and fall (August-September) migrant, apparently summering occasionally at points in the Willamette Valley.

As a matter of record it may be noted that the specimen constituting the basis of the early record for Bellingham Bay is still in Mr. Edson's possession, and, like that collected at Tacoma, is in juvenal plumage (Edson, letter of December 23, 1941).—JOHN W. SLIPP, *University of Washington, Seattle, January 6, 1942.*

The Use of Duck Feathers by Nesting Marsh Wrens.—The Western Marsh Wren (*Telmatodytes palustris plesius*) nests commonly in the Cariboo region of British Columbia and in the summer of 1941 many nests were examined in the marshes near Springhouse. It was observed that duck feathers were conspicuous on the outer surface of many nests and evidently formed an important constituent of the nest material.

One unoccupied nest was collected and later taken apart. It was found to contain 491 teleoptile feathers; the longest, chiefly flank feathers from male Mallards, averaged 85 mm. in length. In addition there was a large amount of duck down. The feathers and down combined represented about one-third of the total material in the nest, the balance being dry *Scirpus* stems and *Carex* stems and leaves. The feather material was not used as a lining but had been worked into the fabric of the nest.

As to the source of the material, these marshes are retreats for molting male ducks and during July every muskrat house or other prominence used as a resting place by the ducks is strewn with quantities of feathers.—J. A. MUNRO, *Okanagan Landing, B. C., January 28, 1942.*

A New Species of Crane from the Pliocene of California.—Recently the Museum of Paleontology of the University of California has made excavations in search of fossils in Pliocene deposits at Black Hawk Ranch situated at the southern base of Mount Diablo, Contra Costa County, California. Stirton (Univ. Calif. Publ. Bull. Dept. Geol. Sci., 24, 1939:341) writes of this locality as follows: "Fossils found on spur just above saddle in sandy and clayey conglomerate with some volcanic ash." A beaver of the genus *Eucastor* was found in this quarry, indicating that the formation is of late Lower Pliocene age (Stirton, *op. cit.*:343).

The remains of birds from this locality are badly crushed and most of them are so altered that they can not be identified generically. Only one bone, a distal end of a tarsometatarsus, is sufficiently well preserved to permit detailed study. This specimen represents a large crane, heretofore unknown, which may be named

Grus conferta new species

Characters.—Similar to *Grus canadensis,* but differs as follows: articular surface of inner trochlea of tarsometatarsus much flatter and its plane more nearly transverse to axis of bone; this surface curves smoothly and extensively on to medial side of metatarsal II in *G. canadensis* and *G. americana.* Inner trochlea of fossil relatively thicker mediolaterally. Second metatarsal extends farther distally, relative to third, in *conferta* and *canadensis* than in *americana.* Size of *conferta* like that of *americana.*

Type.—Distal end of left tarsometatarsus (see fig. 50), no. 34715 Univ. Calif. Mus. Paleo.,

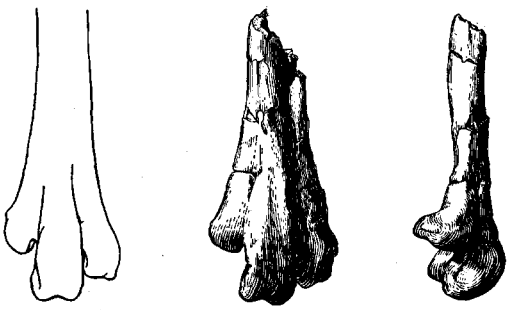

Fig. 50. Distal ends of left metatarsi of cranes. Outline at left, anterior view of *Grus canadensis tabida,* no. 40455, Mus. Vert. Zool. Center and right, anterior and medial views of type of *Grus conferta,* no. 34715, Univ. Calif. Mus Paleo. Dissimilarities in trochlea IV result from crushing of fossil. (Drawings by Viola Memmler.)

from Black Hawk Ranch Quarry, locality no. V-3310, Lower Pliocene, Contra Costa County, California (for further details of locality, see Stirton, *op. cit.*, fig. 94).

Measurements in millimeters.—Width of middle trochlea, 10.1; transverse diameter of inner trochlea, 8.0.

Remarks.—The shape of the articular surface of the inner trochlea in the fossil species would cause the inner toe to lie closer and more nearly parallel to the middle toe than in modern *Grus*. This would result in a less widespread tripod of toes and probably in less secure footing. No members of the Gruidae have been reported from North America between the Eocene and the Pliocene. The fossil cranes of the Pliocene and Pleistocene have all been placed in *Grus*, and indeed much of the material has been allocated to the living species, *Grus canadensis* and *Grus americana*. *Grus minor* L. H. Miller and *Grus haydeni* Marsh have been relegated to the synonymy of *Grus canadensis* (Wetmore, Smithsonian Misc. Coll,. 99, 1940:50). The extinct species from the later geologic record that are recognizably different are *Grus proavus* (Marsh, Amer. Jour. Sci., ser. 3, 4, 1872:261) from the Pleistocene of New Jersey, and *Grus nannodes* (Wetmore and Martin, Condor, 32, 1930:62) from the middle Pliocene of Kansas. The tarsometatarsi of these species are not known, but both these cranes were smaller than *Grus canadensis* and hence much smaller than *conferta*.

The arrangement of the articular surface of the inner trochlea in *conferta* might seem to be more generalized and primitive than in other members of the genus *Grus*. For this reason special search for evidence of this condition among fossil gruids has been made. Unfortunately in few of these is this part of the metatarsus preserved and figured. *Aletornis nobilis*, although from the Eocene, apparently was like *G. canadensis* and not like *conferta* in this respect (see Shufeldt, Trans. Conn. Acad. Arts Sci., 19, 1915: pl. 2, fig. 15, pl. 6, fig. 43). The drawing of *Pliogrus pentelici* (Gaudry, Bull. Soc. Geol. France, ser. 2, 191, 1862:633, figs. 8-11) shows a less rounded articular contour than in *Grus*, but the description points out especially that this trochlea permits considerable medial separation of the second toe from the others. Whatever the exact condition, the trochlea in this species from the Pliocene of Greece must have been more like *Grus canadensis* than like *G. conferta*. *Grus melitensis* (Lydekker, Proc. Zool. Soc. London, 1890:408-409, pl. 36, figs. 2, 2a) from the Pleistocene of Malta shows a flatter articular surface than in the modern *Grus antigone*, which is also figured, but not nearly so flat as in *conferta*. In other respects, *melitensis* appears rather aberrant and it may not be properly placed in *Grus*. Thus the principal distinguishing feature of *conferta* can not through comparison with other fossils be proved primitive nor does it indicate close connection with other forms. Probably *conferta* was as distinct from typical *Grus* as was *Pliogrus*, which has been separated by Lambrecht (Handbuch Palaeorn., 1933:522) on the basis of characters of the distal end of the tibiotarsus. However, *conferta* is so remarkably like typical *Grus* in most respects that its fundamental similarity should not be obscured by separating it generically. —ALDEN H. MILLER and CHARLES G. SIBLEY, *Museum of Vertebrate Zoology, Berkeley, California, February 15, 1942.*

Records from Extreme Northeastern Nevada.—A brief collecting trip with Mr. Cecil S. Williams through the Raft River and Grouse Creek Mountains of extreme northwestern Utah terminated at the McCuistion ranch on the west base of Pilot Peak on September 20, 1941. The Pilot Range, including Pilot Peak, is almost entirely within Utah, although the Utah-Nevada boundary runs close to the base of the peak and the McCuistion ranch, about 2 miles west of this boundary, is in Elko County, Nevada, south and east of Montello.

Pilot Peak, famous as a landmark for early emigrants traveling westward over the Great Salt Lake Desert, stands like a giant pinnacle or torch in the heart of the great western desert. This well-timbered, 10700-foot mountain is undoubtedly a concentration point for migrant birds, and the few watered areas and ranches at the base of the mountain are teeming with birds during the period of migration.

On September 19 the weather had been stormy and cold, the mountain being covered with a blanket of snow above the 5000-foot contour. This forced the late migrants off the mountain, so that on September 20 the McCuistion ranch abounded with birds.

In about two hours on the morning of September 20 the writer and Mr. Williams collected one bird that appears to be new to Nevada's avifaunal list, as well as other specimens sufficiently uncommon in the state to merit reporting. Northern Pileolated Warblers (*Wilsonia pusilla pileolata*) were abundant, and three specimens were collected; with them, however, was collected one specimen that was later determined to be *Wilsonia pusilla pusilla*, a bird apparently new to the avifaunal list for this state. Dr. H. C. Oberholser confirmed this identification.

Of the water birds, two Eared Grebes, one Coot, and a Killdeer were noted on or near a small artificial pond.

Obviously, a "vermin" campaign had recently been conducted in this area. Dead Sharp-