

## BUFFLEHEAD (*BUCEPHALA ALBEOLA*) APPARENTLY CAUGHT BY HARBOUR SEAL (*PHOCA VITULINA*)

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*Abstract* — I document apparent predation on a Bufflehead by a Harbour Seal in Boundary Bay.

*Key words:* Bufflehead, *Bucephala albeola*, Harbour Seal, *Phoca vitulina*, predation, Boundary Bay, Surrey.

At approximately 11:00 Pacific Standard Time on 11 January 2000, while participating in a B.C. Coastal Waterbird Survey at Crescent Beach, Surrey, I noticed a female-plumaged Bufflehead (*Bucephala albeola*) that appeared to be in distress approximately 300 m. offshore in Boundary Bay. Curious, I watched through Zeiss Dialyst 10 x 40 B/GA T binoculars as the bird vigorously flapped its wings, beating the water's surface, moving 2-3 m. in one direction, then another. At the end of these agitated "dashes," it disappeared underwater, as if diving. After the third "dash-dive-resurface" sequence, I saw an adult-sized Harbour Seal (*Phoca vitulina*), recognized by its brown-blotched, grey "skin," surface and then dive approximately 2 m. behind and toward the duck, seemingly pursuing it. I wondered why the duck didn't escape by taking flight, inasmuch as Buffleheads normally take off easily from the water, with less effort than other diving ducks (Bent 1925; Palmer 1976; Cramp 1977; Madge and Burn 1988). Although I did not see the seal again, the apparent pursuit continued, with three more "dash-dive-resurface" sequences by the duck. After a fourth "dash" of 1.5 to 2 m., the duck disappeared under water, and did not resurface. The Bufflehead was probably finally eaten by the seal.

### DISCUSSION

The shallow waters of Boundary Bay support a moderate population of Harbour Seals, which are often seen in the water, or hauled out on sandbars and banks near the Nikomekl River. The Bufflehead is a common wintering species in Boundary Bay, frequently observed from Blackie Spit and Crescent Beach. Eight were seen on the survey that day, but none of the others was in the immediate vicinity of the attack.

Adult seals need as much as 10 kg. of food daily (Schliemann 1990). The primary food of the Harbour Seal is fish (Burt and Grossenheider 1964), including anchovy, cod, flounder, herring, lamprey, rockfish, salmon, smelt and trout (Cowan and Guiguet 1965; Nowak 1991) and shellfish (Cowan and Guiguet 1965). Their diet also includes octopus (Nowak 1991) and there have been observations of birdcatching or of bird remains in stomach contents of several northern pinniped species, including Harbour Seals, on the Canadian west coast (Lucas and McLaren 1988).

Some predation on seabirds by Grey Seals (*Halichoerus grypus*), octopuses (*Octopus* sp.), sharks (*Galeocerdo cuvieri*, *Carcharodon carcharias*, *Carcharinus leucas*, *C. longimanus*), monkfish (*Squatina squatina*) and cod (*Gadus macrocephalus*) has been documented in

Maine (French 1981). Off Eastern Egg Rock, Muscongus Bay, Maine, in August 1975, fish of undetermined species attacked a fledgling Black Guillemot (*Cepphus grylle*) and two eclipse-plumaged Common Eider drakes (*Somateria mollissima*). Eventually the eiders escaped, but the guillemot was disabled; a bird believed to be the same guillemot was found beached the next day. The webbing of the feet had been pierced, and both its legs had numerous lacerations that severed the main tendons, paralyzing the legs. In 1974, other seabirds were found similarly injured (French 1981). At Triple Island, B.C., Killer Whales (*Orcinus orca*) were seen preying upon ducks, mostly White-winged Scoters (*Melanitta fusca*) (Odlum 1948). However, with the exception of well-known predation by Leopard Seals (*Hydrurga leptonyx*) on penguins, birds do not usually form a large part of the diet of pinnipeds (Hamilton 1946).

There is little in the literature regarding predation on Buffleheads. On land, large falcons may prey on them (Bent 1925; Cannings *et al.* 1987), as do Bald Eagles (*Haliaeetus leucocephalus*) occasionally (Phillips 1922-1926; Retfalvi 1970; Todd 1979). Munro (1929) found a Bufflehead preyed upon by a Snowy Owl (*Nyctea scandiaca*). Erskine (1972) mentions Great Horned Owl (*Bubo virginianus*) as a common predator in Bufflehead breeding areas, and perhaps Cooper's Hawk (*Accipiter cooperii*). In southeastern Alaska, Buffleheads are sometimes preyed upon by mink (*Mustela vison*) along the edge of the ice (Phillips 1922-1926), and females killed on the nest by weasels (*Mustela* sp.), mink and Barrow's Goldeneye (*Bucephala islandica*) (Gauthier 1993). Such references as Delacour (1959), Rodgers (1974), Johnsgard (1975, 1978, 1979), Bellrose (1976), Palmer (1976), Cramp (1977), and Heintzelman (1978) provide no information on predators of Buffleheads.

A small duck, such as a Bufflehead, is apparently unusual prey for a Harbour Seal. Although the waters off Crescent Beach are too shallow for fishing activities, making entanglement in fishing gear as reported by Burch (1923) unlikely, the bird may have been entangled in some other equipment or already injured or disabled in some other way, affording an opportunistic target for the seal.

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