

FROM FIELD AND STUDY

Flight Behavior of Young Chimney Swifts.—On August 12, 1941, several families of Chimney Swifts (*Chaetura pelagica*) left their nests which were situated in a large dummy chimney near my office. Previously I had heard the young birds twittering at intervals throughout the day, presumably whenever they were fed by the adults. However, on the morning of August 12 a more or less continuous twittering came from the chimney until 10:15 a. m., at which time it ceased rather abruptly. Opening a trapdoor in the roof, I counted twenty-two swifts circling around the building. Returning to my work, I was startled a few minutes later by the entrance of a swift through the trapdoor, which had been left open. The bird was examined, marked with India ink, and released. Within four or five minutes another bird made its entrance and was treated in much the same manner. During the morning six birds, all young, dropped through the trapdoor; there were no repeats. After the third descent, I gave up trying to get any work done and stationed myself below the opening in order to observe, if possible, the manner of entrance. In the three examples seen, the birds hovered briefly immediately above the opening before dropping or "flapping" through tail first.

It appears that the young birds, attempting to return to the chimney, presumably for a rest, mistook the open trapdoor for the chimney top. None flew back out; five flew across the room to flutter against a window. The sixth hung up on the wall near the point of entrance.

In observing these birds, my attention was caught by the apparent periodicity of alternating activity and quiescence. It seemed almost as though seven or eight wing beats tired the bird and necessitated a rest of from three to five seconds. The same periodicity was noted for the flight of the birds above the roof.

Although none of the birds uttered a sound when handled, all seemed to display a definite fear reaction.—DONALD M. HATFIELD, *Chicago Academy of Sciences, Chicago, Illinois, January 23, 1942.*

The Black Tern in Western Washington.—So far as I am aware Edson's record of a Black Tern (*Chlidonias nigra surinamensis*) (Auk, 25, 1908:429) taken August 26, 1899, at the Nooksack Marsh, Bellingham Bay, has remained unique in the ornithological literature of western Washington. However, Frederick C. Lincoln (letter of December 9, 1941) states that there is in the Fish and Wildlife Service files "a migration card (unpublished) sent in by Rufus Comstock, of Vancouver, under date of June 7, 1936, which contains the note that 'It [the Black Tern] is seen here nearly every year during high water about June 1.'" Accordingly a spring sight record and the collection of a fall specimen, both at Waughop Lake near Steilacoom in Pierce County, 110 miles south of the Bellingham locality and an equal distance north of Vancouver, seem worthy of notice.

Waughop Lake is a small, shallow, muddy lake lying near the northern edge of the "prairie country," a mile or less inland from the waters of southern Puget Sound. Mrs. J. H. Kitler, an enthusiastic and competent bird student of Tacoma, has reported to me that on May 17, 1938, she visited this lake and there observed a full-plumaged, adult Black Tern, conspicuous with its blackish body and pearl gray wings, flying about over the water. She is uncertain as to the exact number present, but at least the one was positively identified and entered in her notes for the day. The fall record is based on a specimen (no. 1017) in my collection, a juvenal male which I collected September 15, 1941, as it flew over the lake with a number of Bonaparte Gulls (*Larus philadelphia*) and Common Terns (*Sterna hirundo*). For permission to collect on the lake, which is included within the boundaries of the Western State Hospital grounds and the Pierce County Game Reserve, I am indebted to Dr. William N. Keller, Superintendent, and Mr. A. P. Wertman, Livestock Manager, of the hospital; and to Mr. Charles M. Morrell and Mr. J. M. Hynes of the Washington State Game Department.

Some interest may attend a comparison of the western Washington records with those of the adjoining parts of British Columbia and Oregon lying west of the Cascade mountain system. Brooks and Swarth (Pac. Coast Avif. No. 17, 1925:29) list the species as rare in spring and fall at Sumas Lake, B. C., on the authority of Brooks, and discount an early record for Burrard Inlet "as the date given (January) is an extremely unlikely one for the Black Tern to occur in this latitude." For western Oregon I have only the two following records at hand: Lincoln (*loc. cit.*) states that in the National Museum there is a specimen of Black Tern collected in July, 1836, in the Willamette Valley by J. K. Townsend; and Einarsen (Murrelet, 19, 1941:22) has recorded visitations in August of 1936, 1937, and 1938 of from 1 to 20 adult Black Terns to an artificial pond 6 miles north of Corvallis. Summarizing, it may be stated that probably throughout the Puget Sound-Willamette Valley trough, lying west of the Cascade Range, the Black Tern is rare as a spring (May)

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 (*Telmatochlamys 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.,

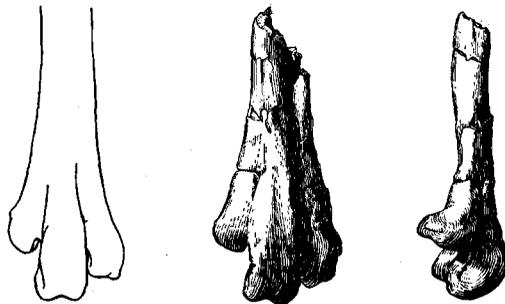


Fig. 50. Distal ends of left metatarsi of cranes. Outline at left, anterior view of *Grus canadensis tabida*, no. 40455, Mus. Vert. Zool. Center and right, anterior and medial views of type of *Grus conferta*, no. 34715, Univ. Calif. Mus. Paleo. Dissimilarities in trochlea IV result from crushing of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