

again checked the colony and noted some young birds perched at burrow entrances.

On 7 June 1962, J. E. Brogdon found a lone pair seven miles west of Gainesville, Alachua County (circle 3). The nest of this pair contained three small young. This is the northernmost definite breeding record of this race.

Several breeding specimens collected by R. W. McFarlane near Davie, Broward County (circle 4), on 30 March 1961 help to bridge the gap between the main portion of the range and the Miami area.

A single pair reared three young on Marathon Key, Monroe County (circle 5), well to the south of the previously known breeding range (Paulson and Stevenson, *Aud. Field Notes*, 6: 401, 1962).

The three new northern breeding sites listed above are located in habitats similar to those described by Neill for the five Marion County localities. In all cases the open area surrounding the burrow was fairly extensive, the grass was either grazed or mowed, and fences were close by, affording perches.

The evidence, as Neill indicates, is that these owls are taking advantage of man-made changes to extend their range. As the cattle industry in northern Florida continues to grow, causing more land to be opened for pasturage, so probably will the range of the Burrowing Owl increase.

These owls are actually reclaiming some of their prehistoric range. At a Pleistocene fossil site near Haile, Alachua County, I have found the Burrowing Owl to be one of the more common birds represented. Recently Brodkorb (*J. Paleont.*, 31: 129-138, 1957) also listed the Burrowing Owl at the Reddick, Marion County, fossil locality.

I wish to thank Dr. Pierce Brodkorb for his many useful suggestions and critical readings of the manuscript.—J. DAVID LIGON, *Department of Biology, University of Florida, Gainesville, Florida.*

Additions to the known breeding ranges of several species in south Texas.

—The distributional status of the following species as given in the A.O.U. *Check-list of North American birds* (5th edition, 1957) is substantially modified by the data here reported.

Least Grebe. *Podiceps dominicus brachypterus*.—The *Check-list* designates Aransas County as the eastern limit of the breeding range of this species. While sight records in the winter months have been fairly common both in Calhoun and Refugio counties since 1947, no nesting was observed until 1960. When a prolonged drought in south Texas was broken in 1957 and there followed five years of more than average rainfall, many shallow lakes and reed-bordered ponds were formed, with a great influx of breeding water birds in both Calhoun and Refugio counties. Included were the Pied-billed Grebe (*Podilymbus podiceps*), Least Bittern (*Ixobrychus exilis*), Black-bellied and Fulvous tree ducks (*Dendrocygna autumnalis* and *D. bicolor*), Blue-winged Teal (*Anas discors*), Ruddy Duck (*Oxyura jamaicensis*), Purple and Common gallinules (*Porphyryula martinica* and *Gallinula chloropus*), and American Coot (*Fulica americana*). In the first three years no Least Grebes were seen in summer, but in 1960 they appeared in numbers and in late July and early August I observed 15 nests in two small ponds in northern Refugio County. Most of these nests held either four or five eggs, varying in condition from fresh to hatching. No count was made of nests in Calhoun County but birds were observed on every suitable pond.

American Bittern. *Botaurus lentiginosus*.—The *Check-list* defines the southern limits of the breeding range as "locally in northern Texas (Wilbarger County)." While this bittern is never common in south Texas, occasionally one is flushed, either in summer or winter, in a suitable cat-tail or tule marsh. On 25 May 1940 I found

a nest with four hatching eggs in a freshwater marsh on Galveston Island, Galveston County. On 14 April 1941 I took three fresh eggs from a nest in a cat-tail marsh in the same area. Since that time I have seen bitterns often on Galveston Island and in adjacent coastal marshes in the breeding season but have not looked for nests.

Blue-winged Teal. *Anas discors*.—The *Check-list* gives the southern limits of the breeding range as western and central Texas. Until 1957 this species was a very rare summer resident in this region, but since then there has been abundant summer rainfall and it has become a common breeding bird in San Patricio, Refugio, and Calhoun counties, and now one or more breeding pairs can be found around nearly every freshwater pond. Nesting usually occurs from June into August. I have obtained many colored pictures of adults with young of various sizes and plumage stages.

Ruddy Duck. *Oxyura jamaicensis*.—The *Check-list* gives only "central Texas" as the southern limit of the breeding range in the United States. Since 1957 this duck has been a rather common breeding species in both San Patricio and Refugio counties. The typical habitat is a shallow, freshwater pond with a good growth of reeds and marsh grass. The nest is normally placed well out in a pond, some distance from shore, and anchored around a clump of marsh grass or reeds. Nesting is normally in late June and July when I have seen numerous nests and young.

Cooper's Hawk. *Accipiter cooperii*.—The *Check-list* gives only "south-central Texas (Kerrville)," as the southern limit of the breeding range in Texas. This hawk is occasionally observed in this area throughout the year and is probably more common than generally reported, being retiring in habits and secluded in habitat. I found a nest containing four eggs near Blanconia, Bee County, on 15 May 1950, and another containing four eggs on 6 May 1960 about 1.7 km (1 mile) west of the city of Refugio. This was about 8 meters (25 feet) from the ground in a live oak in a thick woods adjacent to a freshwater pond. Apparently the nest had been taken over from a pair of Red-shouldered Hawks (*Buteo lineatus*) that had used it nearly every season for many years. A few fresh twigs had been placed on the old nest and then a thin lining of pieces of bark.

Marsh Hawk. *Circus cyaneus*.—The *Check-list* defines the southern breeding limits of this species as "northern Texas (probably)." In Refugio County the Marsh Hawk is an abundant winter resident and enough birds remain to summer so that one or more can be observed nearly every day. On 30 April 1960 I investigated a nest found by a friend and found it to be that of a Marsh Hawk. The nest was on the ground and consisted of a shallow, cupped matting of coarse grass and weed stems about three inches thick and 18 inches in diameter. It was well hidden in tall grass, surrounded by weeds and dewberry vines. The nest contained five eggs that seemed to be unusually well marked for this species. I made colored slides of the nest and eggs and of the female parent. The only previous mention of nesting in south Texas may be the comparatively little known statement of Stephen G. Williams (*Checklist of the birds of the upper Texas coast*. Houston Outdoor Nature Club, 1962. See p. 15.): "A few summer and often breed near Texas City, Seabrook, and La Porte, but not at other places."

Robin. *Turdus migratorius*.—The *Check-list* states "breeds south to central and eastern Texas (San Antonio, Austin, Waco, Marshall)," but makes no mention of the Gulf Coast region. Robins breed south to the Gulf Coast in eastern Texas and west as far as Refugio County. Although they are not common in Refugio County, in the summer of 1961 a pair reared a brood across the street from my house in the city of Refugio.—TRAVIS C. MEITZEN, *Refugio, Texas*.