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Mallard-like ducks in the Playa Lakes Region.—The relationship of the Mallard (*Anas platyrhynchos* L.) to similar members of the genus *Anas* is often complex (Johnsgard 1961). Hybridization of Mallards with American Black Ducks (*A. rubripes* Brewster), Mottled Ducks (*A. fulvigula maculosa* S.), and Mexican Ducks (*A. diazi* R.), further complicates taxonomic status and identification of subgroups within the Mallard complex. Experimental crosses and back crosses of Anatini result in a broad range of overlapping phenotypes (Phillips 1915, 1921). Furthermore, subgroups within the Mallard complex are often difficult to differentiate using biochemical methods (Ankney et al. 1986, Hitchmough et al. 1990). Thus, for wild monomorphic hybrids within the Mallard complex, it may be difficult at best to determine the taxonomic status of both parental types based on plumage characteristics or biochemical analysis and nearly impossible to determine in which F_i generation the bird belongs.

The Playa Lakes Region (PLR) in the Southern Great Plains represents a major wintering area for waterfowl in the Central Flyway. At least 14 species of ducks occur on the PLR. However, few Mallard-like ducks have been reported. Oberholser (1974a) reported a Mexican Duck collected in Swisher County, Texas and a sight record in Randall County, Texas. However, Hubbard (1977) believed that both were probably Mottled Ducks and he suggested that reports of Mexican Ducks in Colorado and Nebraska were most likely hybrids between Mallards and Black Ducks or Mallards and Mottled Ducks. Although Mottled Ducks have been considered a coastal species, they have been found in Oklahoma (Sutton 1971), Kansas (McHenry 1968), Nebraska (Silcock et al. 1986), northeast Texas, Iowa, and Wisconsin (Stutzenbaker 1988). These reports suggest extensive inland movements by at least some individuals from traditionally non-migratory Mottled Duck and Mexican Duck populations.

Due to the paucity of information concerning Mallard-like ducks on the PLR, we report two sight and four specimen records. Where possible, physical measurements of body mass, body length, and wing length of the specimens were compared to male Mallards collected during the same periods. In addition, maximum length, width, and height of the culmen, and the length of the tarsus and middle toe were measured for three specimens.

A male duck resembling a female Mallard was shot 3 November 1984 on a playa lake in Castro County, Texas (34°24′N, 102°15′W); the specimen was thought to be either a Mottled Duck or Mexican Duck (P. N. Gray, pers. comm.). During waterfowl trapping operations (Fedynich et al. 1989) on 26 January 1986 in Parmer County, Texas (34°28′N, 102°55′W), a female Black Duck was captured, photographed, and released. Apparently,

TABLE 1

COMPARATIVE MEASUREMENTS OF MALLARD-LIKE DUCKS WITH MALLARDS COLLECTED IN THE PLAYA LAKES REGION OF TEXAS

					Mallard		
Measurement[a]	Specimen 1	Specimen 2	Specimen 3	Specimen 4	N	$\bar{x}$	SE
Mass	1129	1200	1338	1224	257	1248	8.1
Wing-chord length	289	240[b]	285	278	258	291	0.6
Total body length[c]	459	475[b]	460	—	204	501	1.3

[a] Mass in g, lengths in mm.
[b] Values from museum prepared specimen; wing could not be fully extended.
[c] Measured from tip of bill to base of tail feathers.

TABLE 2
SELECTED MEASUREMENTS OF MALLARD-LIKE DUCKS COLLECTED ON THE PLAYA LAKES REGION OF TEXAS

Measurement[a]	Specimen 2	Specimen 3	Specimen 4
Hubbard index value[b]	30	32	25
Exposed culmen length	55	58	57
Culmen nail to nostril	41	45	42
Maximum culmen height	22	20	25
Maximum culmen width	22	22	24
Middle toe length	56	56	54
Tarsus length	41	44	47

[a] Lengths in mm.
[b] Values can range from 0 for phenotypically "pure" Mallard to 36 for phenotypically "pure" Mexican Duck.

this is a new locality record for this species. A male duck with traits resembling those of a Mexican Duck, was collected 26 October 1988 by O. E. Rhodes, Jr. on a playa lake in Parmer County, Texas (34°31'N, 102°46'W); rudimentary measurements were made (Table 1, specimen 1) before its inadvertent loss. Another male (specimen 2), found in the waterfowl collection at the Texas Tech Museum, was cataloged as a Mexican Duck. It was collected on 6 December 1980 by L. W. Robbins in Castro County, Texas (collection number TTU 4158). Specimen 3, a male duck resembling a Mexican Duck, was collected on 30 November 1988, on a playa in Castro County, Texas (34°30'N, 102°20'W) by O. E. Rhodes, Jr. Another male (specimen 4) resembling a Mexican Duck was collected 16 January 1990 by A. M. Fedynich on a tailwater irrigation pit in Castro County, Texas (34°26'N, 102°04'W). Specimens 3 and 4 were deposited in the Texas Tech Museum, Lubbock, Texas (TTU 4224 and 4225).

Plumages of specimens 2 and 3 appeared consistent with descriptions of Mexican Ducks (Palmer 1976a, Hubbard 1977). However, specimen 4 most closely resembled the description by Oberholser (1974a) of the Northern Mexican Duck (*A. diazi novimexicana*), which is now synonymized as *A. platyrhynchos diazi*. Hubbard (1977) index values for specimens 2, 3, and 4 were similar to those of Mallard × Mexican Duck hybrids (Table 2). However, since the Hubbard index generally weights plumage coloration by how dusky a bird is, it may not differentiate between Mottled or Mexican Ducks. It is possible that specimens designated by the Hubbard index as Mallard × Mexican Duck hybrids could also be Mallard × Mottled Duck hybrids.

Obvious differences between specimens 2, 3, and 4 and a phenotypically pure male Mallard (alternate plumage) included the overall female Mallard-like coloration, absence of a green head and white neck collar, presence of a dark eye stripe, and fuscous lesser and middle coverts with light brown edging. In each of our specimens the greater coverts had prominent subterminal white and terminal black banding and the secondaries had subterminal black and terminal white banding, which precluded them from being either a Black Duck or Mottled Duck. However, because of the wide range of plumage variation found in Mallard × Black Duck and Mallard × Mottled Duck hybrids (Phillips 1915, 1921), we cannot discount the possibility of hybrid combinations, even though plumage characteristics (excepting the 2 white speculum bars) of male Mallards were absent.

Specimen measurements (Tables 1 and 2) were generally within the ranges reported for Mexican Ducks (Oberholser 1974a, Hubbard 1977, Scott and Reynolds 1984) and Mottled

Ducks (Oberholser 1974b, Palmer 1976b, Stutzenbaker 1988). However, our specimens tended to be heavier than sample averages of Mottled Ducks from coastal Texas (Stutzenbaker 1988) and Florida (Palmer 1976b), and were more similar to Mallards collected on the PLR (Table 1). This may have been the result of seasonal fat deposition, which occurs in Mallards overwintering on the PLR (Whyte et al. 1986).

Four of the Mallard-like ducks were shot during field collections for Mallards and were initially thought to be hen Mallards before in-hand inspection. The ratio of these ducks to phenotypically normal Mallards (males and females) collected during winters 1984–1990 was 4:673 (0.6%). Comparisons with only female Mallards yielded a ratio of 4:206 (1.9%). These results suggest that more Mallard-like ducks occur in the PLR than previously thought. The relatively low numbers of monomorphic Mallard-like ducks collected on the PLR most likely result from their similarity to hen Mallards, which are de-emphasized in current hunting regulations.

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First description of the nest and eggs of the Socorro Mockingbird.—The Socorro Mockingbird (*Mimodes graysoni*) represents a monotypic genus endemic to Isla Socorro, Mexico (Brattstrom and Howell 1956). Formerly abundant on Socorro, this species has declined since the middle of this century (Jehl and Parkes 1982) and now numbers between approximately 100 (Castellanos and Rodríguez-Estrella 1993) and 300 individuals. As a consequence of its restricted range and small population size, *Mimodes* is considered critically endangered (Collar et al. 1992). Possible causes of the species' decline include predation from feral cats, habitat destruction caused by feral sheep, and competition with recently arrived Northern Mockingbirds (*Mimus polyglottos*) (Jehl and Parkes 1982). Determining what action is needed to prevent the extinction of *Mimodes* will require understanding of the species' breeding biology. However, almost nothing of this bird's natural history is known. Here we present the first description of the nests and eggs of the Socorro Mockingbird, along with preliminary observations about breeding seasonality and behavior derived from our ongoing field study of the conservation status of *Mimodes graysoni*.

Isla Socorro lies 460 km SSW of Cabo San Lucas, Baja California Sur, and 580 km west of Cabo Corrientes, on the Mexican mainland. Socorro is the largest (110 km^2) and highest (1040m) of the four volcanic islands in the Revillagigedo Archipelago (Wehtje et al. 1993) (The archipelago was declared a Biosphere Reserve by the Mexican government in June, 1994). Socorro is probably early Pleistocene in age, based on evidence in the form of erosion shelves (Levin and Moran 1989, Brattstrom 1990). Descriptions of the different habitats on the island, which range from arid coastal scrub to moist montane forest, can be found in Miranda (1960) and Levin and Moran (1989).

We initiated field studies of the surviving population of *Mimodes* in January 1993. One of us (JEMG) subsequently made extended observations on Socorro in 1993 (6 June–5 August) and 1994 (18 February–4 June). Throughout these periods of study we have attempted to color-band and observe *Mimodes* over the entire island. By June, 1994, we had marked 215 Socorro Mockingbirds. We were able to identify the sex of many banded birds from observations of singing birds combined with measurements in the hand. Males average larger in wing and tarsus length (unpubl. data). We could also recognize paired females, regardless of whether they were nesting, because they gave distinctive calls when their mates were vocalizing. After a distant male sang, the females typically gave one or two short, guttural "chunk" calls, and then usually moved towards the vocalizing male. As soon as a female drew close to her mate, she gave a series of more nasal calls we describe as "nya, nya."