ABOUT THE COVER: OLDSQUAW

The Oldsquaw (*Clangula hyemalis*) is a winter duck on the New England coast, whose active, perky behavior elicits anthropomorphic adjectives like "cheery," "lively," "restless'" or "happy and gay." The incessant babbling of Oldsquaw flocks gives the bird its name—from the Massachusetts Indian word *squa* meaning *woman*. The Oldsquaw is a beautiful duck with a bewildering array of plumages through the seasons. In winter, males have largely white bodies, heads, and necks with brown wings, back, and breast, and sport the long tails that has given the species the common name "long-tailed duck" in Eurasia. They also have tan facial patches accentuated by dark brown cheeks and pink and gray bills. Females appear more dusky brown and lack the brown breast band and long tail. In summer plumage, males have a rich chocolate breast, neck, and head with a mask of white. Female plumage is similar year round but somewhat darker in summer. Oldsquaws can be identified at long distance by their rapid, careening flight.

Oldsquaws are monotypic and Holarctic in distribution, breeding in coastal tundra and interior valleys mostly above the Arctic Circle. In North America they breed from Alaska across northern Canada to Hudson's Bay and over to Greenland. This species winters along both coasts from Alaska to California and Greenland to North Carolina, and a large population winters on the Great Lakes. In Massachusetts they are an abundant coastal migrant, and they winter in huge flocks among the offshore islands. In April and May, more than 4000 may congregate in Newburyport Harbor. Fall migratory flights occur from October to mid-November, with a high count nearly 6000 reported off of Cape Ann, and by mid-November the wintering birds are congregating.

The Oldsquaw is a monogamous species, with some individuals re-pairing in successive seasons. Pair formation begins on the wintering grounds long before the spring migration to the arctic tundra. The vocalizations of this species are variable and prompted John C. Phillips to write in his classic monograph on ducks: "Probably more ink has been devoted to attempts at describing the voice of the male, than is the case with any other duck. Were I to invent a new series of sounds I should not come any closer than the rest, for one must go to the coast one's self on some calm morning in March to get any idea of it, and the journey will not be in vain if there are any birds within a mile or so." The call is generally described as two or three notes, and the term *yodeling* has been used.

As with most ducks, the Oldsquaw's nuptial displays occur largely on the water. Males erect their long tail feathers and necks and bow to the female, and often flip their heads back until their bills are vertical. Often baying notes—*ugh, ugh, ah-oo-gah*—accompany the displays. Males and females may swim toward each other with head and neck extended flat in the water. A variety of other displays have been described as "head-shaking," "porpoising," and "breast

display," and a brief aerial display has been described as a "parachute display." Often, several males may court a single female, resulting in fights and chases—courtship is very dynamic in this species.

Oldsquaws nest in the tundra in depressions of moss and grass, lined with leaves and down. They often nest in loose aggregations near shallow tundra pools. The usual clutch is 6-7 buffy-olive eggs, and occasional clutches of a dozen or so are attributed to "egg-dumping" by other Oldsquaws. Incubation, performed by the female alone, lasts 3.5-4 weeks. The young are precocial and move about soon after hatching. The young may be herded into creches containing the chicks of several broods, or up to a hundred or more chicks, tended by older females. The nests are subject to predation by foxes and other mammals, and Oldsquaw females give elaborate distraction displays when predators approach the nest. The young fledge in 5-6 weeks.

Oldsquaws feed primarily on aquatic invertebrates, including crustacea (e.g., shrimp, crabs, and amphipods), molluscks, and insects. Fish are only a minor component of their diet. They are supreme divers, with some reports of birds getting caught in nets set at a depth of over 200 feet. They prefer, however, to forage in water up to 25 feet in depth. They reportedly can stay under water for more than a minute and a half.

Oldsquaws may be one of the few duck species that have not diminished in numbers in historical times. Their strong flavor makes them a poor food choice, and they nest in areas generally remote from man and pesticides. There was, however, severe mortality in gill nets in the Great Lakes during the 1950s when as many as 20,000 per year were killed in Lake Michigan alone. This situation has been largely corrected, partially at least due to a diminished fishing industry. Their major predators are foxes, gulls, and jaegers on the breeding grounds, but weather conditions are probably the major factor that constrains populations size. It appears that thousands of these charming little seaducks will continue to provide the great flight shows at Nantucket indefinitely into the future.

W. E. Davis, Jr.

ABOUT THE COVER ARTIST

Paul Donahue's artwork has frequently appeared on *Bird Observer*'s cover, much to our delight. Some of our readers may also enjoyed the experience of visiting the rain forest canopy walkway at the Amazon Center for Environmental Education and Research (ACEER) off the Rio Napo in the Department of Loreto in northeastern Peru. This canopy walkway, the world's longest, is the creation of Paul and Teresa Wood. Paul can be reached at P.O. Box 554, Machias, Maine 04654.