

## Bald Eagle (*Haliaeetus leucocephalus*) Consumption of Harbor Seal (*Phoca vitulina*) Placenta in Glacier Bay, Alaska

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This note reports on the frequent consumption of Harbor Seal (*Phoca vitulina*) placenta by the Bald Eagle (*Haliaeetus leucocephalus*) and a fluctuation in numbers of Bald Eagles in Muir Inlet, Alaska, in relation to the availability of this food source.

From 30 May to 23 August 1982 and 8 to 13 June 1984, we spent 41 d in our study area in the northern portion of Muir Inlet, located in the northeast corner of Glacier Bay in southeast Alaska. This recently (within the last 20 yr) deglaciated area is about 20 km long and an average of 2 km wide. The shoreline rises steeply on both sides of the inlet and consists of loose rock and glacial debris. There are no trees and vegetation is extremely sparse. Up to 1,000 Harbor Seals rest and give birth to young on small icebergs formed by an active tidewater glacier at the head of Muir Inlet. Our research was focused on the biology and behavior of Harbor Seals in this area. Our regular censuses and observations of seals required us to scan the entire inlet with binoculars and spotting scopes and consequently observe eagles and their interactions with seals.

On 9 occasions in early June, we observed Bald Eagles feeding on Harbor Seal placenta; these were the only times we saw eagles feeding in our study area. In one instance we saw 6 eagles either feeding on the placenta, chasing after an eagle with placenta, or perching near a feeding eagle. At each of 3 Bald Eagle perches visited in early June 1982, we found from 2 to 15 clumps of lanugo hair (the fetal coat of Harbor Seal pups that is shed before birth and is expelled with the placenta).

Bald Eagle numbers in our study area changed through the season and corresponded to the time of Harbor Seal pupping. We saw a minimum of 4-7 eagles on 5 d between 31 May to 17 June 1982 and a minimum of 5 on 2 d between 8 and 13 June 1984. We saw fewer eagles during visits later in the season. During the latter part of June we saw up to 2 eagles. In 16 d of observation in July and August 1982, we had only one eagle sighting. Bald Eagles in Muir Inlet consisted about equally of mature and immature birds, 4 of the 7 seen at one time in June 1982 and 3 of the 5 seen at one time in June 1984 were mature. The majority of Harbor Seal pups in Muir Inlet are born in late May and early June, the same period we saw the largest numbers of Bald Eagles. In both 1982 and 1984, over 300 Harbor Seal pups were born in this portion of Muir Inlet. Given a minimum weight of 1 kg for a Harbor Seal placenta, this would mean an excess of 300 kg of food available to eagles.

We concluded that Bald Eagles in this area during late May and early June subsist largely or entirely on placenta of Harbor Seals because: 1) our frequent observations of eagles feeding on placenta and not on other food, 2) the abundance of this food source and the scarcity of other food sources in this deglaciated area, 3) the presence of seal lanugo hair found at eagle perches, and 4) the close parallel between the number of eagles in our study area and the Harbor Seal pupping season. Eagles appear to use this area for only a short period; we found no evidence of eagle nesting.

Sherrerd et al. (Living Bird 15:143-182, 1976) reported that Bald Eagles on Amchitka Island, Alaska consume northern Sea Lion (*Eumetopias jubatus*) afterbirth. It is the only other report we know that mentions Bald Eagles feeding on placenta of pinnipeds. We have observed Bald Eagles feeding on seal placenta and

scavenging on dead seal pups in other parts of Glacier Bay and Puget Sound, Washington.

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## Barred Owl Hunting Insects

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Although the Barred Owl (*Strix varia*) is partially insectivorous (Bent, U.S. Natl. Mus. Bull. 170, 1938) its methods of hunting and capturing insects have not been described. From 1924-2000 H we observed a Barred Owl hunting insects on 4 April 1984 at Blue Springs Stake Park, Orange City, Florida. The Barred Owl was apparently hunting noctuid moths (Lepidoptera) and large veined insects on the lawn of an historic house in the park. The owl hunted these insects from a small stump or on a sandy stretch of lawn beneath a lighted area. In hunting, the owl sat motionless except for slight head movements to watch the insects. Captures were attempted only after the insects landed. Capture attempts were a combination of 3 movements; 1) a bound initiated from a partially forward leaning position, 2) a single wing flap and 3) a short glide. Attempts covered 1-2 m distances and the owl was twice observed to follow missed attempts with 2 or 3 immediate additional pounces. Insects were captured with the talons and consumed by bringing the head down to pick the insect from the talons. One insect not immediately consumed was transferred to the beak before the owl flew to a nearby tree. At 1949 H the Barred Owl returned to its hunting perch on the lawn where it unsuccessfully attempted two more captures before leaving the area at 2000 H. During the time observed, the Barred Owl was successful in 2 of 18 capture attempts.

Forsman et al., (Wildl. Monogr 87, 1984) reported that the Spotted Owl (*Strix occidentalis*) diet also includes insects and that these owls used pounces to capture insects on the ground or on tree limbs. Also, mid-air captures of flying insects were not observed.

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