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WHITE-FACED IBISES NEST AT SALT PLAINS NATIONAL WILDLIFE REFUGE, OKLAHOMA

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The White-faced Ibis (*Plegadis chihi*) is considered a rare migrant and summer visitor in Oklahoma (Baumgartner, F.M., and A.M. Baumgartner, 1992, Oklahoma bird life, Univ. Oklahoma Press, Norman, pp. 74-75). This species is a "rare and erratic nester" in the Great Plains (Johnsgard, P.A., 1979, Birds of the Great Plains, Univ. Nebraska Press, Lincoln, p. 41) but has bred in several locations in the region surrounding Oklahoma (Johnsgard *op. cit.*; Rider, R.R., and E.M. Maney, 1994, White-faced Ibis, *in* The birds of North America, No. 130 [A. Poole, P. Stettenheim, and F. Gill, eds.], Acad. Nat. Sci., Philadelphia, & Amer. Ornithol. Union, Wash., D.C.). Since about 1970, it has undergone a range expansion (Baumgartner and Baumgartner, *op. cit.*; Sutton, 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 44), due in part to the ban of DDT and to habitat management on state and federal wildlife refuges (King, K.A., D.L. Meeker, and D.M. Swineford, 1980, White-faced Ibis populations and pollutants in Texas, 1969-1976, *Southwest. Nat.* 25:225–240; Ryder and Manry, *op. cit.*). This report represents the first and second known documentations for nesting of this species in Oklahoma.

For several years prior to 1992, White-faced Ibises have been observed annually throughout summer on Ralston Island, a 1.8-ha sliver of land in the northern part of Great Salt Plains Reservoir, in Salt Plains National Wildlife Refuge, Alfalfa County, northcentral Oklahoma (pers. observ.). As the refuge biologist, I decided to ascertain whether or not they were breeding.

In 1995, an estimated 19,000 Cattle Egrets (Bubulcus ibis) and about 4000 other herons and egrets of four species used this island for nesting, as did lesser numbers of Great-tailed Grackles (Cassidix mexicanus) and Double-crested Cormorants



Fig. 1. White-faced Ibis at nest. Salt Plains National Wildlife Refuge, Oklahoma, 21 June, 1995. Photo by Ron S. Shepperd.



Fig. 2. White-faced Ibis chick and eggs. Nest material primarily horseweed (Conyza canadensis). Photo taken 30 June 1995 at Salt Plains National Wildlife Refuge, Oklahoma, by Ron S. Shepperd.

(*Phalacrocorax auritus*; see following paper). These numbers were based on a survey of Ralston Island made 27 June 1995 by Marcus T. Koenen, Bryan R. Winton, and Dr. David M. Leslie, Jr., from the Oklahoma Cooperative Fish and Wildlife Research Unit at Oklahoma State University.

When refuge manager Rod Krey, United States Fish and Wildlife Service regional biologist Bill Howe and I visited Ralston Island on 14 June 1995, we discovered nine juvenile and several adult White-faced Ibises there. One week later, I counted eight adult ibises along that section of the island where we had earlier observed the young birds. After coming ashore, I began to search nearby shrubby vegetation for nests. The island was dominated by exotic salt cedar (*Tamarix* sp.), together with various assemblages and densities of smooth sumac (*Rhus glabra*), hackberry (*Celtis occidentalis*), honey locust (*Gleditsia triacanthos*), cottonwood (*Populus deltoides*), red mulberry (*Morus rubra*) and elms (*Ulmus* sp.). Horseweed (*Conyza canadensis*) and various grasses constituted most of the ground cover.

Presently, an adult ibis flushed from a nest built of horseweed and situated a few inches off the ground. It contained four eggs. Slides and a video tape were made of this nest (Fig. 1). Soon, I found two others, each located about 4.5 m from the first nest. As with the first, these nests also were constructed mainly of horseweed supplemented with small twigs and grasses. One of them had three eggs, the other two.

A subsequent visit by the author on 30 June disclosed 14 additional ibis nests containing either eggs or young birds (Fig. 2). A final search on 5 July was conducted by Krey, Winton, Leslie, and me. By thoroughly searching the island, we managed to locate an incredible 23 previously unknown nests, bringing the total to 40.

On 5 July, Winton and Leslie conducted a wandering quarter transect on both the north and south ends of the island in order to determine tree density. This also allowed them to estimate the number of nests for each species using the rookery. Relying on these data, together with their earlier population estimate (161 ibises) on 27 June, I calculated that perhaps as many as 40 other undiscovered nests might have been initiated during the summer of 1995, which would have brought the total number to about 80 nests!

ADDENDUM: Unknown to the author, state game ranger Dakota R. Cagle discovered a White-faced Ibis nest at a Caddo County pond 4 km (2½ mi) north and 18 km (11 mi) east of Binger in late July 1993 (pers. comm.). Cagle initially saw a pair of birds in a willow stand at the swampy upper end of the pond. On several consecutive inornings thereafter, he watched one ibis fly out of these trees. When he searched the willows, Cagle found a nest of reeds and cattails that contained three eggs and that was nestled in the fork of a cottonwood sapling about one m above the water. He checked the nest daily until noting that all three eggs had hatched. Photos were taken of this nest. All five birds remained in the area until early October. In 1994, two ibises returned and may have nested. However, Cagle saw no ibises there in 1995.

In the future, Oklahoma birders should make a point of checking suitable habitat for nesting ibises anywhere in the state during the breeding season.

SALT PLAINS NATIONAL WILDLIFE REFUGE, ROUTE 1, BOX 76, JET. OKLAHOMA 73749, 14 AUGUST 1995.