Western Grebe Colonies in Northern Colorado.—The Western Grebe (*Aechmophorus occidentalis*) was noted by Sclater (History of the Birds of Colorado, 1912:4) only as a rare fall migrant in Colorado. In 1940, however, Bailey and Brandenburg (Condor, 43, 1941:73) observed a nesting colony of Western Grebes in the San Luis Valley of southern Colorado. This species has now become one of the most common breeding birds on the larger reservoirs of the irrigated plains just east of the foothills in northern Colorado. This fact, which is well known to local bird students, seems not to have been recorded in the literature.

I first saw Western Grebes (three individuals) on June 11, 1953, at Terry Lake, a shallow, 1½-mile-long reservoir just north of Fort Collins at about 5000 feet elevation. It is likely that they were already breeding in the area at that time. Later, from 1957 to 1959, I made ten observations at six separate nesting colonies on this and three similar reservoirs, all between 4900 and 5000 feet elevation. The other localities involved are: Timnath Reservoir, 1½ miles long; Fossil Creek Reservoir, 2½ miles long; and Boyd Lake, 3½ miles long. These are situated about five miles east-southeast, six miles south-southeast, and eight miles south of Fort Collins, respectively. All these reservoirs are partly, but not predominantly, fringed with cottonwood and willow trees; the establishment of cattails and other marsh vegetation is prevented by fluctuation of the water level, except in small patches a few rods to a few acres in extent, where there is ground water seepage. The grebes nest only in years when the water is high enough to flood these marsh areas or marginal zones of tall weeds or brush on the otherwise exposed shores. From 1957 to 1959 these reservoirs remained at their highest possible levels all through the early summer, and the grebes found conditions favorable for nesting in water one to four feet deep near the shore. Water two to three feet deep was preferred.

Surprising versatility in choice of nest sites was shown. In a 16-nest colony found at the northwest end of Terry Lake on May 26, 1957, only one egg had been laid. At this site there was a partly submerged patch of bulrushes, but the grebes had used it only as a source of nest material, mooring the nests in scattered willow bushes at the edge of open water. On June 9 of the following year there were 13 nests in the same area.

On June 8, 1957, laying was under way in two colonies, several hundred feet apart, at the northeast corner of Timnath Reservoir. The westernmost colony included about ten occupied nests in an exposed situation in a very thin growth of dead, half-submerged *Kochia* and cockleburs about 100 feet from shore. The other was in the outer edge of a patch of bulrushes and included five nests, only one of which contained eggs. Nesting success was evidently poor at this lake, as on June 25 only six of the exposed nests seemed to have escaped the effects of predation, and the bulrushes at the other colony were so limp and deeply submerged that wind and waves had carried away all the nests there. In 1958 only the bulrush colony was occupied, but success was better, as on June 26 fifteen nests still retained eggs.

On June 11, 1958, the colony at Boyd Lake contained 12 nests built in an open growth of half-submerged tamarisk bushes at the southwest end of the reservoir.

Fossil Creek Reservoir has a less regular outline and better marshy areas than the others, and it has had by far the greatest concentration of Western Grebes. There has been little evidence of nest predation in the good cover available there. In 1957 the majority of the nests were in a large tamarisk-rimmed cattail marsh at the southwest end, with some also in a cattail-bulrush marsh at the southeast end. In 1958 and 1959, for reasons unknown, the former colony was abandoned while the latter increased greatly.

The clutch size and distribution of nests in the colonies on Fossil Creek are given in table 1. It is realized that not all the clutches were complete. These distributions are similar to those in the smaller colonies. In the large colony at Fossil Creek in 1959, three of the nests of the Western Grebe also contained single eggs of the Pied-billed Grebe (*Podilymbus podiceps*), although only one nest of the latter was found in the marsh. One nest in the colony at Timnath, in 1958, also contained an egg of the Pied-billed Grebe. In seven of the Western Grebe nests in the colony at Fossil Creek in 1958, and ten in that colony in 1959, the eggs had been covered on my approach as is done by the smaller grebes.

Nests in the various colonies ranged from one to six feet in diameter (usually 1½ to 2 feet) and were spaced from 6 to 50 feet apart, tending generally to be smaller and closer together in dense cover. They were normally massed within 100 feet of the open water. The materials used were those most easily available; weed stems and algae were used in the exposed colony at Timnath Reservoir and at

Boyd Lake, whereas cattails and bulrushes were typical at the others. The supporting mats under the nests, usually green bulrushes, were often placed on submerged snags when these were available.

In exposed colonies the grebes often left the nests while I was still several hundred yards away. They swam well out into open water where they waited, calling noisily. Where the cover was denser, however, I managed to approach within ten feet of some incubating birds.

TABLE 1

DISTRIBUTION OF CLUTCH SIZES IN WESTERN GREBE NESTING COLONIES AT FOSSIL CREEK RESERVOIR, COLORADO

Clutch size	Number of nests	Clutch size	Number of nests	Clutch size	Number of nests
June 2, 1957		June 8, 1958		June 5, 1959	
		SW end—None		SW end—None	
SW end		SE end		SE end	
1	12	1	10	1	6
2	7	2	9	2	16
3	1	3	19	3	49
4	1	4	32	4	54
Total	21	5	35	5	11
		6	10	6	1
SE end		Total	115	Total	137
0	2				
1	5				
3	1				
Total	8				

In 1960 the reservoirs around Fort Collins failed to reach capacity by two or three feet, and there was no nesting at the known sites as the water did not flood the cover. However, grebes lingered in small numbers, and I have no doubt that nesting will be re-established when conditions permit.—DONALD G. DAVIS, *Timnath, Colorado, December 15, 1960.*

The Flight Speed of a Red-breasted Merganser.—In the course of investigating the terrestrial avifauna of the Cape Thompson area of northern Alaska for the United States Atomic Energy Commission, several low aerial reconnaissance flights of the Kukpuk River (latitude 68° 22′N, longitude 166° 00′W) were made. On May 29, 1960, a flock of six Red-breasted Mergansers (*Mergus serrator*) was flushed from the river ahead of the airplane. The area in which this flock was flushed was bordered on the south by a sheer bluff, rising to about 30 feet, and on the north by a bank 4 feet high. The wind was blowing from the west at 20 miles per hour. At the time the ducks were flushed we were flying east up the river. When the ducks took flight, all the birds turned aside except one male which flew slightly below and ahead of the airplane. This bird with a burst of speed managed to keep his position in relation to the aircraft for about 1500 feet before finally losing ground and turning aside. The air speed of the airplane during the chase was 80 miles per hour. The 20 miles per hour wind from the west added to the 80 miles per hour air speed would give the bird a ground speed of 100 miles per hour.

Similar flights had been conducted several times before and although mergansers had been flushed, none behaved in such a manner that an air speed could be calculated.

Cooke (Flight Speed of Birds, U. S. Dept. Agr. Circ. 428, 1937) did not list the flight speed of the Red-breasted Merganser in her compilation of flight speeds. The fastest speed of a duck that she recorded was that of a Canvasback (*Aythya valisineria*) with a clocked speed from an airplane of 72± miles per hour.—MAX C. THOMPSON, *Arctic Health Research Center, Anchorage, Alaska, November 25, 1960.*

Notes on Bird Nests Found in a Desert Shrub Community Following Nuclear Detonations.—In the past three years I have conducted investigations in plant ecology at the United States Atomic Energy Commission's Nevada Test Site, Nye County, Nevada, under A. E. C. Contract Num-