FROM FIELD AND STUDY

Barnacles on Birds.—On the morning of August 7, 1938, about 15 miles south of the Farallon Islands, off San Francisco Bay, California, the writer collected two female Pacific Fulmars (*Fulmarus glacialis rodgersii*). The birds were shot on the wing while circling the Allan Hancock Foundation cruiser, Velero III, as she lay hove-to, dredging for marine life. After a bit of unique maneuvering of the Velero by Captain Hancock, the birds were picked up and immediately inspected for ectoparasites by the staff parasitologist, Gus Augustson. A peculiar condition of the belly became apparent. Small clusters of young peduncled barnacles of the genus *Lepas* were attached to the outer barbs of the belly feathers. There were several dozen clusters, each composed of three or four individuals of different sizes, with a few solitary individuals between. This illustrates the gregarious instinct of the free-swimming larva at the time of attachment.

Upon returning to the laboratory with several of the barnacles preserved in alcohol, the specific identity of the cirriped was established as *Lepas hillii* Leack, a species that is distinguished with difficulty from the cosmopolitan goose-necked barnacle (*Lepas anatifera* Linnaeus). The smallest specimens were barely distinguishable as to species, but the larger ones had well-calcified capitular valves and distinct peduncles. One specimen had a capitulum 3.0 mm. long with a peduncular length of 1.1 mm.

We can look upon this condition as accidental and occurring only during a period of the year when the fulmars are consistently roosting on the water. Certain species of littoral sessile barnacles are able to withstand considerable desiccation between the tides, but members of the genus *Lepas* regularly attach themselves to floating materials or permanently submerged objects, as described in Hoek's report on the cirripedia of the Challenger Expedition (Challenger Reports, Zoology, vol. 8, 1883). Thus we must assume that in order for these barnacles to have developed to the aforementioned size, the fulmars must have been on the water most of the time.

Accounts of barnacles on birds seem to be rather scarce in the literature; at least, the writer has found it so in the reports on cirripedians. However, I might quote from Hoek's review of the literature the following (*op. cit.*, p. 7): "A new genus (*Ornitholepas*) was proposed (1874) by Targioni-Tozzetti for a species of Cirripedia inhabiting the tail feathers of *Priofinus cinereus*, a bird of the Southern Atlantic and the Indian Ocean. Gerstäker supposes that the *Ornitholepas australis*, Targioni-Tozzetti, is only a larva of a Cirriped in its *Cypris*-stage."

Since this observation the writer has had opportunity to collect a considerable number of oceanic birds, some of which were confined to the surface by molting primaries, but no other occurrence of barnacles on the feathers has been noted.—GRANVILLE ASHCRAFT, *Allan Hancock Foundation, University of Southern California, April 8, 1940.*

The Vermilion Flycatcher at Santa Barbara.—On April 7, 1940, a Vermilion Flycatcher (*Pyrocephalus rubinus mexicanus*) was taken near Santa Barbara. The exact locality is what is called Pendola Flats and is situated on the Santa Ynez River midway between Gibraltar and Juncal reservoirs about 10 miles in an air line northeast of the city. The bird was first seen darting after flies from its perch on a wire fence. It is an immature male with a white throat and the red on the under parts is mixed with white. The specimen is now no. 3778 in the collection of the Santa Barbara Museum of Natural History.—EGMONT Z. RETT, *Santa Barbara Museum of Natural History, Santa Barbara, California, May 8, 1940.*

Desert Sparrow Hawk and Pasadena Screech Owl in the Same Nest.—A Pasadena Screech Owl (*Otus asio quercinus*) was found in an old hole up ten feet in a dead Joshua tree stump on the Mohave Desert north of the San Bernardino Mountains. Ten inches down from the opening, on dead wood chips, there were two fresh eggs of the owl. A week later, on April 16, 1939, a Desert Sparrow Hawk (*Falco sparverius phalaena*) was flushed from this hole and investigation disclosed that the nest contained the two owl eggs and three eggs of the hawk, one being a runt of about one-third normal size. An owl, probably the owner of the two eggs, was in another hole about one hundred feet away, incubating a single egg of her own. On April 23 the original hole was still in the possession of the hawk and contained an additional egg of the hawk; the owl had deserted her egg. The hawk must have believed "a turn about is fair play" for in 1935 (Condor, vol. 38, 1936, p. 250) I found in this same vicinity an owl in possession of a mixed set.—WILSON C. HANNA, *Colton, California, February 24, 1940.*

More Notes on Salt-feeding of Red Crossbills.—An interesting corroboration of Aldrich's "Notes on the salt-feeding habits of the Red Crossbill" (Condor, vol. 41, 1939, pp. 172-173) came

to the writer's attention at the Deer Park Guard Station on the Boise National Forest, Idaho, during the past summer (1939).

At the edge of the horse pasture of the station a block of sulfurized salt is kept for the horses and the deer that come in at night. The grass for several feet around the block has been removed by their pawing, so that there is a clear view of the ground.

On the morning of August 12 I observed nine Red Crossbills (*Loxia curvirostra*) on this area and flushed them to a nearby lodgepole pine tree. They returned to the salt area almost as soon as I sat down about fifteen feet from it. The birds could then be seen feeding on some coarse salt scattered around the block, using the tongue in the same manner as described in detail by Aldrich. One male bird was seen to "lick off" salt from the block itself.

For several weeks after this, a flock of the same size, probably the same one, visited the block regularly. On several instances, birds were seen "fighting," by posturing, for the favorable feeding place under the block, which was several inches above the ground.

Other birds noted at the salt during the same period were the Western Mourning Dove, Cassin Purple Finch, Evening Grosbeak, and Pine Siskin. The dove, however, apparently used the place for dusting and resting during the middle of the day, whereas the other birds were seen in early morning or late evening and probably fed on the salt, as there was little if any vegetable material near the block.—WILLIAM H. MARSHALL, *Bureau of Biological Survey, Boise, Idaho, January 29, 1940.*

A European Widgeon in Solano County, California.—Mr. Paul S. Wetmore of Benicia, California, shot a European Widgeon (*Mareca penelope*) on the grounds of the St. Germain Gun Club on Grizzly Island, Solano County, California, on October 29, 1939. This appears to be the first recorded occurrence of this species in my county since 1884, when two were taken at Rio Vista (see Grinnell, Pac. Coast Avif. No. 11, 1915, p. 33). Mr. Wetmore, who is a veteran duck hunter, recognized the bird as an unusual species and he presented it to me for my collection of scientific skins. It is a male; weight 1 pound, 12 ounces; length 19½ inches and wing spread 31½ inches.—EMERSON A. STONER, *Benicia, California, December 16, 1939.*

Posturing of the Western Sandpiper.—Observations of the 1940 spring shore-bird migration in the San Francisco Bay area have led me to notice the general presence of an interesting habit of the Western Sandpiper (*Ereunetes mauri*). In large flocks of feeding sandpipers there is often some little "conflict" between individuals; one will meet another head on while food hunting or again will

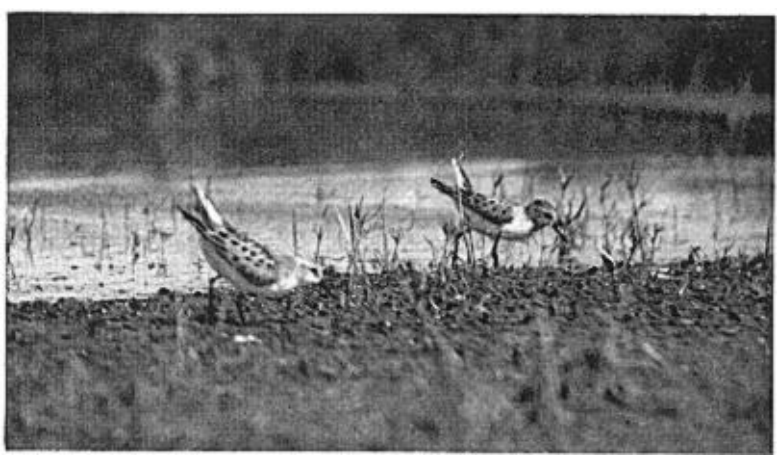

Fig. 61. Tail-elevating posture of Western Sandpiper.

chase its neighbors away from the area in which it is feeding. On such occasions the head may be lowered and the tail thrown up stiffly, the wings not being noticeably dropped. A rigid posture will be held for a moment (fig. 61) then the bird will relax, go on about its food hunting, and the tail will gradually descend to a normal position as shown in figure 62.