

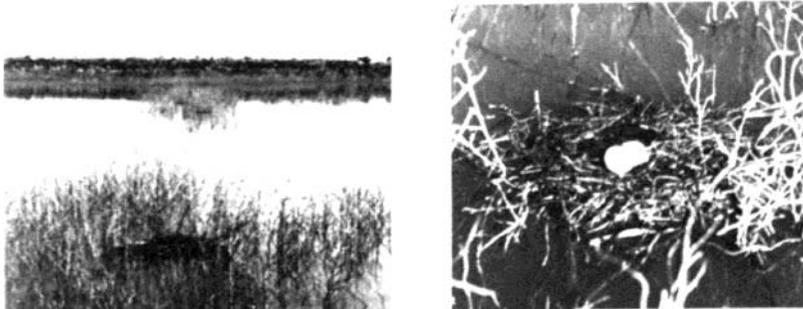
FIRST EARED GREBE NESTS FOR OKLAHOMA

BY JOHN S. SHACKFORD

Several times in the spring and summer of recent years, I have observed Eared Grebes (*Podiceps nigricollis*) singly or in pairs on the Boise City sewage ponds in central Cimarron County at the west end of the Oklahoma Panhandle. Though I searched arduously for a nest, I was never able to locate one.

On 18 June 1987, John E. Skeen, my son Nick and I made a routine check of the ponds. Not surprisingly, we found five Eared Grebes and a Pied-billed Grebe (*Podilymbus podiceps*) swimming about on the northwest lagoon. Toward the center of the pond, we presently saw one of the Eared Grebes approach a fairly large floating nest. As we watched, it hopped on the nest, pulled a small amount of debris over two whitish eggs with its bill, then swam off. We scanned the pond carefully and discovered, also near the middle, two other grebe nests. One was about 60 feet (20m) south of the first, the other about 20 feet (7m) to the north of nest number one. An additional platform on the pond may have been used for resting, but might also have been part of yet another nest.

After a short time, an Eared Grebe made an additional visit to one of the nests, but unfortunately, we could not subsequently recall which nest. During the next 20 or 30 minutes, no grebe returned to any nest. However, when I later waded out to take photographs (below), the three eggs in the northernmost nest were also partially covered. The last two nests found each held three eggs. All were identical to those in the first nest.



EARED GREBE NESTS

Left photo is a south to north view of the three nests found by John S. Shackford at the Boise City sewage ponds. A close-up of the two eggs in the nest visited by one grebe is shown at right. Both photos were made 18 June 1987 by Shackford.

This pond had been dry during the previous several years. The preceding summer, I found dense stands of a tall, weedy forb known as firebush (*Kochia scoparia*), growing on its fertile bed. It was in the sparse remnants of the tops of these, which projected above the meter-deep water, that the nests had been built. We estimated that the pond, which lay north to south, measured approximately 100 by 150 yards.

According to A. C. Bent (Life histories of North American diving birds, Bull. U.S. Natl. Mus. 107, p. 28, 1919), Eared Grebes "are always in evidence about their nesting colonies and are not nearly as shy as the pied-billed grebes. The pied-billed grebe nests in small scattered colonies . . . Moreover the nests of the eared grebe are almost always in open situations, whereas the nests of the other two species [horned and pied-billed] are usually more or less concealed in some kind of vegetation. The nests of the eared grebe are also smaller and less elaborately built than these of the pied-billed or the horned grebes." Even though our three nests were all similar in construction and all built close together in the open, characteristic of Eared Grebes' nests, we could vouch with certainty only for the center one, where we saw an adult grebe pulling vegetation over the eggs.

Unfortunately, the pond was not checked later to ascertain whether or not any nest produced young. The openness of the 1987 nests leads me to suspect that few, if any, of the grebes seen here in the past actually nested, for I believe their nests would have been easily detected.

Some questions pertaining to the behavior and color of the young Eared Grebes described from Kingfisher County in an earlier paper (Ratzlaff, A., Bull. Oklahoma Orn. Soc. 19:9-11, 1986), prompted a review by the newly established Oklahoma Bird Records Committee. It was the considered judgment of the committee, as well as several independent authorities on grebe biology, that the validity of the record was questionable enough that it should not be accepted. Photos of adults, nests, and eggs described herein have been seen, approved, and filed by the committee. They therefore constitute the first documented occurrence of breeding for Oklahoma. This migratory species has, however, nested in the Panhandle of Texas (see Seyffert note that follows).

6008-A N.W. EXPRESSWAY, OKLAHOMA CITY, OKLAHOMA 73132, 14 JANUARY 1988.



EARED GREBES

A pair of Eared Grebes at the Boise City sewage ponds. Note the unturned bill of the farthest bird. Photo taken by John S. Shackford on 18 June 1987.

HYBRIDIZATION OF NORTHERN BOBWHITES AND SCALED QUAIL IN OKLAHOMA AND TEXAS

Northern Bobwhites (*Colinus virginianus*) and Scaled or Blue Quail (*Callipepla squamata*) coexist in southwest Oklahoma, but each has distinctive patterns of behavior and habitat use. The following validates their hybridization in Greer and Harmon counties.

On 23 December 1986, the senior author was hunting quail 7 miles south and ½ mile west of Mangum in Greer County. This is an area of extensive mesquite (*Prosopis juliflora*) pastureland, flat in places, but very rough locally due to erosion gullies and small scattered mesas. Thickets of skunkbush (*Rhus trilobata*), scrubby hackberries (*Celtis reticulata*), and sand-plum (*Prunus* sp.) provide scattered cover. Suddenly, his dog detected a covey of quail in some nearby brush. He counted 18 birds on the ground altogether; one or two appeared to be full Blues, but every other quail there was a hybrid. The covey immediately scattered and began to flush, singly or in twosomes, but they levelled off before rising very high, a trait characteristic of bobwhites. Blue Quail usually reach greater heights before descending back to earth at a shallow angle. When the dog relocated and pointed them, they were hesitant to fly, holding briefly before flushing again — another *Colinus* attribute; Blue Quail much prefer to run from danger than to “freeze.” Webb shot two hybrids from this covey, had them prepared by a taxidermist, and later presented the mounted pair (male, CUMZ 1002; female, CUMZ 1003) to the Cameron University Museum of Zoology in Lawton. Unfortunately, no weights or measurements were taken on the freshly killed specimens.

The fall and winter of 1986-87 proved to be an exceptionally productive year for both species. As an Oklahoma game ranger, Webb is frequently afield in the southwestern counties and sees at least a few crosses approximately every fifth year. There are usually more in Harmon County to the southwest, than in Greer County. Since 1968, he has observed about 15 instances of hybridization, primarily in these two counties. Webb has noticed that pairing is invariably between cock Blues and bobwhite hens. He speculates that the larger, more aggressive Scaled Quail sometimes produces a surplus of males, which actively seek out and mate with bobwhite females. Moreover, he has observed as many as five bobwhite hens mated to a single bobwhite cock, possibly indicating a sometime shortage of males in that species. For some reason, high numbers of Scaled Quail frequently do not pair in this part of the state.

Callipepla also appears to be the hardier of the two. For example, during the bitterly cold winter of 1977-78, Webb found hundreds of Mourning Doves (*Zenaid macroura*) and meadowlarks (*Sturnella* sp.), as well as scores of bobwhites and other smaller birds that had starved or frozen to death. But more than once during this rigorous period, he watched the resourceful Scaled Quail eating seeds from fruits of pricklypear cactus (*Opuntia* sp.) they had dug from debris composing packrat (*Neotoma micropus*) nests. Schemnitz (Amer. Midl. Nat. 71:429-433, 1964) found that the severe drought of 1954-56 in Cimarron County also took a higher toll of bobwhites than Blues.

Plumage colors of the hybrid pair at Cameron University are similar, except that the white of the cock's throat and facial region is replaced by creamy buff in the hen, and the overall coloration of the male is a bit more vivid. Their general appearance trends neither to one species nor the other. They resemble bobwhites in the light color of head and throat; the facial pattern that includes a chestnut auricular patch; the pattern and color of the belly, flanks, under tail coverts, distal portions of the inner secondaries and all the tertials; and the chestnut color of the topknot. Conversely, their plumage is more Scaled Quail-like on the nape, back, upper tail coverts, breast, most of the wing, and in the presence of the topknot. The bills are black.

Mr. Jess Hanna of Tipton, in Tillman County, has shot at least two hybrid quail during the past 15 years in Harmon County. These birds were prepared as taxidermy mounts and are on display in his home. Slides of one of them, killed near Hollis, are on file in the Cameron University Museum of Zoology (CUMZ 1023), but exact dates of collection were not available.

On the late afternoon of 11 September 1987, a mostly calm, sunny day with a high in the lower 80's (°F), Webb, Jack D. Tyler, Victoria Begin (naturalist at Quartz Mountain State Park), and 11 natural history students from Cameron University, drove an irregular 20-mile route on dirt roads leading alternately west and north from Mangum. This line of travel more or less paralleled the Elm Fork of Red River. Except for the more extensive brushlands bordering the river and its small tributaries, this region is similar to that south of Mangum. During this trip through northwest Greer and northern Harmon counties, Tyler counted a minimum of 15 coveys of quail that flew up from the roadway. Each covey contained 15 to 20 quail, the great majority of which were Blues. A conservative estimate of the total number was 290 birds, as follows: Scaled Quail-144; Northern Bobwhites-12; unknown (primarily Scaled)-110; and hybrids-*at least 24!* Webb, a life-long field biologist and hunter who grew up in Greer County, had never before encountered such phenomenal numbers of quail.

Hybrids were noted in three of the 15 coveys, all in Greer County. One, about 10 miles northwest of Reed, contained more than 20 birds, of which six or seven were crosses, the rest Scaled. All of 14 quail in another covey approximately 4½ miles northwest of the first were intermediate in plumage, and a third group 2 miles farther south was made up of 13 Scaled Quail and 4 hybrids.

In numerous sections of the Texas High Plains, Reid, *et al.* (Proc. Ann. Conf. S.E. Assoc. Fish & Wildl. Agencies 33:146-153, 1979) found a positive correlation of whistle counts between the two species, indicating direct competition for habitat during the breeding season. Increasing usurpation of natural vegetative cover by agricultural interests in recent years has thrown these two species into closer contact, forcing them to compete for the remnants of food and cover in many areas of the southern Great Plains. This has probably broken down natural isolating mechanisms that normally prevent interbreeding. However, experiments with captive quail in Oklahoma by Wint (Proc. Oklahoma Acad. Sci. 40:151-52, 1960) strongly suggested that hybrids are sterile.

Rollins (Proc. Ann. Conf. S.E. Assoc. Fish & Wildl. Agencies 35:239-48, 1981) reported that these quails' diets overlapped considerably in southwestern

Oklahoma during the critical fall and winter months. In Cimarron County, another area of sympatry, Schemnitz (*op. cit.*) also observed the similarity of foods in these species during early winter.

Hybridization in the wild has been reported from Morton County, Kansas (Coles, L. S., 1985, *Bull. Oklahoma Orn. Soc.* 18:12-13), and Concho, Motley, and Stonewell counties of Texas (McCabe, R. A., 1954, *Auk* 71:293-97; Sutton, G. M., 1963, *Southwest. Nat.* 8:108-11), but never heretofore from Oklahoma.

Two recent Texas records are also worthy of note. In Howard County, several hybrids trapped in 1978 were suspected to have been the direct result of removal of more than 90% of the male bobwhites from the area by state wildlife personnel (letter of 1 April 1984 to Dr. Warren M. Pulich, University of Dallas, Irving, from Bill E. DelMonte; copy on file in CUMZ). E. D. Dorchester shot a hybrid cock that was with a covey of Scaled Quail in a mesquite pasture near Midland, Midland County, on 27 December, 1986. It is similar to the Oklahoma specimens in plumage, except that the gular area is washed with chestnut. Photos of it are on file at Cameron University.

WESLEY D. WEBB, 220 W. FRANKLIN, MANGUM, OKLAHOMA 73554, AND JACK D. TYLER, DEPARTMENT OF BIOLOGY, CAMERON UNIVERSITY, LAWTON, OKLAHOMA 73505, 13 FEBRUARY 1988.

Breeding status of the Eared Grebe in the Texas Panhandle. — The Eared Grebe (*Podiceps nigricollis*) is generally considered as strictly migratory in the Texas Panhandle. My personal records show that north-bound migrants arrive in late March or early April and all have departed by late May (extreme dates: 11 March-28 May), while dates of southward migration fall between mid-August and late October or early November (extreme dates: 5 August-26 November). On rare occasions, it lingers into mid-winter. Published references to its summer status in the area are few. H. C. Oberholser (1974, *The bird life of Texas*, Univ. Texas Press, Austin, pp. 61-63) shows a summer sight record on his range map for the southcentral sector of the Panhandle, but makes no mention of it in his statewide summary of summer sightings. For Oklahoma, G. M. Sutton (1967, *Oklahoma birds*, Univ. Oklahoma Press, Norman, p. 10) cited one mid-summer sighting (20 July 1958, Oklahoma County). At least three birds in nuptial plumage were observed in Texas County in the Oklahoma Panhandle by W. M. Davis (1970, *Bull. Oklahoma Orn. Soc.* 3:14-15) on 3 June 1969. J. D. Tyler (1979, *Birds of southwestern Oklahoma*, Stovall Mus. Sci. & Hist., Univ. Oklahoma, Norman, p. 10) mentioned a single early summer sighting on 13 June. A nesting record, reported in Kingfisher County, northwestern Oklahoma, in 1984 (A. Ratzlaff, 1986, *Bull. Oklahoma Orn. Soc.* 19:9-11) was not accepted by the Oklahoma Bird Records Committee. The first documented case of breeding occurred in Cimarron County in June 1987 (Shackford, J. S., 1988, *Bull. Oklahoma Orn. Soc.* 21:1-2).

In New Mexico, J. P. Hubbard (1978, *Revised check-list of the birds of New Mexico*, *New Mexico Orn. Soc. Publ. No. 6*, p. 1) placed its breeding range in that state no nearer the Texas Panhandle than the northcentral section. He further stated that "spring migrants irregularly persist in non-breeding areas

into June." In summarizing the Eared Grebe's breeding range in the Great Plains, P. A. Johnsgard (1979, *Birds of the Great Plains*, Univ. Nebraska Press, Lincoln, pp. 8-9) defined it as "nearly all of North and South Dakota, northwestern and southwestern Minnesota, northwestern Iowa, the northwestern part of Nebraska, and probably adjacent Colorado." The purpose of this note is to publish breeding records for the Texas Panhandle.

The first reported nesting of the Eared Grebe in the Texas Panhandle is that of A. S. Hawkins (1945, *Bird life of the Texas Panhandle*, *Panhandle Plains Hist. Rev.* 8:111-12). On 6 August 1945 he observed two adult birds and four "quarter-grown" young on a playa lake near Washburn, northwestern Armstrong County. Furthermore, "Floating among the rushes in about eighteen inches of water, four nests were found. One nest contained nothing but chips of egg shell, another held seven warm eggs lightly covered with rush stems, the third was empty, and the fourth is known to have had on July 26 two eggs, one of which was pipped." Because at least one pair of Pied-billed Grebes (*Podilymbus podiceps*) also summered on the playa, he could not be sure to which species the nests belonged.

During the early summer of 1972 a nesting colony of Eared Grebes was reported at the upper end of the Buffalo Lake National Wildlife Refuge, southwestern Randall County, by then assistant refuge manager, Milton Suthers. I visited the area on 2 July and found 19 adult grebes; however, because of a rapid fall in water level, their nesting site was inaccessible. On 16 July I found 12 adults, and on 30 July, 16. By this latter date the area was more or less dry, but not too far away I spied an adult Eared Grebe swimming close to shore, accompanied by one chick in downy plumage (Williams, F., 1972, *Amer. Birds* 26:873). On 6 and 20 August, respectively, I observed one and two adult grebes.

On 5 September 1982, E. B. Ellis found a breeding colony on a playa lake 4½ miles southeast of Kingsmill, in northwestern Gray County. This permanent lake receives effluent from the nearby Celanese Chemical Corporation plant. Ellis counted at least 40 adult grebes with young birds. Two adults he saw had chicks riding on their backs.

D. H. Fischer, *et al.* (1982, Checklist of birds from the playa lakes of the southern Texas Panhandle, *Bull. Texas Orn. Soc.* 15:2-7) classified the Eared Grebe as a "summer resident" with breeding records known for Castro and Swisher counties. However, specific nesting locations were not given.

On numerous other occasions I have recorded this species during summer as follows: south of Amarillo, Randall County, 4 July 1968 (1); southwestern Sherman County, 22 June 1975 (pair); west-central Parmer County, 7 June 1977 (pair); playa in southwestern Castro County, 4 June 1978 (10); playa in southwestern Ochiltree County, 16 June 1979 (6); and southeast of Amarillo, Randall County, 12 June 1984 (pair). Peggy Acord reported pairs at Buffalo Lake NWR, Randall County, on 10 and 18 July 1958, and south of Amarillo, Randall County, on 25 and 26 June 1968. Finally, Fern Cain observed one in Ochiltree County on 13 June 1976. — Kenneth D. Seyffert, 2206 S. Lipscomb St., Amarillo, Texas 79109, 9 July 1985.

Loggerhead Shrike preys on Horned Lark.—On 21 December 1985, at about 0915, as I drove along a country road 2¼ miles south and 2 miles east of Middleberg, Grady County, Oklahoma, a Loggerhead Shrike (*Lanius ludovicianus*) flew across the road in front of me, burdened by a large prey item carried in its beak. It dropped its prize on the road, flew on to a roadside plum thicket, perched, and glared back intently. What the shrike had jettisoned proved to be a freshly killed Horned Lark (*Eremophila alpestris*) that lacked visible wounds or bloodstains. I placed the lark back in the road and drove away.

When I returned at about 1000, a shrike was watching me closely from a nearby electric line, and the Horned Lark's headless body lay beside the plum bushes. Comer (Bull. Oklahoma Orn. Soc. 13:13-15, 1980) described a similar incident involving the decapitation and carrying of a Northern Cardinal (*Cardinalis cardinalis*) by a shrike in northeastern Oklahoma. This is apparently the heaviest species known to have been transported in flight by a shrike (Ingold, J. J., and D. A. Ingold, 1987, J. Field Orn. 58:66-68).

I came back about 1130 to find the Horned Lark nowhere in sight, nor did I find any feathers strewn about. The shrike probably removed its prey, but another predator, such as the house cat whose tracks I found nearby, might have done so.

The weather on 21 December was quite cold, with a low temperature of 23°F accompanied by a north wind of 6-9 mph. Perhaps these stark conditions diminished the shrike's chances of obtaining smaller invertebrates, forcing it to tackle such large prey. Ingold and Ingold (*op. cit.*) reported the mean weight of the Loggerhead Shrike as 47.4 ± 3.26 g and of the Horned Lark, 31.9 g. Therefore, its prey would have weighed about 67% as much as the shrike.

There are few records of this species falling prey to a Loggerhead Shrike. Wiggins (Condor 64:78-79, 1962) saw a shrike take one in flight during late March 1961 in Baja California, Mexico, and Conley (Southwest. Nat. 27:367, 1982) reported a shrike carrying a Horned Lark in its "talons" near Cloverdale, in Hidalgo County, New Mexico, on 23 July 1980. — Larry P. Mays, *Route 3, Box 555, Blanchard, Oklahoma 73010, 3 November 1987.*

Unusual food of Purple Finches. — On 12 January 1986, at approximately 1500, I was walking through an upland area near Hogshooter Creek 6 miles east of Bartlesville, Washington County, Oklahoma. The day was mild (about 55°F), sunny and calm. I came upon an open glade in the woods and decided to sit by a little stream. Suddenly, out of a nearby brushpile burst forth a flock of about 12 Purple Finches (*Carpodacus mexicanus*) of which three were bright raspberry-colored adult males, at least five less colorful subadult males, and the remainder brown females. This was surprising, as I had not thus far seen a single Purple Finch at my nearby feeders this winter, although Evening Grosbeaks (*Coccothraustes vespertinus*) and other finches had been fairly common visitors.

Three of the immature male finches perched near the top of a 30-foot honey locust tree (*Gleditsia triacanthos*) were eating what I assumed to be seeds from

the long brown pods. But when I focused my binocular on them, I was amazed by what I saw. The finches were snapping off and actually *eating* the sharp spines from the tree's limbs, but I could not tell whether they were being swallowed point-first or not.

I inspected the spines attached to the lower branches. The older thorns were brittle while newer ones bent under pressure and were a reddish color. Some measured as much as two to three inches long, and all were extremely fine-tipped. I tried breaking them as the finches had done with so much apparent ease. I could snap the old thorns and remove them with much twisting, but had no success in breaking off the younger spines because of their pliability. I could not tell whether the finches were eating the old thorns or the new.

John K. Terres (1980, *Encyclopedia of North American birds*, Alfred A. Knopf Co., New York, p. 328) lists the Purple Finch's foods as "seeds of weeds, grasses, elm, white ash, red maple, sycamore, sweet gum, cedar berries, winter-berry, buds of apple, aspen, maple and birch." Indeed, Terres does not list any of the larger-billed finches as eating honey locust spines. However, many species enjoy the beanlike seeds and even the "sweetish pulp of the pods, like honey, is consumed by livestock and wildlife" (1981, *Forest trees of Oklahoma*, Oklahoma Forestry Division, Oklahoma City, p. 139).

Though I could find nothing in the literature relevant to the poison contained in the needle-pointed honey locust spines, anyone who has been pierced by one will agree that it has a slight paralytic effect. I returned the next day, fully expecting to find some dead Purple Finches. I hoped to determine whether they had been perforated or poisoned. I found none, either dead or alive. — Melinda Droege, *Rt. 1, Box 516AA, Bartlesville, Oklahoma 74006, 13 February 1986.*

FROM THE EDITOR: Many persons, unheralded in print, contributed to Volume 20 (1987). Dr. John P. Hubbard of the New Mexico Department of Game and Fish made helpful comments on the December Great-tailed Grackle note. In the present issue, three widely recognized grebe experts were consulted, and I wish to extend the society's appreciation to each of them: Drs. Gary Nuechterlein, Department of Zoology, North Dakota State University; John T. Ratti, Department of Zoology, Washington State University; and Robert W. Storer, Museum of Zoology, University of Michigan.

There may be rekindled hope for the Eskimo Curlew (*Numenius borealis*), considered all but extinct until recently. It has been reported in migration several times during the 1980's in the central and southern U.S. In late May of 1987, biologists discovered a pair (possibly at a nest) in the Canadian Arctic (USDI Endangered Species Tech. Bull. 12(8), 1987). — Jack D. Tyler.

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