## **GENERAL NOTES**

Mourning Dove and Scissor-tailed Flycatcher nests in close proximity.—The Scissor-tailed Flycatcher (Tyrannus forficatus), a common summer resident throughout Oklahoma, is known to share nest trees with a variety of other birds including the Mississippi Kite (Ictinia mississippiensis), Red-tailed Hawk (Buteo jamaicensis), Mourning Dove (Zenaida macroura), Mockingbird (Minnus polyglottos), Orchard Oriole (Icterus spurius), Bullock's Oriole (I. galbula bullockii), Lark Sparrow (Chondestes grammacus), and House Sparrow (Passer domesticus), (Fitch, F.W., 1950, Life history and ecology of the Scissor-tailed Flycatcher, Auk 67:145-167; Sutton, G.M., 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 333). During the summer of 1992, while conducting a study of nesting success and sexual dimorphism in the Scissor-tailed Flycatcher, 1 observed an exceptional case of nest tree sharing by a pair of Scissor-tails and a pair of Mourning Doves. On 25 June I discovered a Scissor-tailed Flycatcher nest in the early stages of construction in a mesquite tree on the west range of the Fort Sill Military Reservation in Comanche County, southwestern Oklahoma. No Mourning Dove nest was detected at this time. The nest could not have been more than five days old since this pair (USFWS bands nos. 8051-47807 and 8051-47849) had an earlier nest that was destroyed in a severe storm on 20 June.

At 0745 on 3 July, I revisited this nest, which was now complete and held two eggs. But only 20 cm (8 in.) away, and at almost exactly the same height (2.3 m or 7.5 ft.), was a Mourning Dove nest containing a single egg. By 1550 on the same day, there were three Scissor-tail eggs. At 1710 the next day, there was an additional egg in each nest, and a dove was incubating.

Approximately twelve days later, I began to check the flycatcher nest daily. At this time, the dove nest was empty, perhaps the result of egg predation. I continued to monitor the Scissor-tail nest. Not once did I encounter an incubating female, and the eggs failed to hatch. Whether the failures of both clutches were related to, or independent of, their proximity I do not know.

This research was funded in part through grants from the Frank M. Chapman Memorial Fund, Sigma Xi, the Hinds Fund, and the Oklahoma Ornithological Society.—Jonathan V. Regosin, *Department of Ecology and Evolution*, *University of Chicago*, *Chicago*, *Illinois* 60637, 14 August 1992.

Courtship displays between an Eastern and Western Kingbird in Cimarron County, Oklahoma.—On the morning of 4 June 1990, while returning from a small mammal survey of the Black Mesa in northwestern Cimarron County, Oklahoma, two companions and I witnessed apparent courtship displays between a Western Kingbird (Tyrannus verticalis) and an Eastern Kingbird (T. tyrannus). At about 1030, Darrell Pogue, Dave Certain and I spotted the two kingbirds perched next to each other on a barbed wire fence about a mile east of Kenton. Both were darting up into the air together and landing side-by-side, so we stopped the car to study them. We watched as, facing each other, they flew straight up to a height of three to six meters, hovered for several seconds, then rapidly descended back down to the fence together. Their plumage appeared to be slightly fluffed out during this display, and they vocalized excitedly all the while. This behavior was repeated at frequent intervals for the next 15 minutes. A few moments before we left, John Shackford arrived and also saw the two kingbirds displaying.

The kingbirds' behavior closely matched the flying courtship display described by Bent (1942, Bull. U.S. Nat. Mus. 179:13-14; 59) and Smith (1966, Publ. Nuttal Ornithol. Club No. 6, Allen Press, Lawrence, Kansas). Kingbirds are known for their courtship flights, wherein they fly straight up into the air, fluttering, tumbling, vibrating their feathers and vocalizing. They are quick to socially interact with each other, are highly territorial and have a well-deserved reputation of being aggressive towards other species of birds (Smith, op. cit.). It is because of this normally aggressive nature of both species that the encounter we witnessed was thought to have been an attempted courtship. Most individuals are paired and in possession of nest sites within a week of their arrival on the breeding ground but young kingbirds may not pair during their first reproductive season (Smith, op. cit.). These two individuals were quite likely unpaired and possibly on the breeding ground for the first time. Both species begin to arrive from the south during early April and usually are breeding by May (Sutton, 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, pp. 329-331). Although it was impossible to sex either bird with certainty, we presumed that the Western Kingbird was a male because its courtship flight behavior closely resembled that described by Bent (op. cit.) and Smith (op. cit.) for that sex. The Eastern Kingbird (presumed female) may have been acting in a defensive manner toward the advances of the other bird. Difficulty in finding an unmated female conspecific could have prompted this Western Kingbird to court perhaps the only available kingbird locally, in this case, an Eastern.

During our sojourn in the Black Mesa country between 31 May and 4 June, we saw large numbers of Western Kingbirds, many of them nesting in the area, particularly in and near Black Mesa State Park 6 miles to the southeast, and in Tesesquite Canyon, 4 miles south of Kenton, but we saw only this one Eastern Kingbird. On a subsequent trip to the area from 22 to 25 May 1992, I could not locate a single Eastern Kingbird. This species approaches the western periphery of its range here, where its preferred mesic habitat is scarce.

Hybridization between intrageneric species of birds is a fairly common occurrence, particularly in the Great Plains (Rising, 1983, Curr. Ornithol., 1:131-157). In the genus Tyrannus, Western Kingbirds are known to have hybridized with Scissor-tailed Flycatchers (see Davis and Webster, 1970, Condor 72:37-42; Tyler and Parkes, 1992, Wilson Bull. 104:178-181) but hybridization between Eastern and Western Kingbirds has yet to be reported.—Steven R. Sheffield, Department of Zoology, Oklahoma State University, Stillwater, Oklahoma 74078, 10 August 1992.

Tool use by a White-breasted Nuthatch.—On 5 May 1992, Donald N. Woodfin, Jimmy D. Woodward and I were searching for Hooded Warblers (Wilsonia citrina) believed to be nesting along the South River Road near Keystone Dam in Tulsa County, Oklahoma, 1.2 miles east of Swift Park and 2.2 miles east of the dam. As we hiked along, I spied a White-breasted Nuthatch (Sitta carolinensis) creeping down a dead tree about 20 yards away. As I watched, the bird grasped a loose piece of bark about two inches long in its bill and flew away. It returned about a minute later, still carrying the bark, and landed about 10 feet up on another dead tree trunk about 15 yards from me. Working its way down the trunk until it came to some peeling patches of bark, the nuthatch began to pry off a few loose pieces with its wooden "tool." Once it had dislodged a few fragments, it dropped the "bark tool," explored this newly exposed area, and caught a small invertebrate in its bill. I watched until the bird ended its search

and darted away.

In their comprehensive discussion of the behavior of this species, Stokes and Stokes (1983, A guide to bird behavior, Vol. 2, pp. 131-142, Little, Brown & Co., Boston) made no mention of tool-use. This behavior must therefore be very rare.—Terry L. Mitchell, 1140 S. 101 E. Ave. #3, Tulsa, Oklahoma 74128, 17 December 1992.

Mountain Bluebird nests in Cimarron County— At 1720 on 24 April 1986, the senior author observed a pair of Mountain Bluebirds (Sialia currucoides) bringing large insects to one or more young birds at a nest in northwestern Cimarron County, about 3 miles north-northwest of Kenton. The nest, about 22 feet up in a cottonwood tree estimated to be 35 feet tall, appeared to have been constructed in an old Northern Flicker's (Colaptes auratus cafer) nest hole. At least four other woodpecker cavities had been drilled above this one in a dead limb at the center of the tree. The easternmost extent of the Black Mesa lay just across the road to the west. On both the 24th and 26th, Shackford obtained photographs of the adults at the nest hole. When he returned on 2 May, he could find neither adults nor young in the area.

On 21 May 1991 the junior author and several of his students found another nest, this time in a nestbox in Tesesquite Canyon about 2 miles south of Kenton. The nestbox, attached to a fence post five feet from the ground, was part of an extensive "bluebird trail" established by the Oklahoma Department of Wildlife Conservation Nongame Program in 1985 and added to by Grigsby and his students in subsequent years. Inside the box they saw young almost ready to fledge. On the following two days, Shackford also observed and photographed adults near this nest and counted at least three young in the box.

The Mountain Bluebird's usual breeding range includes the higher plains and mountains (above 5000 feet) stretching northward and westward from southern New Mexico to Alaska (National Audubon Society Master Guide to Birding, 1983, Vol. 3, p. 50, Alfred A. Knopf, N.Y.).

Sutton ([1982], Species summaries of Oklahoma bird records, Oklahoma Mus. Nat. Hist., Univ. Oklahoma, Norman) reported nests or breeding activity in Cimarron County of far western Oklahoma during 1922, 1923, 1971 and 1973. Extralimital nestings have also been recorded in Harmon (1954, 1957), Greer (1957), and Cleveland (1951) counties of western and central Oklahoma. Several of these included nests with eggs or young birds, the most notable being from Cleveland County.—John S. Shackford, 6008-A Northwest Expressway, Oklahoma City, Oklahoma 73132 and Everett M. Grigsby, 288 Redbud Lane, Tahlequah, Oklahoma 74464.

Cedar Waxwings in Cherokee County, Oklahoma, during June.—The Cedar Waxwing (Bombycilla cedrorum) is a common winter resident in Oklahoma. Its normal breeding range extends over most of central and northern Canada, with scattered isolated nesting records for at least 12 states (A.O.U. Check-list of North American birds, 6th ed., 1983, p. 582). In the main body of Oklahoma, it has been seen from 19 September to 27 May. In Cimarron County, at the western end of the Panhandle, dates of occurrence range from 10 September to as late as 4 June (Sutton, G.M. [1982], Species summaries of Oklahoma bird records, Oklahoma Mus. Nat. Hist., Univ. Oklahoma, Norman).

There are a handful of breeding records for the state. M.M. Nice (1931, The birds of

Oklahoma, rev. ed., Univ. Oklahoma Biol. Surv., Vol. 3(1):148) learned from W.E. Lewis of Gate, in Beaver County, that the species nested there in 1921. In Cimarron County, near Kenton, R.C. Tate (1923, Some birds of the Oklahoma Panhandle, *Proc. Oklahoma Acad. Sci.* 3:49) found a nest on 15 June 1914 with four young birds and another with three eggs on 3 June 1920. Only one nest is known east of the Panhandle: on 17 June 1961, V.J. Vacin Jr., discovered two adults at a nest 20 feet up in an elm tree in Oklahoma City, Oklahoma County (1961, *Aud. Field Notes* 15:478). Four small young were banded on 25 June and one fled ged next day (Sutton, *op. cit.*). A pair of waxwings, probably nesting, was noted in Okmulgee, Okmulgee County, by H. Pitchford and R. Durham on 15 June 1961 (Sutton, *op. cit.*).

On 20 June 1992, I discovered a pair of waxwings along the Illinois River at a place called Combs Bridge, 8 miles north and 2 miles east of Tahlequah in Cherokee County. The time was about 1500, winds were calm, the temperature about 90° F, and skies were partly cloudy. Having just finished a canoe trip from several miles upstream, I was standing on a large gravel shoal in the river. I first noticed a small bird, with rather short tail, fly out over the water from one of the large sycamore trees bordering the west bank. It hovered briefly about 20 feet up, flycatcher-like, then circled back to the west shore and lit in a tree. I suddenly realized that the bird's tail was tipped with a narrow yellow band. The next time it flew out, I noticed that the breast, back and head were brownish, the belly washed with yellow. A companion, Gayle Hagee, also saw a tuft on the bird's head. Other than the much larger Bohemian Waxwing (B. garrulus), only the Cedar Waxwing fits this description. Presently, this bird flew across the river and landed on a tall dead willow snag. Moments later, another joined it, perching about three inches away. These two were undoubtedly paired and possibly nesting. After watching several more "flycatching" sorties by the birds over the river, I moved on.

At 1100 the next day, while canoeing down the river about 4 miles northeast of Combs Bridge, I noticed another waxwing. It, too, was "flycatching" over the water.

These late dates more than likely indicate that this pair of waxwings was breeding. The preceding five weeks had brought an unprecedented succession of cold fronts through Oklahoma that had triggered near-record low temperatures and abnormally high precipitation throughout the state. Too, the preceding winter (1991-92) had been one of the mildest on record. Observers should watch for this species during late spring and summer in the future, with an eye to finding nests, the last having been recorded more than 30 years ago.—Jack D. Tyler, Department of Biological Sciences, Cameron University, Lawton, Oklahoma 73505, 25 June 1992.

THEBULLETIN, the official organ of the Oklahoma-Ornithological Society, is published quarterly in March, June, September, and Devember, at Norman, Oklahoma. Subscription is by membership in the OOS: 55 student, 57:50 regular, 510 family, 515 or more sustaining, per year. Life membership \$125. Treasurer, leffrey A. Cox, P.O. Box 27081, Tulsa, OK 74149. Editor, Jack D. Tyler, Department of Biology, Cameron University, Lawton, Oklahoma 73505. Associate Editors, John S. Shackford, 6008A NW Expressway, Oklahoma City, Oklahoma 73132, and Melinda Droege, Rt. I. Box 516AA, Bartlesville, Oklahoma 74006. Questions regarding subscription, replacement copies, back issues or payment of dues should be directed to: Darrell W. Pogue, OVS Membership/Circulation Chairman, P.O. Box 65, Ada, Oklahoma 74821-0065, ISSN 0474-0750.