Purple Sandpipers were seen in December and four in January (1975, Amer. Birds, 29: 689).

A significant winter problem is, of course, ice, for ice makes animal food virtually unobtainable. Partly because freshwater freezes at a higher temperature than saltwater, ice usually forms more readily inland than along ocean coasts. During recent winters in the Great Lakes region small, but recurring, numbers of Purple Sandpipers have been reported from points along the 700-mile stretch of freshwater between the south end of Lake Erie and the Gulf of St. Lawrence. If winter and ice force these birds to leave this stretch, they are obliged to fly southward across the great land mass. Under conditions of extreme privation such as these, some birds reach areas that are far indeed from the ocean.

Other species that irregularly appear in Oklahoma may also be victimized by what I have come to think of as the St. Lawrence shunt. Among these are the Oldsquaw (Clangula hyemalis), Red Knot, Red Phalarope (Phalaropus fulicarius), Parasitic Jaeger (Stercorarius parasiticus), Glaucous Gull (Larus hyperboreus), Black-legged Kittiwake (Rissa tridactyla), and Sabine's Gull (Xema sabini).

10731 N. WESTERN, OKLAHOMA CITY, OKLAHOMA 73114, 4 FEBRUARY 1978.

## A BALD EAGLE NEST ON THE R. S. KERR RESERVOIR

BY JOHN CARMICHAEL

nonsiderable attention has recently been paid to the ecology of Bald Eagles (Haliaeetus leucocephalus) that winter in Oklahoma (Lish and Lewis, 1975, Proc. 29th Ann. Confer. Southeastern Assn. Game & Fish Commissioners, pp. 415-23). Data filed at the University of Oklahoma Bird Range make clear that the species' stay in the state is from early October through the first half of April as a rule, though there are many late-April sightings for northern Oklahoma; an adult bird was seen near Oklahoma City, central Oklahoma, on 8 May 1967; and Lish (1973, Bull. Oklahoma Orn. Soc., 6: 30) has reported seven sightings, each of an immature bird, in Ottawa County, northeastern Oklahoma, during the 1-11 May period 1969-1971. According to Sutton (1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 117), two adult Bald Eagles summered at Upper Spavinaw Lake in Delaware County, northeastern Oklahoma, in 1950, and that same (or possibly an earlier) year a pair built a nest in the top of a huge sycamore on the west side of Fort Gibson Reservoir in Wagoner County, northeastern Oklahoma, "but no young were reared." As a Park Ranger assigned to the Robert S. Kerr Reservoir, in east-central Oklahoma, I have become accustomed to seeing Bald Eagles about the big impoundment in winter, but in the spring of 1976 one pair surprised me by lingering at least until 10 May. This pair had a nest along Sans Bois Creek in east-central Haskell County about 2 miles west of the town of Keota.

Ranger Larry Fears and I first became aware of the nest on 23 April. It was in the top of a dead tree along the north edge of an extensive stand of inundated timber. The water there was 2-5 feet deep. So long had the trees been dead that they had lost most of their branches. To the best of our knowledge no one had witnessed the building of the nest. It was so huge that we could not help surmising that eagles, or possibly Ospreys (Pandion haliaetus), had built it. We decided to check it whenever we were in the area, to see if it was being used.

The next time I was in the area was on 30 April. That morning, to my great delight, I found two adult Bald Eagles at the nest, one perched on the rim, the other "sitting down" in it, with head clearly showing over the rim. That afternoon Ranger Wayne Lea went to the nest with me. This time the one eagle that was there was in the nest: all we could see of it was its head.

The following day (1 May), Lea and I visited the nest-tree by boat. As we approached, we saw no eagle anywhere; but as we slowly paddled around we perceived that an eagle was deep in the nest, watching our every move. It did not seem to be disturbed and it made no attempt to leave. The tree was about 40 feet high. The nest appeared to be at least 3 feet in diameter and 2 feet thick.

Not wanting to disturb the bird, we carefully backed the boat away and hid ourselves among fallen trees and branches. The eagle watched as we ma-



BALD EAGLE ON NEST

Photographed on 1 May 1976 along San Bois Creek in Haskell County, Oklahoma, by John Carmichael and Wayne Lea.

neuvered the boat about. At one point Lea slipped from a log into the lake, causing quite a commotion, but the eagle seemed quite unperturbed. Its "sit tight" behavior convinced us that eggs, or possibly small chicks, were in the nest. We stayed close to the nest-tree about an hour. Before leaving we spotted the other eagle, perched in a dead tree some 200 yards south of the nest.

To keep from annoying the eagles, we decided to do all our observing from the bridge crossing Sans Bois Creek on State Highway 9. The bridge was about a quarter of a mile from the nest. From 2 to 10 May (inclusive) some member of the Reservoir Ranger Staff checked the nest at least once a day except on 3 May. On 4, 6, and 7 May, the only eagle that we saw was in the nest, thus reinforcing our belief that eggs or young were being brooded. On 5 and 9 May, no one saw an eagle either on or near the nest. On 10 May the one bird that we saw was perched in the top of a dead tree near the channel of Sans Bois Creek several hundred yards from the nest. We continued surveillance of the nest for another week, on some days checking it three times from the bridge, before becoming convinced that the eagles had abandoned it.

Sorely disappointed, we turned our attention to the circumstances that might have caused the eagles to leave. We decided that inclement weather had been a major factor. Several fronts had brought strong wind and heavy rain during the first week of May. On 3 June this decision of ours was confirmed: that day a party of navigation channel inspectors took a scheduled helicopter flight over the area, and Curt Weddle, the navigation system's Resident Engineer, arranged for Wayne Lea, Robert Berger (a biologist from the Tulsa District Office), and myself to be aboard. The helicopter made its first pass above and to the north of the nest-tree. There were no eggs or chicks in the nest. On a second approach, this from the south side, we saw that a main supporting branch on that side had fallen off. The south side of the nest had collapsed, spilling much of the lining over the rim. We made several more turns about the nest and took photographs of it before leaving the area.

No one had attempted to climb the nest-tree for fear of disturbing the eagles. When we had first seen the nest on 23 April it had appeared to be complete. No one saw the eagles adding sticks or lining material to it between 23 April and 10 May. Presumably it had been completed in early April or in March. I continue to be puzzled by the fact that no one reported seeing eagles carrying nest material during those months. Another point that is of considerable interest: on only one occasion during the above-reported observation period did any of us see either eagle flying, nor did we see either bird holding, eating, or obviously watching for, prey. Fish abound in the area and these presumably would not be difficult for the eagles to catch.

From now on reservoir personnel will be watching closely for an eagle carrying nest material or for courtship behavior. Depending on the weather to

some extent, such behavior might be observable in February or January or even December.

ROUTE 4, BOX 182, SALLISAW, OKLAHOMA 74955, 20 SEPTEMBER 1976.

## **GENERAL NOTES**

Early spring date for Green Heron in Oklahoma.—At about 0830 on 22 March 1977 (morning cold and cloudy; air temperature that day 31°F. to 66°F.), several persons, including Elizabeth Hayes and me, saw two Green Herons (Butorides striatus) along Bird Creek in the northern part of Mohawk Park in Tulsa, Tulsa County, northeastern Oklahoma. No part of the creek had frozen at all recently, so far as we could tell. We were looking for Wood Ducks (Aix sponsa), a species reported to have bred in the area. As we approached a clearing on the creek bank, I saw a Green Heron perched on a bare branch that jutted over the water from the opposite bank. Presently, joined by a second Green Heron that had been in or under shrubbery close by, it flew downstream low over the water. Everyone clearly saw the two herons as the birds made off.

Scattered early spring and late fall sightings indicate that the Green Heron is to be looked for in winter in Oklahoma in areas having some open water. The only winter record for the state is of a bird seen repeatedly from 4 January to 2 March 1975 along Sandy Creek near Eldorado, Jackson County, southwestern Oklahoma (Tyler and Ault, 1975, Bull. Oklahoma Orn. Soc., 8: 36), though a bird seen on 27 December 1971 in Ft. Smith, Arkansas (Armstrong, 1972, Bull. Oklahoma Orn. Soc., 5: 26-27) was within only a few miles of the Oklahoma state line.—Jayne Christo, 5239 S. Sandusky, Tulsa, Oklahoma 74135, 9 July 1977.

Early spring sighting of Common Nighthawk in Oklahoma.—Not long before dark on the evening of 14 March 1975, 1 mile north and ¼ mile west of Indiahoma, Comanche County, southwestern Oklahoma, I watched a Common Nighthawk (Chordeiles minor) as it circled above overgrazed pastureland about 30 feet up. The weather was mild, so I assumed that the bird was capturing moths, midges, and other flying insects. The date was exceptionally early for a Common Nighthawk — indeed a full month earlier than 15 April, the date given for arrival of the species from the south by Sutton (1974, A check-list of Oklahoma birds, Stovall Mus. Sci. & Hist., Univ. Oklahoma, Norman, p. 22). According to the summary of records kept at the University of Oklahoma Bird Range, on 15 April 1974, Kenneth Burns saw four Common Nighthawks circling with six Chimney Swifts (Chaetura pelagica) over Norman, Cleveland County, central Oklahoma. The next earliest date on record is 18 April 1904, when G. E. Stilwell saw the species in Custer County, west-central Oklahoma (Nice, 1931, Birds of Oklahoma, p. 108).

I did not, admittedly, note the position of the white patch in each of the nighthawk's wings, so cannot say positively that the bird was not a Lesser Nighthawk (Chordeiles acutipennis), a species for which there is one Oklahoma record — that of a male collected by W. Marvin Davis in Boise City, Cimarron County, far western Oklahoma on 23 April 1961 (Sutton, 1967, Oklahoma birds, Univ. Oklahoma Press, p. 275)—but behavior of the bird seemed to me to be that of Chordeiles minor.—John W. Ault III, 4213 Bedford Drive, Lawton, Oklahoma 73501, 15 September 1975.

Eastern Phoebe three-brooded in southwestern Oklahoma.—During the nesting season of 1974, three broods of Eastern Phoebes (Sayornis phoebe) fledged at a nest under a concrete overhang in a settling tank at the water-pollution control station at Fort Sill, Comanche County, southwestern Oklahoma. The nest had been built and used the previous season by Barn Swallows (Hirundo rustica). In 1974, the phoebes relined it. Whether all three clutches of phoebe eggs were laid by the same female bird I do not know.