

In early behavioral characteristics, of which I can find no published description, these young eiders walked nearly erect, with heads held a little down and forward, giving them a long-legged, flat-bellied appearance suggestive of a pugilist heading for his adversary. Generally quiet, they occasionally gave a single call note, a peculiar, clear, flat-sounding, *Geep!*, low in pitch, without discernible overtones. In distress, the call became *Geep-eeep!* or *Geep-eeep-eeep-eeep!*, rapidly repeated, the second and subsequent syllables rising in pitch to a major third above the first syllable.

The eiders "sat" a good deal during their first two days, usually resting on the belly, but sometimes on the heels, with backs nearly upright and breasts high, the bills touching the puffed-up breasts and the heads drawn back. Sometimes they would stand, legs far apart and backs upright, heads drawn backward at a near-impossible angle, wagging their bills from side to side in what I took to be a form of preening. Figure 2 shows these various attitudes. In temperament, the birds were neither aggressive nor overly docile, but seemed to be quite self-contained, whether with birds of their own or other species.

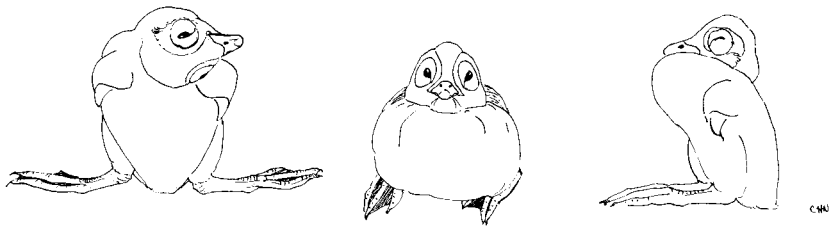


Figure 2. Characteristic attitudes of a Spectacled Eider duckling. Left, preening (?); center, resting on belly; right, resting on heels. Drawings by Colleen Helgeson Nelson. $\times \frac{1}{4}$.

I was assisted by grants from the Frank M. Chapman Memorial Fund of the American Museum of Natural History (1962-1963) and from the Society of the Sigma Xi (1963). The material was gathered at the Round Lake Waterfowl Station, Round Lake, Minnesota, owned and operated by Kenneth L. Sather. Through the efforts of Mr. Sather and Glen Smart, with the cooperation of the U. S. Fish and Wildlife Service, the eggs of the Spectacled Eider were obtained from Alaska. I thank Mr. Sather for use of the excellent facilities of his station. Thanks go also to Kenneth C. Parkes and H. A. Hochbaum for their prompt and helpful suggestions in the preparation of this note, and to Miss Gladys Sudomlak for her translation of the Russian work. The entire project of which this work was a part is being carried on with the cooperation of the Delta Waterfowl Research Station, Delta, Manitoba, Canada.—COLLEEN HELGESON NELSON, *c/o Carl R. Nelson, Jr., School of Architecture, University of Manitoba, Winnipeg, Manitoba, Canada.*

Flycatching by Wandering Tattlers (*Heteroscelus incanum*).—The habit of catching live insects by certain kinds of shorebirds has been observed by a number of persons. W. M. Tyler (*in A. C. Bent, Life histories of North American shore birds*, Pt. 2, *U. S. Natl. Mus., Bull.* 146: 85, 1929) gives an excellent description of the method employed by the Spotted Sandpiper (*Actitis macularia*) in approaching and capturing insect prey. It was with interest, therefore, that I made observations of a

similar nature on Wandering Tattlers along the central California coast in September, 1962. Here both migratory and small wintering populations of these birds are associated with rocky shoreline and small secluded beaches very close to rocks. The limited information available on the feeding habits of this species at these times of year indicates that small crustaceans, mollusks, and marine worms are the principal items of food consumed (see Grinnell, Bryant, and Storer, *Game birds of California*, 1918; Bent, *op. cit.*; R. T. Orr, *Amer. Midl. Nat.*, 27: 306, 1942). However, many years ago Preble and McAtee (*North Amer. Fauna* no. 46, 1923) recorded the stomach contents of six migrant Wandering Tattlers from the Pribilof Islands as containing 46.1 per cent flies (Diptera), 30.6 per cent caddisflies, 16 per cent amphipods, 3.6 per cent mollusks, and 1.1 per cent beetles. Although no mention is made concerning any observations on feeding, one stomach was said to be filled with blowflies (*Calliphora vomitoria*), another nearly so with dung-flies (*Scatophaga crinita*), and a third with kelp flies (*Coelopa frigida*).

The present observations were made on Año Nuevo Island off the coast of San Mateo County, California, where over a period of 16 months from May, 1961, to September, 1962, tattlers had been observed several times incidental to other studies. Specific dates on which this species was recorded are 28 July, 11 August, 23 September, 8 December, 1961, and 15 May, 4 and 11 August, 1 and 21 September, 1962. Año Nuevo Island is approximately nine acres (3.6 hectares) in size and is situated a half mile (0.7 km) offshore. It was operated as a lighthouse station from 1873 to 1948 by the United States Coast Guard and most of the installations are still present.

While visiting the island on 1 September 1962, I disturbed several tattlers (three noted on one occasion) a number of times as they were capturing blowflies. The birds were disturbed from the edge of a cement rain slide around a cistern and along a narrow gravel path, bordered by brush, that led from the foghorn house to an oil storage building about 75 feet away. In each instance they were reluctant to leave. They usually flew only a few yards and frequently perched on low brush (18 to 24 inches high) composed of lizard tail (*Eriophyllum staechadifolium*). In fact it was this behavior, unusual for migrant shorebirds, that led me to observe their feeding habits. As soon as I remained quiet they flew down to the gravel path or the cement rain slide. There, with outstretched necks and bills extended directly toward their prey, they stalked and captured flies. They frequently approached within 25 feet, so that I could easily observe their actions. Their ability at capturing these alert insects was remarkable; rarely did a tattler fail to capture a fly that it was stalking.

Blowflies are very abundant on the island at this time of year because of the usual presence of a number of sea lion carcasses. The island serves as a rookery for Steller sea lions and the mortality among the pups is high during the summer months, thus providing breeding situations for scavenger flies. By far the most common fly present and one which the tattlers were observed capturing was *Phaenicia pallescens*, one of the Calliphoridae.

On 21 September a few tattlers were observed on the island but none in the area where they were feeding on 1 September. One individual, however, was seen capturing flies from rocks around a sea lion carcass on a small beach just below the foghorn house.

For identification of the scavenger flies I am indebted to Dr. Edward L. Kessel, Associate Curator of Entomology, California Academy of Sciences. Travel to Año Nuevo Island was possible through the friendly cooperation of Dr. Thomas C. Poulter, Scientific Director, Stanford Research Institute.—ROBERT T. ORR, *California Academy of Sciences, San Francisco, and University of San Francisco, California.*