

NESTING OF THE YELLOW-HEADED BLACKBIRD  
IN THE PANHANDLE OF TEXAS

BY KENNETH D. SEYFFERT

The Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*) is, according to my records of many years, primarily a transient in the Texas Panhandle, usually encountered sometime between 21 March and 18 June in spring and 3 July to 14 November during fall. Spring migration is largely over by mid-May and in autumn most Yellow-headededs have passed through by late September. Rarely is this bird seen in winter and, with a single exception, it is not known as a breeding species in Texas. Early in this century, Strecker (1912) stated: "May breed in some localities but I have no authentic record of it nesting in the State." Oberholser (1974) cited a possible nesting in the Panhandle: "Thought to have bred in Oldham County (1899)," and three other possible nestings much farther south: "Mason County (1884, 1886) and Culberson County (1939)," but he questioned the validity of all these. The one nesting record he acknowledged was McCauley's (1877), who observed the species "at only a few places," and who discovered but "a single nest . . . in the canyon of the Red River . . .," in what is now Armstrong County during the latter part of May, 1876. Prior to the documentation below, the localities nearest the Texas Panhandle where nesting was known with any regularity were eastern Colorado and southwestern Kansas (Johnsgard, 1979) and at Tucumcari Lake, in Quay County, northeastern New Mexico (Hubbard, 1978), where it apparently has become established (Hubbard, 1983). Sutton (1967) cited one breeding record for Oklahoma: on 19 June 1914, a nest with three eggs was collected near Kenton in Cimarron County, at the far western end of the Panhandle.



Marsh located about 10 miles west of Kress, southwestern Swisher County, Texas, where approximately 50 pairs of Yellow-headed Blackbirds nested in 1990. Photo taken by Nancy Elliott on 19 June, 1990.

On 12 May 1978, Max S. Traweek, Jr., of the Texas Parks and Wildlife Department, discovered a colony of nesting Yellow-headed Blackbirds on a perennial playa lake near a cattle feedlot located 11 miles west of Hart in southcentral Castro County, Texas. This site is about 60 miles southwest of Amarillo. One nest held three eggs and two others contained two eggs each. He told me of his find, and we returned to the site on 20 May. The playa was surrounded by pastures and croplands and bisected by a dirt road. The western portion of the lake adjoined the feedlot but was devoid of emergent vegetation save for a few willow trees (*Salix* sp.). The eastern section, in addition to roadside willows, supported scattered islands of cattails (*Typha* sp.) and bulrushes (*Scirpus* sp.), some rather extensive in circumference. One cattail island near the road was accessible to wading. Here we found eight Yellow-headed Blackbird nests containing four eggs each, and at least as many empty ones (Williams, 1978). The other clumps of cattails farther out were not searched, but numerous adult Yellow-headed, mostly females, were seen thereabouts. Also nearby was a flock of approximately 50-75 adult males. Pictures we took of one nest were deposited with the Texas Photo-Record File at Texas A&M University (No. 137).

On 4 June, I returned alone to the nesting site. In the interval, a heavy rain had fallen, raising the water level of the lake considerably. I believe that the nests I found this trip represented a renesting because only three empty nests remained in the cattails that earlier had held 16 nests. In a section of the cattail island previously without nests, I found the following: two nests with one egg each; two with three eggs each; one with four eggs; one with one egg and two young a day or so old; and one with three young with eyes not yet open. There were also three empty nests. The nests were deep and compact cups of coarse plant stems, the ones at the periphery woven rather loosely compared to those in the center. All were secured to the lower stalks of cattails. The eggs were light blue, finely speckled and mottled with brown or reddish-brown, and oval to long-oval in shape. Measuring from their bases, the height of the nests above water level ranged from 8 to 32 inches, averaging 23 inches. Depth of the water was from 3 to 4 feet. My last visit to the colony that year was on 2 July, at which time I saw a dozen or more adult birds feeding their young.

Four years later, on 4 July 1982, Peggy Acord and I visited the playa again. On this late date we observed several juvenile Yellow-headed Blackbirds, as well as numerous adult females that were entering the cattails with food items in their bills, presumably feeding young (Williams, 1982). During my most recent visit to the site (16 May 1987), I estimated 30 Yellow-headed pairs present, the males defending territories and several females nest-building (Williams, 1987).

On 6 June 1979, I examined two other playa lakes in northwestern Castro County where I encountered fairly large numbers of Yellow-headed Blackbirds and where indications of nesting were strong. Deep water, however, prevented a search for nests (Williams, 1979). One of the playas was adjacent to a cattle feedlot and the other was a tailwater lake adjacent to cultivated fields. Both contained many cattail islands. Subsequent to our 1978 find, Fischer et al. (1982) reported Yellow-headed Blackbirds nesting not only in Castro County but also in adjacent Parmer County to the west and Swisher County on the east. More recently, on 19 June 1990, Nancy and Ed Elliott and Carolyn Boyd, while taking part in the Texas Breeding Bird Atlas Project, observed 50 or more nest-building pairs. These birds were at a playa located approximately 10 miles west of Kress in Swisher County (Lasley and Sexton, 1990; see lead photo).

All of the above observations were made in the southwestern part of the Panhandle. On a number of occasions in summer I had found small numbers of Yellow-headed Blackbirds on a perennial playa a half mile east of Spearman, Hansford County, in the northcentral Panhandle. On 7 May 1989, I visited this site and found males singing and displaying on territories. There were also several females in the area, and I observed one with nesting materials in her bill that entered the cattails near a displaying male (Lasley and Sexton, 1989). This site is approximately 30 miles south of Optima Lake in Texas County, Oklahoma, where the species was found nesting on 29 May 1986 for the first time in that state since 1914 (Shackford and Tyler, 1987).

It is not uncommon to see small groups of Yellow-headed Blackbirds in many parts of the Texas Panhandle in summer, particular in late June and early July, leading to speculations that it is a more common nesting species than generally thought. Close observation of most of these birds, however, has indicated that they were early southbound migrants rather than residents. This was also the opinion of Sutton (1967, *op. cit.*) in reference to midsummer sightings in western Oklahoma. Such conclusions are supported by the findings of Royall et al. (1971), who reviewed recovery data on Yellow-headed Blackbirds banded in North and South Dakota. Some recoveries of birds banded earlier in the year were made in the Texas Panhandle and southwestern Oklahoma, primarily between July and September. His findings showed a rapid and direct southward migration from the Dakotas during which these birds travelled at least 70 miles per day. Early migrants, therefore, could be in western Oklahoma and northwest Texas in little more than a week. Numerous times in summer I have observed adult males singing on territory without finding them nesting. For example, I discovered four singing males in a marsh about 50 miles north of Amarillo in northeastern Moore County on 6 June 1978. A thorough search of the marsh, however, revealed neither nests nor female blackbirds.

The question must be raised as to what ecological events have taken place to induce the Yellow-headed Blackbird to take up residence in the Texas Panhandle, a significant extension southward of its recent breeding range. The area has undergone profound changes in land use during this century, particularly in the last 50 years. Most areas that were originally shortgrass prairie are now intensively cultivated, and many cattle feedlots dot the area. Some playas that were once intermittent or ephemeral in nature are now permanent, fed by tailwaters from irrigated croplands or runoff from feedlots. Some new ponds have likewise been created. An estimated 85% of the larger playas in the Panhandle have been modified by man (Bolen et al. 1979).

Orians (1966) set forth the ecological parameters found in a small isolated colony of nesting Yellow-headed Blackbirds that had recently immigrated into an area beyond its known breeding range. The requirements for nesting that he found closely parallel conditions at the Castro County nesting site: (1) a warm and sunny climate; (2) lakes of a relatively constant level with consequent emergent vegetation (principally *Typha* and *Scirpus* spp.) needed for both nesting sites and as primary foraging areas; (3) some surrounding grassland as important supplementary feeding grounds; and (4) water within a certain range of conductivity. This latter factor has not been assessed at the Texas sites. Conductivity was considered "directly correlated with the concentration of dissolved solids in the water, which, in turn, has a strong correlation to the productivity of plankton." This productivity is finally channeled into certain aquatic insects, importantly odonates (damselflies), one of the principal foods of young

blackbirds. Other important prey included coleopterans (beetles), trichopterans (caddisflies), and dipterans (flies). Runoff from heavily fertilized croplands and feedlots would certainly produce higher concentrations than normal of dissolved solids, and it would be reasonable to think that this has occurred at the Texas nesting sites. Merickel and Wangberg (1981) found the insect orders Odonata and Coleoptera among the major taxa present on playa lakes in the southern high plains, with Trichoptera and Diptera less well represented.

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