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DAVID E. DAVIS, *Department of Zoology, North Carolina State University, Raleigh, North Carolina 27607.* Accepted 10 Sep. 73.

**Bald Eagle preys upon Arctic Loon.**—A number of authors (Brooks 1922, Bent 1937: 333-339, Munro 1938, Murie 1940, Imler and Kalmbach 1955) have documented diving birds in the diet of the Bald Eagle (*Haliaeetus leucocephalus*). Apparently loons are not taken frequently, and I have seen no previous account of eagles preying upon the Arctic Loon (*Gavia arctica*). The purpose of this note is to document the circumstances surrounding an eagle-loon predator-prey encounter rather than simply to identify the species involved.

In discussing eagle predation, Imler and Kalmbach (1955) note that "many . . . birds captured were taken under conditions of adversity." They elaborate little except to point at the effects of severe weather and to recount an incident in which a hunter nearly lost a wounded duck to an eagle. The latter occurrence is common; a number of hunters have told me of eagles stealing ducks they had shot,

and in May 1969 I watched an immature eagle try to dispatch a Glaucous-winged Gull (*Larus glaucescens*) that had become entangled in fishing line. But for wild-caught prey, that is, where debilitation by man is not a factor, we rarely have the opportunity to determine the more subtle aspects of "condition" as are students of the larger mammalian predators (see Mech 1966: 168-170).

On 4 June 1969 I saw an immature Arctic Loon acting strangely. This bird was resting, head under wing, just 2 m from shore in the shallow water of a protected bay on the east side of Vargas Island, Clayoquot Sound, Vancouver Island, British Columbia (49° 10' N, 125° 58' W). I approached in a small boat to within 35 m of the loon to confirm identification. It lifted its head and swam away, slowly, but did not attempt to dive or fly, and was again resting near shore when I left at 14:55. It had not moved when I passed by again at 16:05. At this time four other Arctic Loons were diving and apparently feeding in adjacent deeper waters.

At 08:20 on the following morning I was attracted by the sudden excited cawing of Northwestern Crows (*Corvus caurinus*) to a commotion in the water some 300 m north of the previous day's sighting. Though the fog was heavy, I eventually saw a mature Bald Eagle in the water of a large, shallow bay. It was swimming in the manner described by Campbell (1969) and was dragging something. The eagle's movements became more labored as it neared shore, changing from a slow, but steady forward motion to a series of pull-rest sequences that continued about 3 m up from the water line. During the first rest stop on land I saw the prey, a bird, kick its legs feebly.

When I arrived minutes later, the eagle was plucking breast feathers from the bird, which I found to be an immature Arctic Loon. The loon was dead, but was still warm. It proved to be a female with no follicles measuring larger than 2.5 mm. Its upper alimentary tract contained about 30 Pacific sandlance (*Ammodytes hexapterus*) thus indicating that the bird was still able to feed; it seemed thin, but its weight of 1,775 g is within the range (1,200 to 2,500 g) Palmer (1962: 43) gives for the species.

Externally the bird seemed normal except for a linear patch of oil, approximately 35 mm × 150 mm, extending down the side from the left axilla. The intestine contained a massive infection of tapeworms including some in the family Hymenolepididae; hundreds of fine, threadlike specimens were wound and woven into masses as large in diameter as the gut itself. The volume of parasites was greater than the volume of chyme in the intestine, and innumerable small ulcerations were visible in the intestine wall.

It seems evident, considering the oil and the parasites, that this loon was in at least a somewhat weakened condition. Further, it seems likely that the dead loon was the strangely acting one seen the previous day. Thus, this incident appears to be another example of a predator's ability to recognize and capitalize on weakness in a potential prey individual.

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DAVID F. HATLER, *Department of Zoology, University of British Columbia, Vancouver 8, British Columbia, Canada.* Accepted 20 Sep. 73.

**Success of two feeding methods of the Black-legged Kittiwake.**—The Black-legged Kittiwake (*Rissa tridactyla*) frequently dives below the water's surface to capture prey (Townsend and Morrill 1907, Rich *in* Bent 1921). Belopol'skii (1957) noted that kittiwakes collect food from the surface water, but are capable of diving to depths of 0.5-1.0 m, dropping into the water directly from the air. No detailed description of the kittiwake's predatory methods exists, nor are there data on the relative success of these methods. Twice during the summer of 1972 I watched kittiwakes using two different methods of fishing in Landing Cove, Great Island, Newfoundland.

At 15:12 on 4 July, adult kittiwakes from the nesting cliffs surrounding Landing Cove gathered above the water's surface about 40 m below where I sat watching them through a 30× telescope and 8 × 30 binoculars. From my position I could look into the water and down to kelp beds and rocks several meters below the surface. Some 20-30 kittiwakes flew slowly back and forth 2-4 m above an estimated 16 m<sup>2</sup> area where incoming waves passed over submerged rocks creating eddies and upwellings. They flew with the body at a 60°-70° pitch angle above the horizontal; the partially expanded tail was depressed below the body's long axis. The feet hung below the belly and moved back on the wings' forward stroke and forward on the recovery stroke. The wings, from the shoulder to the wrist, were held vertically with the manus extended at right angles to the forearm, the wing tips pointing away from the body. At midstroke the manus had a pitch angle of 30°-60° above the horizontal, moving up to 90° at the end of the forward stroke, then rotating so that in rearward motion the "leading edge" was again 30°-60° above the horizontal at midstroke. The birds moved forward, but at less than an estimated 3 m/second.

Of 42 capture attempts by the birds, 16 were dives below the surface, from the air, whereas on 26 they dropped to the surface and submerged only the head. Both methods were used simultaneously by different individuals, but I do not know if a particular bird used one method exclusively.

The diving kittiwake depressed the pitch angle of its body to nearly zero and extended the wings horizontally. Then the bird depressed the leading edge of one wing, rolled slightly to one side, tilted forward, and fell head first. The kittiwake entered the water with the wings partially folded and angled back slightly. The