The Smithsonian Book of North American Mammals

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Alaskan hare | *Lepus othus*

The Alaskan hare occurs in the Arctic tundra region of western and northwestern Alaska from sea level to more than 600 meters elevation. The range extends from the Selawik-Kotzebue area in the north to the Cold Bay area in the south, and includes all of the Seward Peninsula, most of the Alaska Peninsula, and most of the western coast of Alaska. Fossil remains have been found in two late Rancholabrean sites in Alaska, Canyon Creek and Porcupine River Cave. These sites are outside the current range of *L. othus*, and the remains from Canyon Creek may be of *L. arcticus*.

*Lepus othus* is one of the largest species of hares. The skull is massive and the upper incisors are strongly recurved. Its stout claws facilitate digging through hard-crusted snow to reach vegetation. In winter pelage, it is white except for the extreme tips of the ears, which are black. In May, it may still be in winter pelage near snow fields at higher elevations, where it can be observed loping over the tundra, pale underparts flashing and large hind feet conspicuous; tail flagging also occurs. In summer pelage (August), the nose, sides of the face, and top of the head are brownish-orange; the top of the head is darkest. The front half of the outer surface of the ears is similar in color to the head. The back half of the ears is white and the tips are brownish. The tail is white or gray.

Alaskan hares are solitary except during the April–May mat-
ing season, when groups of 20 or more may be seen. Conception occurs from mid-April to May, and the gestation period is about 46 days. Usually, one litter of 5 to 7 young (average is 6) is born per year. The young may be born in nest sites aboveground with no brush or in the thick shelter of willow or alder brush. Some nests are located in natural depressions in the moss and cotton sedges, and have no lining; in those nests, the backs of the young are well beneath the top of the surrounding tundra, but the young are continuously exposed to cold, wind, and rain.

The time of birth seems to coincide with the loss of snow cover in late May. The young are precocial, and this timing enhances their chance of survival, because the snow has melted, their brown pelage blends in with the color of the ground surface, food is abundant, and ambient temperatures are relatively high. On some young, a white center stripe about 10 millimeters long is present on the forehead. The pupils are dark and the iris is dark blue. The young begin drifting away from the mother a few weeks after birth.

Females show signs of nursing for 5–9 weeks after parturition. This prolonged nursing period helps maintain a rapid rate of growth. The estimated average growth rate for juveniles is 37.2 grams per day over a 102-day growth period, from a birth weight of 100 g to a minimum adult weight of 3,900 g. The hind foot attains 95 percent of the average adult size in 112 days, an average rate of growth of 2.6 millimeters per day. Rapid growth allows at least a minimum adult body mass to be reached during the short summer, thereby increasing the hare’s chances of survival through its first winter.

*Lepus othus* inhabits tundra in the coastal regions of Alaska.

It lives in dense alder thickets, and in summer, when the vegetation is leafed out, it is nearly impossible to see. It comes out of the thickets in the evenings to feed. During snow and rain *L. othus* makes no attempt to seek shelter. Near the Kashunuk River, it was found in all habitats from sedge flats and wet meadows to the upper slopes of the Askinuk Mountains. The two subspecies are associated with distinct habitat types, and each subspecies is composed of a complex of disjunct populations. *Lepus othus othus* prefers tundra or alluvial plain, whereas *L. o. poradomus* lives primarily in coastal lowland areas.

During April and May, the diet consists mainly of shrubs, especially woody willow tissue and crowberry leaves. In early spring, Alaskan hares may be seen feeding at the edge of melting snow patches, where crowberries from the previous summer are abundant. The hares seldom drink water.

Population density varies among localities and years. Pilots flying over the Alaska Peninsula report seeing many Alaskan hares during some years, but no hares in other years. Alaskan hares are particularly difficult to see in summer when their pelage is brown. Predators include golden eagles, rough-legged hawks, snowy owls, gyrfalcons, arctic foxes, red foxes, weasels, wolverines, gray wolves, and polar bears. When attacked by a snowy owl, the alaskan hare may strike at the owl with its forefeet when the bird swoops low. Between attacks it races toward the nearest patch of willows for shelter. Because the red fox is present throughout the year and probably capable of taking both adult and juvenile hares, it may be the most important predator. No ectoparasites are known; endoparasites include nematodes. *T. L. Best*
Size
Total length: 565–690 (597) mm
Length of tail: 65–104 (74) mm
Weight: 3,900–7,200 (4,800) g

Identification
The Alaskan hare can be distinguished from L. arcticus and L. timidus on the basis of skull characters, but these species are also separated geographically. L. othus may occur with L. americanus. Compared with L. americanus, L. othus has longer ears, a tail that is always white, and winter pelage that is white to the base of the hairs.

Recent Synonyms
Lepus poadromus

Other Common Names
Alaska tundra hare, St. Michael's hare, swift hare, Alaska arctic hare, tundra hare, Alaska Peninsula hare, ukalisukruk, ugalishugruk, ushkanuk, okhotsk, oo-skon

Status
Uncommon

Subspecies
Lepus othus othus, northern and western Alaska
Lepus othus poadromus, southwestern Alaska

References
Mammalian Species 458; Walkinshaw, 1947