

For the next two days, the nest was studied and frequently photographed by numerous OOS members. Some felt that they might have seen three heads protruding from the cavity. Our photographs confirm only two, and we wonder if the third head might have been that of the female. Normal clutch size in this species is three to five (Reilly, E.M. Jr., 1968, The Audubon illustrated handbook of American birds, McGraw-Hill, N.Y., p. 272).

The chicks were fed every 30 to 40 minutes alternately by the parents, but we never saw both adults at the nest hole simultaneously. Several times we observed the male foraging, often low to the ground, on the trunks of larger trees nearby. Although the chicks became quite vociferous when the adults approached the nest, not once did we hear either of the old birds vocalize.

The nest tree protruded far above the surrounding woods and was popular with several other birds. Mississippi Kites (*Ictinia mississippiensis*), that were nesting at several other locations in the park, used the uppermost branches as a roost, and a pair of Red-headed Woodpeckers (*Melanerpes erythrocephalus*) had a nest cavity in an upper fork of the tree.

Pileated Woodpeckers, fairly common to eastern Oklahoma, become increasingly rare westward, where mature hardwood forests are confined to riparian situations. The western limit of range is more-or-less delineated by records from Alfalfa, Major, Canadian, Caddo, Comanche, and Jefferson counties (Sutton, G.M., 1974, A check-list of Oklahoma birds, Stovall Mus. Sci. & Hist., Univ. Oklahoma Press, Norman, p. 23). The westernmost breeding record heretofore was in northeast Stephens County, 165 miles to the southeast (McGee, L.E., and F. Neeld, 1972, Bull. Oklahoma Ornithol. Soc. 5:5-7). Our findings extend the nesting range in Oklahoma westward about 100 miles.

7664 S. RACE ST., LITTLETON, COLORADO 80122, 14 SEPTEMBER 1987.

GENERAL NOTES

First Northern Harrier nest in southwestern Oklahoma. — At approximately 0830 on 14 April 1986, Craig Bitler and I discovered the nest of a Northern Harrier (*Circus cyaneus*) from a helicopter in which we were searching for coyotes over Fort Sill's East Range. The nest, located about 9 miles northeast of the main post office, contained four white eggs, but we saw no adult near it at the time, nor when we returned a few minutes later. The nest lay only about 75 yards north of a heavily used blacktop road, but was otherwise encompassed by mature mixedgrass prairie. It was situated on the open, east-facing side of a gentle slope, fairly well hidden amid leadplants (*Amorpha fruticosa*) two to three feet tall, numerous milkweeds (*Asclepias* sp.) and little bluestem grass (*Schizachyrium scoparium*) that averaged about a foot high. Scattered dead stalks of big bluestem grass (*Andropogon gerardii*) three feet high, and a few other forbs we also noted around the site. The nest itself was a flattened mat of dried grasses and grass stems possibly two feet across. Some 40 yards east of it, a few small cottonwoods (*Populus deltoides*) and black willows (*Salix nigra*) lined a little ravine.

On 31 May, Sam Orr, Art Breaden and I returned to the nest. We found there two hatchlings a few days old, and three eggs in the nest. Clutch size is usually five, but varies from three to nine, with incubation lasting about 31 days (Reilly, E.M., Jr., 1968, *The Audubon illustrated handbook of American birds*, McGraw-Hill, N.Y., p. 106). Both adult birds circled overhead, calling loudly. We took photographs of the nest and departed soon thereafter. One picture on file at the Cameron University Museum of Zoology in Lawton (CUMZ 980) shows both nestlings and one of the eggs.

Once again, on 17 June, Orr, Breaden and I revisited the harrier nest between 1700 and 1745, this time in company with Breaden's son Wally and Jack D. Tyler from Cameron University. Both parent birds scolded us as they wheeled above the nest. There were now four young hawks in and near the nest: two females with dark brown eyes, a male with grayish-brown eyes, and another of uncertain sex (Clark W.S., and B.K. Wheeler, 1987, *A field guide to hawks of North America*, Houghton Mifflin Co., Boston). The latter was one of two older chicks. The younger two, considerably smaller, were still mostly covered with whitish down. The infertile egg (CUMZ 1011) was collected.

Tyler (1979, *Birds of southwestern Oklahoma*, Contrib. Stovall Mus., Univ. Oklahoma, Norman, p. 18) mentioned six summer sightings for the southwestern counties, but stated that no breeding record was known. The species is very common in winter, however, and great numbers roost in the mature grasslands of Fort Sill's East Range. — Toni Montaperto, *DEH, Fish and Wildlife Branch, Fort Sill, Oklahoma 73503, 15 September 1987*.

Juvenile Whooping Crane winters in western Oklahoma. — Unpublished files of the U.S. Fish and Wildlife Service (USFWS) indicate that observations of Whooping Cranes (*Grus americana*) in the western half of Oklahoma have occurred sporadically during fall and spring migration for many years. In recent years, sightings have increased as the numbers of both Whooping Cranes and observers have grown. No midwinter record of Whooping Cranes exists for Oklahoma, although they have been seen as late as 26 December (Sutton, G.M., 1974, *A check-list of Oklahoma birds*, Stovall Mus. Sci. & Hist., Univ. Oklahoma, Norman, p. 12).

During the last week of January 1987, Oklahoma game ranger Gary Roller received a telephone call from Melvin Shantz, a farmer northwest of Hydro, Caddo County, Oklahoma, relating that he had recently observed a white bird fitting the general description of a Whooping Crane. He said that numerous Sandhill Cranes (*G. canadensis*) had been in his area since before Thanksgiving, but that he had only recently noticed the white bird. As refuge manager of the nearby Washita National Wildlife Refuge, I communicated frequently with Roller, and during that same week he told me about this report. I immediately enlisted the help of fellow refuge employee David Hollingsworth to attempt verification. We were both experienced with Whooping Cranes. I had served five years as assistant refuge manager of the Aransas National Wildlife Refuge in coastal Texas where they winter, and Hollingsworth was also a former employee there. In fact, he had been a member of the 1983 radiotelemetry team

that followed a Whooping Crane family by air from Aransas to Wood Buffalo National Park in northern Alberta, Canada, where the species breeds.

At midday on 30 January 1987, Hollingsworth and I spotted a Whooping Crane feeding with about 200-300 Sandhill Cranes in a winter wheat (*Triticum aestivum*) field approximately 9 miles northwest of Hydro in extreme eastern Custer County, Oklahoma. We observed the bird for approximately 20 minutes through a variable power (20-60X) spotting scope and binoculars at a distance of about 200-250 yards. It was definitely a juvenile bird with some rusty coloration on the neck and scapular area. It also wore colored leg bands (left leg: white over black over white, right leg: orange over silver).

After returning to refuge headquarters, I telephoned Tom Stehn, refuge biologist at Aransas, and he gave me the following facts about the bird we had just observed: (a) it was a female (band number 86-21), as determined by the biologists who banded her as a fledgling; (b) she was the smallest and apparently the youngest of 21 chicks banded at Wood Buffalo Park during the summer of 1986; (c) she was the first offspring of a newly-established pair of Whooping Cranes of which the male was only three years old; and (d) her parents, first noted near Aransas on 18 November 1986, spent most of that winter on San Jose Island adjacent to the refuge.

I established regular telephone contact with Melvin Shantz who, along with several of his neighbors, was very cooperative in keeping me informed about sightings of #86-21. Several avid birders, including Ina Brown of Elk City and Judy Bandy, on the Washita Refuge staff, were instrumental in locating this bird during the period 31 January-8 February 1987.

Various sightings indicated that #86-21 mingled with an estimated 1,000 Sandhill Cranes that fed in the fields of winter wheat, harvested grain sorghum (*Sorghum* spp.) and harvested peanuts (*Arachis hypogaea*) in the general area straddling the Custer-Blaine County line south of the Canadian River. This vicinity lies approximately 6-10 miles northwest of Hydro, Oklahoma. Presumably, she roosted with the Sandhill Cranes in the sandbar and shallow water habitat of the Canadian River, although no roost observations were made. This area is a relatively quiet farming community with little hunting pressure for waterfowl or Sandhill Cranes, and the lack of major roads also minimizes human disturbance.

On the morning of 9 February 1987, a local citizen reported seeing a "white crane" with Sandhill Cranes in a sorghum field near Putnam, in Dewey County, Oklahoma, about 25 miles northwest of the Shantz farm. On 10 February, personnel of the Quivira National Wildlife Refuge, in south central Kansas, observed #86-21 with several Sandhill Cranes not far from the refuge. This location, near Stafford, Kansas, is 170-180 miles north of the Shantz farm. On 15 February, Shantz saw #86-21 back near his farm and Hollingsworth photographed her in that vicinity on 21 February. Shantz last observed #86-21 on 11 March. On 17 March, USFWS employees sighted #86-21 along the Platte River near Kearney in south central Nebraska (pers. comm., James C. Lewis). Canadian Wildlife Service workers identified her not far from her hatching site in Wood Buffalo Park in the early summer of 1987, and again several times in mid and late summer near Yellowknife, Northwest Territories, Canada. This site is

about 200 miles north of her natal area and directly across Great Slave Lake (pers. comm., Tom Stehn).

An interesting postscript to this wintering incident is provided by the files at the Aransas Refuge (pers. comm., Tom Stehn). Whooping Crane #86-21 also failed to arrive at Aransas during its second winter (1987-88), spending the winter in the company of Sandhill Cranes in the vicinity of Edna, Texas, 50-60 miles north of the Aransas Refuge. On 14 March 1988, Melvin Shantz reported that "his" crane was back within 3 miles of his house in western Oklahoma, and USFWS employee Jon Brock confirmed that #86-21 was indeed there on 15 March 1988. Later in the month she was again seen along the Platte River near Kearney, Nebraska.

Kenneth O. Butts, *U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103-1306, 16 May 1988.*

A Blue-winged Warbler nest in Delaware County, Oklahoma. — On 1 June 1987, W. E. Miller of Tucson, Arizona, discovered a Blue-winged Warbler (*Vermivora pinus*) and its nest containing four eggs near Brush Creek, about 3 miles south of Jay in Delaware County, Oklahoma. The eggs may well have been eaten by some predator later that day, for on 2 June, Miller led my wife Marguerite and me to the nest, which was now empty. It was collected and added to the Little Lewis Whirlwind School collection. Although no Blue-wings were seen or heard that morning, I heard the species sing intermittently on 4 June from the edge of the creek. That same day, Miller located an adult at the margin of a mature lowland forest approximately one-third mile from the nest site. A male sang in this same area on 6 June.

Habitat surrounding this nest consisted of a fairly dense bottomland woods of American elm (*Ulmus americana*), sycamore (*Platanus occidentalis*), and box elder (*Acer negundo*). The understory was dominated by scattered bushes, especially buckbrush (*Symphoricarpos orbiculatus*), saplings of Ohio buckeye (*Aesculus glabra*) and other trees, and wild grape vines (*Vitis* spp.). The nest was a deep cup on the ground, well concealed by dead leaves that covered the sides and arched partially over the top. A short entryway three or four inches long led into the cup.

Breeding records for the Blue-winged Warbler in Oklahoma are very limited and several are inconclusive. Woodhouse (1853, *Birds, in Report of an expedition down the Zuni and Colorado rivers by Capt. L. Sitgreaves, Wash., D.C., p. 72*) listed this species as "Common in the Indian territory. In the latter country it breeds." A. J. B. Kirn found it to be rare near Copan in Washington County, listing the dates of 26 and 27 April 1916 and 5 and 25 May 1917, but nests were not located (Nice, M.M., 1931, *The birds of Oklahoma, Rev. ed., Publ. Univ. Oklahoma Biol. Surv. No. 1, p. 156*).

In the Tulsa vicinity, the Blue-winged Warbler was believed to have nested in the 1930's (Force, E.R., and W. Hughes, 1940, *Time table of birds in Tulsa County, Oklahoma and vicinity, Tulsa Aud. Soc., p. 4*); it was also seen in 1950 from 22 May to 27 August (S. C. Mery). J. D. Ligon observed two birds 6 miles west of Westville, Adair County, in August, 1960. These birds were in "high

weeds near a road" and a "weedy pasture, covered in spots with brambles" (Sutton, G.M., 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 493). Despite the fact that this species has been reported occasionally from a number of localities throughout much of northeastern Oklahoma, recent nesting records have been confined to a few places near the Spavinaw Lakes in Delaware County. On 14 July 1951, J. L. Norman and I located a pair of scolding adult Blue-winged Warblers attending at least two young birds that were calling for food. They were in an abandoned field grown up to blackberries (*Rubus* spp.), mixed saplings and rank grasses and weeds near Spavinaw Creek above the head of Spavinaw Lake. On 22 May 1955 Norman found a nest in this same locality that contained three large young. On 16 June he photographed a fledgling nearby (Sutton, 1967, *loc. cit.*).

It is hoped that an intensive effort will be made to locate additional nesting Blue-winged Warblers in Oklahoma. Environs of recently built reservoirs in northeastern Oklahoma, such as Copan Reservoir in Washington County, should develop suitable habitats for this species. Areas near the head of Spavinaw Lake should also be investigated again. — Frederick M. Baumgartner, *Little Lewis Whirlwind Nature Center, Route 2, Box 51A, Jay, Oklahoma 74346, 21 April 1988.*

FROM THE EDITOR: The Bulletin of the Oklahoma Ornithological Society invites contribution of notes and longer papers concerning the status, distribution, behavior, ecology, and historical aspects of the avifauna of Oklahoma and its contiguous regions. Lead papers require a black-and-white glossy photograph of the subject, preferably 5 x 7 inches. Manuscripts should be submitted in duplicate, typed on good quality paper. Depending on the quality and quantity of material at hand, each issue is kept seasonal insofar as possible. General notes are arranged in phylogenetic sequence and an attempt is made to represent as many bird families as possible. To maintain balance further, geographic spread of subject matter and of authorship is sought. Thus a manuscript may be used if (1) is seasonal, (2) pertains to a bird family or an area for which little or no other material is available, and (3) is authored by a person (or persons) not already represented in that particular issue. Preference naturally is given to members of the Oklahoma Ornithological Society.

THE BULLETIN, the official organ of the Oklahoma Ornithological Society, is published quarterly in March, June, September, and December, at Norman, Oklahoma. Subscription is by membership in the OOS: \$5 student, \$7.50 regular, \$10 family, \$15 or more sustaining, per year. Life membership \$125. Treasurer, Bill Dirck, Box 65, Ada, Oklahoma 74820. Editor, Jack D. Tyler, Department of Biology, Cameron University, Lawton, Oklahoma 73505. Associate editors, John S. Shackford, 6008A N.W. Expressway, Oklahoma City, Oklahoma 73132, Dr. William Radke, Department of Biology, Central State University, Edmond, Oklahoma 73060, and Melinda Droege, Rt. 1, Box 516AA, Bartlesville, Oklahoma 74006. Questions regarding subscription, replacement copies, or back issues should be directed to the treasurer. ISSN 0474-0750.