

ISSN 0737-0393

THE MISSISSIPPI KITE

Vol. 27(2)

December 1997



A Periodical Published by the Mississippi Ornithological Society to Record and
Further the Study of Mississippi Birdlife.

Vol. 27, No. 2

December 1997

Contents

FIRST RECORD OF NORTHERN HARRIER NESTING IN MISSISSIPPIFred J. Broerman	14
POSSIBLE NEST ATTEMPT BY WOOD STORKS IN MISSISSIPPIAllan J. Mueller and Charles A. McCabe	18
ESCAPE BEHAVIOR OF BLUE-WINGED TEAL FROM ATTACK BY A NORTHERN HARRIERJonathan D. Maul and Charles M. Cooper	21
A FALL OBSERVATION OF UNUSUAL BEHAVIOR OF RUBY-THROATED HUMMINGBIRDSThomas Tidwell and Diane Tidwell	23
MOS OFFICERS AND MEMBERSHIP INFORMATION	Back Cover

Cover: Common Moorhen (*Gallinula chloropus*). Photo by Jerome A. Jackson.

FIRST RECORD OF NORTHERN HARRIER NESTING IN MISSISSIPPI

Fred J. Broerman

*U.S. Fish and Wildlife Service
Mississippi Wetland Management District
P.O. Box 1070, Grenada, Mississippi 38901*

I report here the first record of a Northern Harrier (*Circus cyaneus*) nest in Mississippi. On 28 May 1997, on a fallow 130 ha parcel in northern Quitman County, Mississippi, I found a Northern Harrier nest containing five downy young (Figure 1). A male and three female adult-plumaged harriers were also seen flying over the nest and hunting on the parcel. Photographs were taken of the nestlings on 28 May, and copies have been deposited in Mississippi Ornithological Society Records Committee File at the Mississippi Museum of Natural Science. A "four-wheeler" was used to search the parcel for additional nests on 28 and 30 May, but none was found. During both May visits, the male harrier was seen making repeated aerial dives at a Red-tailed Hawk (*Buteo jamaicensis*) perched about 0.5 km from the nest.



Figure 1. Northern Harrier nest with 5 Downy young, 1.5 miles north of Sledge, Quitman Co., Mississippi, 28 May 1997. Photo by Fred Broerman.

On visits to the parcel on 30 May and 5 June, I saw only one female and one male harrier near the nest. The nest was not checked on these dates. On visits to the area on 25 and 26 June, I observed the male and female and two or three young flying in the vicinity of the nest. I watched aerial food exchanges from the male to the female and fledged young on several occasions. Judging from their size, the prey items of these exchanges appeared to be cotton rats (*Sigmodon hispidus*), the most abundant small mammal in abandoned fields in the Mississippi Alluvial Valley (Hamel pers. com.) And a common prey species of wintering harriers in Mississippi (Jackson et al. 1972). On 30 June, four fledgling harriers were present at the parcel but no adult harriers were seen, nor were there young harriers at the nest. No harriers were seen in the area on 22 July.

The nest was found on public land managed by the U.S. Fish and Wildlife Service (FWS) about 2.4 km north of Sledge, in northwestern Mississippi at 34° 27' 27.57"N 90° 13' 6.69"W. The nest was in a field that had been fallow since 1987 and which supported a mixture of plant species typical for abandoned fields of the area. The nest was in a low lying area of the parcel. Among the plant species seen here were broom-sedge (*Andropogon virginicus*), curly dock (*Rumex crispus*), soft rush, (*Juncus effusus*), trumpet creeper (*Campsis radicans*), ladies' eardrops (*Brunnichia ovata*), marsh elder (*Iva annua*), and scattered green ash (*Fraxinus pennsylvanica*) saplings. Black willow (*Salix nigra*) and a small amount of cattail (*Typha latifolia*) were found in the wetter areas. This old field habitat made up approximately 70% of the 130 ha fallow parcel. A 10-ha shallow impounded wetland has been constructed on the parcel, and small remnants of the original bottomland hardwood forest are nearby.

Within 3 km of the nest site, immediately east of Sledge (at 34° 25' 7.55"N 90° 12' 55.44"W), lies another parcel managed by FWS consisting of 303 ha which also was removed from cultivation in 1987. Its vegetation is similar to the nest parcel, but is a wetter site having proportionally more acreage in dense stands of *Juncus* and sedges (Cyperaceae). I made several brief visits to this larger parcel while making observations of the nesting activities of the harriers. I observed no harriers during these visits; however on several occasions I watched the adult male harrier leave the nest site parcel and fly southeast in the direction of the larger parcel, eventually returning with prey. These two parcels were the only uncultivated tracts of old field habitat within 6.5 km of the harrier nest. Both parcels are located in the Mississippi Alluvial Plain of northwest Mississippi where land use is dedicated mostly to intensive row-crop farming of cotton, corn, rice and soybeans.

Besides the Red-tailed Hawk, the following birds listed in order of decreasing relative abundance, were seen during my daytime visits to the nest parcel: Dickcissel (*Spiza americana*), Red-winged Blackbird (*Agelaius phoeniceus*), Eastern Meadowlark (*Sturnella magna*), Northern Bobwhite (*Colinus virginianus*), Common Yellowthroat (*Geothlypis trichas*), Barn Swallow (*Hirundo rustica*), Blue Grosbeak (*Guiraca caerulea*), Least Bittern (*Ixobrychus exilis*).

One or two American Bitterns (*Botaurus lentiginosus*) were also seen on 28 and 30 May and 25 June. These are late records for American Bittern, which has yet to be documented as nesting in the state. Northwestern Mississippi received substantial amounts of rainfall from February through June of 1997 keeping wetlands moist well into summer. This probably contributed to the American Bitterns and Northern Harriers lingering into late June.

The Northern Harrier is a fairly common winter resident in northwestern Mississippi and by mid-April most wintering harriers have departed. It does not nest regularly east of the Mississippi River south of Kentucky. It is not known to breed in Alabama, but pairs have been recorded several times there in summer (Imhof 1976). There are two nest records for Arkansas (James and Neal 1986). Robinson (1990) documents no nests for Tennessee, but lists two late May records and seven records in June and July. For Louisiana, Lowery (1974) reports only one summer record, an adult female seen on 28 July 1954. Robertson and Woolfenden (1992) list Northern Harrier as having nested in the northern peninsula of Florida, but report no breeding records since 1908.

ACKNOWLEDGMENTS

I thank the following individuals for their help and encouragement. Robert Stewart, Delta State University, gave assistance with the vegetation analysis of the two parcels. Marvin Davis, University of Mississippi, provided much assistance with the literature search and reviewed an early draft of the manuscript. Sam D. Fitton, Bureau of Land Management, Hollister, California made several suggestions which helped clarify the manuscript.

LITERATURE CITED

- Imhof, T.A. 1976. Birds of Alabama. University of Alabama Press, University, Alabama.
- Jackson, J.A., M.W. Roberts, and J.E. Wright. 1972. The winter roosts and food habits of Marsh Hawks in east central Mississippi. *Mississippi Kite* 2:25-32.
- James, D.A., and J.C. Neal. 1986. Arkansas Birds; their distribution and abundance. University of Arkansas Press, Fayetteville, Arkansas.
- Lowery, G.H. 1974. Louisiana Birds. 3rd ed. Louisiana State University Press, Baton Rouge, Louisiana.
- Robertson W.B., Jr., and G.E. Woolfenden 1992. Florida bird species, an annotated list. Florida Ornithological Society, Gainesville, Florida.
- Robinson, J.C. 1990. An annotated checklist of the birds of Tennessee, University Tennessee Press, Knoxville, Tennessee.

POSSIBLE NEST ATTEMPT BY WOOD STORKS IN MISSISSIPPI

Allan J. Mueller and Charles A. McCabe¹

*U.S. Fish and Wildlife Service
2524 South Frontage Road
Vicksburg, Mississippi 39180*

Prior to the 1970s, Wood Stork (*Mycteria americana*) nesting in the United States was concentrated in Florida. With declining habitat quality in south Florida, Wood Stork nesting expanded to Georgia (1976) and South Carolina (1981) (Ogden 1996). Bent (1926) presents the only record of Wood Storks nesting in Mississippi. He lists them as nesting at Rodney (Claiborne County) with no details.

On 2 June 1997 we observed six Wood Storks sitting on nests in a baldcypress tree at Jones Lake, Warren County, Mississippi. The nests were approximately 40 feet high in a 65 foot tall cypress tree on two adjacent horizontal branches. Great Blue Herons (*Ardea herodias*) were nesting in the same tree.

When we passed beneath the tree in our boat, the storks left the nests but did not leave the tree. Within five minutes after we moved away from the tree, the storks had settled back on the nests as if incubating eggs. We were not able to see any eggs from the boat and did not climb the tree. From our vantage point the nests looked the same as the Great Blue Heron nests, about three feet across and made of sticks. On 12 June we did not see any Wood Storks in the nest tree or in the colony area. On 20 June five of the nests were gone and no storks were observed in the area.

Jones Lake is adjacent to and on the land side of the Mississippi River mainline levee. It is a permanent lake with several large bald cypress and many buttonbushes providing nesting sites for colonial waterbirds. From 1994 to 1997 the Jones Lake colony had an average of 3,032 nesting pairs of nine wading bird species. The nearby borrow pits along the levee provide suitable Wood Stork feeding habitat.

¹ Current address: 210 Katherine Drive, Vicksburg, MS 39180

Wood Storks regularly occur in western Mississippi as postbreeding birds dispersing from colonies in Mexico or Georgia, South Carolina, or Florida. Annual first arrival dates range from 5 June to 11 August. In addition there is a 1956 record of one Wood Stork in a heron colony from 12 April to 8 July (pers. comm. T. Schiefer). Our 2 June record is early, but not out of the historic range for the occurrence of post-breeding birds.

The site of our observations, in a large waterbird colony; nest location, over standing water in a large cypress near other nesting waterbirds; and nest size and composition are all consistent with Wood Stork behavior elsewhere, however, 2 June would be a late egg date. Wood Storks are very responsive to local conditions in the timing of their nesting. In south Florida Wood Storks previously began forming colonies in November to January. With the degradation of habitat, they now begin nesting activities in February or March. In Georgia and South Carolina Wood Storks lay eggs from March to May with fledging occurring in July and August (U.S. Fish and Wildlife Service 1996). If early nests fail, second nests are attempted (Ogden 1996, Rodgers *et al.* 1987).

Wood Storks are federally listed as endangered in Florida, Georgia, South Carolina, and Alabama. They regularly occur in Mississippi from June to September. Although there are observations of tagged birds from the U.S. breeding population in Mississippi (Ogden 1990), the birds we observed could be from either or both the U.S. and Mexican breeding populations (U.S. Fish and Wildlife Service 1996). Inadequate food and nesting sites may be causing Wood Storks to expand their nesting range. We will continue to monitor the Jones Lake colony to document any nesting attempts, however, Wood Storks commonly shift nest sites especially in response to changes in feeding conditions (Ogden and Patty 1981, Kushlan and Frohring 1986).

ACKNOWLEDGMENTS

We thank Terence Schiefer for providing records on Wood Stork summer arrival dates. We appreciate Bill Harris allowing us access to his property.

LITERATURE CITED

- Bent, A.C. 1926. Life histories of North American marsh birds. Smithsonian Institution U.S. Natl. Mus. Bull. 135.
- Kushlan, J. A., and P.C. Frohring. 1986. The history of the southern Florida Wood Stork population. *Wilson Bull.* 98:368-386.
- Ogden, J.C. 1990. Habitat management guidelines for the Wood Stork in the Southeast Region. U.S. Fish and Wildlife Service, Atlanta, GA.
- Ogden, J.C. 1996. Wood Stork. Pp. 31-41 *in* J.A. Rogers, H. Kale, II, and H.T. Smith (eds.). Rare and endangered biota of Florida. Vol. V. Birds. University of Florida Press, Gainesville, FL.
- Ogden, J.C., and B.W. Patty. 1981. Georgia Department of Natural Resources, Game and Fish Division Technical Bulletin 5:97-103.
- Rodgers, J.A. Jr., A.S. Wenner, and S.T. Schwikert. 1987. Population dynamics of Wood Storks in north and central Florida, USA. *Colonial Waterbirds* 10:151-156.
- U.S. Fish and Wildlife Service. 1996. Revised recovery plan for the U.S. breeding population of the Wood Stork. U.S. Fish and Wildlife Service. Atlanta, GA.

ESCAPE BEHAVIOR OF BLUE-WINGED TEAL FROM ATTACK BY A NORTHERN HARRIER

JONATHAN D. MAUL

and

CHARLES M. COOPER

*Department of Biology
The University of Mississippi,
University, Mississippi 38677*

*USDA-ARS National Sedimentation Laboratory
Water Quality and Ecology Unit
P.O. Box 1157
Oxford, Mississippi 38655*

On 8 October 1996 at the Yazoo National Wildlife Refuge, Washington Co., Mississippi, we observed a female Northern Harrier (*Circus cyaneus*) attack a male Blue-winged Teal (*Anas discors*). The observation occurred at a 3.5 ha impoundment that was 0.7 m deep and contained floating and submergent vegetation. There were 47 Blue-winged Teal and 5 Northern Shovelers (*Anas clypeata*) actively foraging within the impoundment. A Northern Harrier had passed over about seven times during a 3-hour period, eliciting short group flights to other sections of the impoundment.

After a 15-minute period absent of harrier activity, a single male Blue-winged Teal began foraging alone approximately 50 m from all other ducks. Within several minutes a Northern Harrier attacked the duck, submerging feet and legs into the water. The raptor was unsuccessful and did not appear to make physical contact with the duck. The Blue-winged Teal escaped not by diving headfirst but rather its breast went under first followed by head and tail. The duck returned to the surface within 12 seconds, approximately 6 m from its diving location, suggesting movement underwater.

Disturbance of waterfowl by Northern Harriers and other raptors has been described (Tamisier 1976, Johnson and Rohwer 1996). Smaller dabbling duck species, such as Blue-winged Teal, are often more sensitive and react differently to raptor predation than larger species (Gaston and Nasci 1994, Johnson and Rohwer 1996). Tamisier (1976) estimated that 18% of all Green-winged Teal flush on each passage of a Northern Harrier, suggesting a major influence on daily behavioral activities, energy expenditure (Johnson and Rohwer 1996), and diurnal habitat selection (Euliss and Harris 1987). The Northern Harrier in this observation attacked when an individual duck was separated from the flock, supporting a defense strategy described by Tamisier (1976) in which ducks form dense flocks during elevated raptor predation pressure.

ACKNOWLEDGMENTS

We thank W.M. Davis, P.C. Smiley, R.L. Smith, and S. Testa for suggestions and review of this note.

LITERATURE CITED

- Euliss, N. H. and S. W. Harris. 1987. Feeding ecology of Northern Pintails and Green-winged Teal wintering in California. *Journal of Wildlife Management*. 51:724-732.
- Gaston, G. R. and J. C. Nasci. 1994. Behavioral ecology of two teal species (Blue-winged Teal, *Anas discors*, and Green-winged Teal, *Anas crecca*) overwintering in marshes of coastal Louisiana, USA. *Gulf Research Reports* 9:39-48.
- Johnson W. P. and F. Rohwer. 1996. Disturbance of wintering Green-winged Teal and Mallards by raptors. *Southwestern Naturalist* 41:331-334.
- Tamisier, A. 1976. Diurnal activities of Green-winged Teal and Pintail wintering in Louisiana. *Wildfowl* 27:19-32.

A FALL OBSERVATION OF UNUSUAL BEHAVIOR OF RUBY-THROATED HUMMINGBIRDS

Thomas Tidwell

and

Diane Tidwell

*Department of Biological Sciences
Mississippi State University
Mississippi State, Mississippi 39762*

*Dept. of Family and Consumer Sciences
University of Mississippi
Oxford, Mississippi 38677*

On the evening of 15 September 1997, at about 6:00 p.m., we were sitting on our patio in Webster County, Mississippi. We had two hummingbird feeders near the patio and were enjoying watching about eight to ten hummingbirds, mostly females or hatching-year birds, having a feeding frenzy around one of the feeders. The other feeder was being fiercely guarded by a male.

As we watched, a female or young bird flew up to the male's feeder and the male came quickly to the feeder. They "squared off" facing each other less than a foot apart and then flew into an apple tree about thirty yards from our patio. When they landed in the tree, we thought the male landed on top of the female and that they were mating. Then they flew back towards the feeder. They more or less circled the feeder area and then the female landed on the lawn and spread her tail feathers fan-like approximately ten feet from where we were sitting. The male landed on her back and remained 15-20 seconds. Again, we thought we might be observing copulation.

The female or young bird then made an aerial loop and landed on the lawn behind us and once again spread its tail feathers, but when the male approached, it flew up and hovered about five to six feet from us and appeared to look directly into our faces. The two hummingbirds then suddenly flew off together and landed on our fence. They briefly perched rather close to one another and then flew off.

While we were quick to interpret our observations as "copulation," this is unlikely. Copulations in Ruby-throated Hummingbirds normally last only 2-3 seconds (Robinson et al. 1996). Furthermore, for copulation to occur, the female must twist her tail sideways to allow cloacal contact -- fanning the tail would seem to thwart copulation. Most likely this was a case of defense of the feeder by the male against a young bird. Robert R. Sargent (pers. comm.) notes that the alighting on the ground with the tail

Laying down of body fat for fall migration often results in near doubling of body weight (Norris et al. 1957) and the stresses of an aggressive encounter while in such a condition may well result in "grounding."

ACKNOWLEDGMENTS

We thank Bob Sargent for commenting on an earlier draft of our manuscript and for assisting us with interpretation of the behavior observed.

LITERATURE CITED

- Norris, E.A., C.E. Connell, and D.W. Johnston. 1957. Notes on the fall plumage, weights and fat condition in the Ruby-throated Hummingbird. *Wilson Bulletin* 69:155-163.
- Robinson, T.R., R.R. Sargent, and M.B. Sargent. 1996. Ruby-throated Hummingbird *Archilochus colubris*. *Birds of North America* No. 204, A. Poole and F. Gill, eds. The Academy of Natural Sciences, Philadelphia, Pennsylvania, and the American Ornithologists' Union, Washington, D.C.

THE MISSISSIPPI KITE

Mississippi Ornithological Society
Organized 30 April 1955

Officers

President	Allan J. Mueller 4308 Shenandoah Road Vicksburg, MS 39180
Vice President	Shannon Knight 79 Highway 9W Oxford, MS 38677
Secretary	Carolyn Jarnigan Rt. 3, Box 217 Corinth, MS 38834
Treasurer	Janet Dubuisson 22410 Glad Acres Pass Christian, MS 39571
Editor: The Mississippi Kite	Jerome A. Jackson Dept. of Biological Sciences Mississippi State University Mississippi State, MS 39762
Editor: MOS Newsletter	W. Marvin Davis 308 Lewis Lane Oxford, MS 38655

MOS Memberships

Honorary	No dues
Life	\$300
Sustaining	30 (or more)
Active	15
Family	25
Library Subscriptions	10
Student/Senior	10

Membership and subscription dues should be sent to the Treasurer. The Mississippi Kite is currently published twice a year and is sent to all classes of membership.