

I am indebted to Andrew J. Berger for suggesting techniques for raising the birds in captivity and for encouraging me to prepare my observations for publication.—C. ROBERT EDDINGER, *Department of Zoology, University of Hawaii, Honolulu, Hawaii 96822, 27 September 1966.*

Diving Wood Duck Ducklings Entangled in Filamentous Algae.—During 1955–1957, I conducted research on Wood Ducks (*Aix sponsa*) at the Olentangy Wildlife Experiment Station in Delaware and Marion counties, Ohio. This research involved frequent visits to the 40 ponds on the area for the purpose of making brood counts of the ducklings. By making sudden appearances at the ponds, it was frequently possible to count the ducklings before they dived, or skittered over the water surface to cover.

In 1955 at one pond only one brood was present, and this brood of recently hatched ducklings was usually seen and the ducklings counted during several visits to the pond. The brood was twice found near the center of the shallow pond that it occupied, and my sudden approach then caused the ducklings to dive beneath the water surface rather than to hide in emergent vegetation. On the second of these visits I was surprised to note that there were only six ducklings in the brood instead of the 11 present the previous day. I was also surprised to note that only one of the six ducklings reappeared on the water surface after diving. I therefore waded out into the pond and found the five missing ducklings entangled in filamentous algae beneath the water surface. There seemed little doubt that the five ducklings would have drowned if I had not rescued them. In six additional cases at other ponds at the Olentangy Wildlife Experiment Station individual Wood Duck ducklings were not seen to return to the water surface after diving near beds of filamentous algae.

Oedogonium and *Spirogyra* were the algae genera identified in the ponds described. Some species of *Oedogonium* have particularly strong strands and grow so dense that "algae paper" is formed when the water disappears from the beds (Prescott, *How To Know the Fresh-water Algae*, 1954, p. 103). Francis M. Uhler (personal conversation) advised me that several species of *Utricularia* grow abundantly on some of the ponds managed for waterfowl production at the Patuxent Wildlife Research Center, and he has the impression that duckling survival is lower on the ponds containing *Utricularia*.

Based on his work in British Columbia, J. A. Munro (*Canad. J. Res.*, 19:131, 1941) reported heavy loss among Lesser Scaups (*Aythya affinis*) as a result of ducklings becoming entangled in weeds or filamentous algae. Drowning, following subsurface entanglement, was suspected as one of the chief causes of loss of ducklings.

My observations on Wood Ducks indicated that the ducklings do not normally dive to escape unless closely pressed, and it seems likely that my activities caused the ducklings to dive and thus made the algae a critical feature of the habitat in all of the cases described. It seems inevitable, however, that conditions must sometimes occur when the ducklings are closely pressed in the absence of research activities, and filamentous algae must then be a hazardous feature of the ducklings' habitat. It appears desirable for pond managers to strive to create conditions so that small Wood Duck ducklings can always move easily into surface cover when on ponds containing thick growths of filamentous algae.

The research reported in this note was conducted under the direction of E. H. Dustman when I was a research fellow of the Ohio Cooperative Wildlife Research Unit. Personnel of the U.S. Fish and Wildlife Service aided in typing and in reviewing the manuscript.—PAUL A. STEWART, *U.S. Department of Agriculture, Agricultural Research Service, Entomology Research Division, Oxford, North Carolina 27565, 27 September 1966.*

The Occurrence and Possible Breeding of McKay's Bunting on St. Lawrence Island, Alaska.—On 29 June 1966 an adult male McKay's Bunting (*Plectrophenax hyperboreus*) was observed on top of Sevuokuk Mountain in the northwest cape area of St. Lawrence Island, Alaska, but was lost in heavy fog. On 25 July 1966 a specimen was collected near the place that the above-mentioned bird was seen. The specimen (U.B.C. Mus. Zool. no. 13274), an adult male with en-

larged testes (7.1×5.1 and 7.0×5.6 mm), was moderately fat and weighed 42.7 g. A brood patch, partially refeathered from the rear, was present. The bird, in summer plumage with no evidence of molt, showed extensive abrasion of the rectrices, secondaries, and tertiaries. Its stomach contained insect parts.

This species has not previously been recorded on St. Lawrence Island. According to the A.O.U. Check-list of North American Birds, 5th Ed. (1957:641) it breeds only on Hall and St. Matthew islands, Alaska, about 200 miles southwest of St. Lawrence Island. During migration and in winter it has been recorded on Nunivak Island (Swarth, *Pacific Coast Avifauna*, 22:56-58, 1934) and several localities on coastal Alaska from St. Michael on Norton Sound (Nelson, *in* Gabrielson and Lincoln, *Birds of Alaska*, 1959:824) to Nushagak near Bristol Bay (Osgood, *N. Amer. Fauna*, 24:74, 1904). This species has also been recorded on St. Paul Island by Hanna (*Auk*, 37:254, 1920) and as a possible breeder there by Kenyon and Phillips (*Auk*, 82:634, 1965).

The date on which this bird was observed and subsequently collected, together with the presence of a brood patch and enlarged testes, strongly suggests that it bred on St. Lawrence Island in 1966. No female was seen, and the behavior of the male was not observed in detail, making the presence of a territory impossible to ascertain. The Snow Bunting, *P. nivalis*, was a common breeder in this area, with fledged young being seen about the middle of July.

An explanation of the restricted breeding area of *hyperboreus* is rendered difficult by the lack of knowledge of its habits and requirements. However, two possibilities come to mind, namely, freedom from competition with *nivalis* or a high degree of philopatry (faithfulness to a species' birthplace). Gabrielson and Lincoln (*op. cit.*) state that "except for the fact that these birds choose to confine their breeding activities to these two islands [Hall and St. Matthew islands], their behavior is not greatly different from that of the Eastern Snow Bunting which is found on the mainland and on most of the other islands of the Bering Sea." They do not record *nivalis* from Hall or St. Matthew islands; thus *hyperboreus* is able to exist there without competing with *nivalis* as would seemingly be necessary if it were sympatric with *nivalis*.

These observations were made while I was engaged in studies of the breeding biology of two species of plankton-feeding alcids on St. Lawrence Island. This work was supported by a grant from the National Research Council of Canada to M. D. F. Udvardy, and I wish to thank him for critically reading this manuscript.—SPENCER G. SEALY, *Department of Zoology, University of British Columbia, Vancouver 8, British Columbia, 22 October 1966.*

Sharp-tailed Grouse Relations to a Food Source near a Dancing Ground.—The behavior of the Sharp-tailed Grouse (*Pedioecetes phasianellus*) on dancing grounds has been described by Lumsden (1965), Hamerstrom and Hamerstrom (1960), and Ammann (1957). Male sharptails are associated with a dancing ground where they conduct their complicated courtship performances at certain times of the year. Males usually adhere rather closely to a well-defined territory, although territorial boundaries are often violated when females are present. Males may even leave the dancing ground to join females (Lumsden, 1965). As described in this paper, adjustments of territories may also occur in response to the proximity of a localized food source.

This observation was recorded on Display Ground 11 in the Bessey District of the Nebraska National Forest, Thomas County, Nebraska. The National Forest is located in the Sandhills and has been described in a previous paper (Blus, 1966). Repeated observations from 1963 through 1966 indicated that the display ground was situated on a small hill; territories of males were located from 50 to 150 feet north of a windmill and tank. An area of several hundred feet around the windmill was severely overgrazed by cattle that were present in the area from May to October. During the initial morning observations in the spring of 1965 (7 April), territories of most of the 11 males had been moved south to a valley around the windmill. The territory of one male included the tank, which had been drained the previous fall, and the area immediately around it. The approximate dimensions of the tank are 20 feet in diameter and 2 feet in depth. Soon after my arrival by automobile at 0650, the males on the dancing ground resumed courtship of several females by vigorous Tail Rattling and Posing displays. Display terminology is that of Lumsden (1965). The principal display of the male in the tank, hereafter referred to as the tank male, was that of Cooing as he moved in and around the tank. At 0720, seven female sharptails flew to the