FROM FIELD AND STUDY

The Grebe Aechmophorus occidentalis clarkii as a Nesting Bird of the Mexican Plateau. -The Western Grebe (Aechmophorus occidentalis) is to date not recognized as a nesting bird of México, according to the American Ornithologists' Union Check-list (5th ed., 1957), or the Distributional Check-list of the Birds of México (Friedmann, Griscom, and Moore, Pac. Coast Avif. No. 29, 1950). Actually, as early as 1903 E. W. Nelson had collected Western Grebes at Ocotlán, Jalisco, and listed them in his field notes under a heading which stated that "all but one or two of the following were breeding birds but not all had begun to breed at the time of our visit [June 23-30, 1903]."

Study of the specimens taken by Nelson and Goldman, two others in the United States National Museum, two I collected on Lake Chapala near Ocotlán on May 11, 1958 (reported in Palmer, Handbook of North American Birds, vol. 1, 1962:95) and several birds taken in February and May of 1962 proved the resident population of Western Grebes of the central portion of the Mexican Plateau to be one of small, pale individuals, racially distinct from the breeding populations of the United States and Canada. This discovery brought up the need to re-evaluate the name Podiceps clarkii Lawrence (in Baird, Cassin and Lawrence, Rept. Expl. Surv. R.R. Pac., 9, 1858:895), long considered a synonym of his simultaneously named P. [Aechmophorus] occidentalis. Unfortunately I did not become aware of this problem in time to make certain comparisons personally, and I wish to express my gratitude to Mrs. Roxie C. Laybourne and Dr. John W. Aldrich, who compared the lectotype of Podiceps clarkii with the specimens taken on Lake Chapala by Nelson and Goldman.

Podiceps clarkii was described from three co-types; two of these were immatures, both apparently migrants taken in coastal California. The third was an adult female from Laguna de Santa María, in the northwest section of the state of Chihuahua, México (see Deignan, Bull. U.S. Nat. Mus. 221, 1961:7). Deignan reported that Grinnell, following a manuscript decision of Richmond's (Univ. Calif. Publ. Zool. 38, 1932:261) recorded one of the immatures as the lectotype. However, Deignan (loc. cit.), with more information at hand, wrote that the adult female, originally selected by Baird as the type, must be the lectotype if one is to be selected. I believe that with the present situation it is necessary formally to select a lectotype and to designate a type locality, and I fully agree with Deignan in the use of the adult bird from Santa María as the lectotype. Retaining the California "lectotype" would probably necessitate relegating clarkii to the synonymy of occidentalis and describing the Mexican populations under a new name. However, until I have had opportunity to compare the California "co-types" with a large series of the two subspecies, I prefer not to assign them subspecifically. Meanwhile, I formally restrict Podiceps clarkii Lawrence to the subspecies represented by U.S. National Museum specimen No. 9930.

Aechmophorus occidentalis clarkii, based on this lectotype and the listed specimens beyond, may be diagnosed as similar to birds nesting in the United States and Canada, namely, A. o. occidentalis (Lawrence), but paler gray dorsally, this paleness extending onto the neck, and smaller (table 1). All Mexican specimens of clarkii examined to date have white lores, contrasting to the majority of the northern population which have dark grayish lores.

TABLE 1

A o occidentalis

	A. o. occidentalis			A. o. clarkii	
	Adult males				
	No.		No.		
Wing (chord)	6	189-206	4.	173-185	
Culmen (from anterior edge of nostril)	10	62.3-68.4	5	53.5–56.7	
Tarsus	9	74.0-81.7	5	70.5-75.0	
	Adult females				
Wing (chord)	4	177-185	5	163-176 (type 165.5)	
Culmen (from anterior edge of nostril)	6	50.0-56.3	6	43.4-50.2 (type 45)	
Tarsus	14	68.0-74.7	6	62.5-71.4 (type 65)	

RANGE OF MEASUREMENTS IN MILLIMETERS OF WESTERN GREBES

P. o. clarkii is distributed in highly disjunct populations from northern Chihuahua south across the Mexican Plateau to Lake Chapala and, formerly at least, to Lake Cuitzeo.

Specimens examined: Total 14. *Chihuahua*: Laguna de Santa María, 19 (lectotype); Laguna Boquilla del Concho, 23, 19. *Zacatecas:* no locality, 1[9]. *Jalisco:* Lake Chapala, 23, 39; 2 mi. NNE Lagos de Moreno, 13. *Michoacán:* San Augustin, SW end of Lake Cuitzeo, 19. *Guanajuato:* 2 mi. E and 5 mi. NW Irapuato, 23.

The two males from Guanajuato are assigned to *clarkii* because of their small size although they are not included in table 1. I did not have opportunity to compare them with known *clarkii*. Likewise, a female and a male from Volcano Lake, northern Baja California, taken June 9 and 10 are tentatively assigned to the nominate race because of their large size: wing chord, 192 and 182; tarsus, 79.5 and 71.7, respectively.

A male taken on Lake Chapala on May 11, 1958, is a "flapper," that is, it had molted all the remiges, as had the female taken on February 12, 1939, by Chester Lamb at San Augustín. The iris color may be paler than in northern populations, being orange, flecked with gold toward the pupil, in a female I collected on Lake Chapala.

One of the major strongholds of A. o. clarkii is Lake Chapala. Recent changes in its water level may have had an adverse effect on the resident grebes. This is now under study and will be reported on at a later date.

I wish to thank Dr. Robert W. Storer, who examined my specimens from Lake Chapala and provided me with many of the measurements of *A. o. occidentalis*; thanks are also due the curators of the United States National Museum, the Robert T. Moore Collection, Occidental College, and the collection of the University of Arizona for permitting me to examine materials in their care and to Allan R. Phillips who read the manuscript and offered his considered advice.—ROBERT W. DICKER-MAN, Department of Microbiology and Immunology, Cornell University Medical College, New York, New York, August 7, 1962.

Sand Grouse Released in Nevada Found in México.—On February 21, 1962, a letter and photographs were received from Mr. Robert F. Petersen of Los Angeles, California, concerning two common Indian Sand Grouse (*Pterocles exustus hindustan*) which he shot while hunting near Navojoa, Sonora, México, on February 10, 1962. Reference to the reported band numbers showed that bird number 8–1158 (female) was from a group of 183 individuals released at Pahrump Valley, Nye County, Nevada, on August 26, 1960. Bird number 8–1727 (male) was one of 208 individuals released in Pahrump Valley on May 3, 1961. Another group of 192 birds was liberated in the same valley on April 6, 1961. Additional releases of Sand Grouse, totaling 1400 birds, were made in Moapa Valley, Clark County, and Pahranagat Valley, Lincoln County. All birds were wild-trapped from the Thar desert, Rajasthan, India, in 1960 and 1961 for introduction into the hot desert region of southern Nevada.

The birds from both the 1960 and 1961 liberations apparently disappeared from Pahrump Valley within two months after each release. It was suspected that the Sand Grouse migrated south, thus descriptive circulars were distributed to the game departments of Arizona, New Mexico, and California, so that personnel working in the southern desert regions could be on the lookout for them. To date the foregoing report is the only confirmed sighting of any of the birds which have left Nevada. The Sand Grouse have also disappeared from the release sites in the Pahranagat and Moapa valleys.

It is interesting to note that the Sand Grouse which were shot in México had returned to a latitude similar to that of their native habitat. Navojoa, Sonora, México, is at a latitude of 27° north. The area in the Thar desert, Rajasthan, India, where the birds were trapped, is between 26° and 27° north latitude. Of particular interest is the fact that the two Sand Grouse were reportedly shot while flying together, although they had been released nine months apart. The finding of these two birds together a year and a half after the initial release suggests the possibility of a southward migration of Sand Grouse from all Nevada release sites and that additional recoveries from these releases may be expected from desert areas to the south of Nevada. From an evaluation of the photographs submitted, the dead birds appear to have been in excellent condition, which indicates that suitable foods are available along the flight route and in the Navojoa region.