying: "Quick, somebody, take my picture; I'm about to vanish!"

The authors recognize that lists like these will need frequent revision, and intend a revision ten years hence. In the meantime, DeSante and Steve Howell are working on Volume 2: **Distributional Checklist of Birds of Mexico, Central America, and the West Indies.**

Sam Robbins
14 South Ruby Road
Madison, WI 53705



Spotted Sandpipers photo by Roy Lukes.

Minutes of the 47th Annual Meeting of the Wisconsin Society for Ornithology held May 17, 1986 at the University of Wisconsin, Platteville

The meeting was called to order by President Noel Cutright at 1:30 p.m.

Minutes of the 1985 annual meeting held June 1, 1985 in Eau Claire were read by Secretary Carl Hayssen. By motion of John Idzikowski, seconded by Vince Bauldry and duly passed, the minutes were approved.

Copies of the treasurer's report prepared by Linda Safir, treasurer, were distributed and discussed. By motion of Carl Hayssen, seconded by Cecelia Kurtzweil and voted on, the report was accepted.

Packets containing reports of all committee chairmen were distributed at the door. Summaries and additions to a few follow:

Membership: Alex Kailing, chairman: His report showed WSO membership at about 1100 the past five years. Membership in the current year is down about seven percent from the previous year but income up because of the approximately 50% dues increase. The increase resulted in a general switch to lower cost categories, particularly to Senior status.

Newly designed membership brochures containing a membership application have been printed and were made available to the membership for distribution.

Supply Department: Chuck Gilmore's financial report showed that \$7033 of merchandise was sold. Inventory on hand is about \$19,700 at cost. A round of applause was given to show the memberships appreciation of the fine work that Chuck has done. His speed in filling mail and phone orders was especially noted.

Grants: Fran Hamerstrom's committee distributed \$1100 this year. \$400 to Jerrold L. Belant for a Common Loon study, \$400 to Robert Rosenfield for research on Coopers Hawks, \$300 to Karen Etter Hale for a study of Waterfowl on Rock Lake, Jefferson County. This was a Steenbock award. Karen was present and thanked the society for the grant.

Education: The sale of slides put together and managed by Steve Lang has been separated from the Education Committee and Bill Volkert appointed the new Education Committee chairman.

It was suggested that WSO members buy the WSO slide sets and donated them to their local schools.

Conventions: On behalf of the Chequamegon Bird Club, Medford, Janice Luepke extended an invitation to host the 1987 convention in Marshfield. A motion to accept the invitation was made by Howard Young, seconded by Alex Kailing and passed.

Oconomowoc/Waukesha is being considered for the 1988 convention.

The 1989 convention will be in Madison.

Richland Center has asked to be considered for 1990.

A resolution passed by the Society July 18, 1970, (see page 176 Vol. 32, No. 4 of the **Passenger Pigeon**) was read by Alex Kailing. The resolution ratified the DNR stand on protection of all birds of prey and offering a reward for indictment. There being no motion to rescind or change the resolution and reward offer the resolution was reconfirmed.

It was noted that WSO past-president (1968-69) Don Hendrick has passed away recently and a check from his widow, Janice, was received by the Society in his memory. A letter of condolences will be sent to Mrs. Hendrick along with thanks for the donation.

The nominating committee, consisting of Mike Mossman, Dick Verch and Carl Hayssen proposed the following slate of officers for 1986-87: Noel Cutright, president; John Idzikowski, vice president and president-elect; Carl Hayssen, secretary; Catherine B. Cleary, treasurer; Charles Kemper, editor. This would be Noel's second year as president. It is the feeling of the nominating committee that the term of the president should be for two years. John Idzikowski has agreed to a two year term when he becomes president in 1988. There being no nominations from the floor, the secretary was requested to cast a unanimous ballot for the slate as presented. So done.

Howard Young moved that the Society express its appreciation to the Eagle Valley Environmentalists and the University of Wisconsin-Platteville Biology Department for their hospitality to WSO at this convention. Seconded by Ike Eckstein and carried unanimously.

There being no other business to come before the floor, the meeting was adjourned at 2:33 p.m.

Respectfully submitted,
Carl G. Hayssen, Jr., Secretary
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