

FACTS ABOUT MARTEN

by Loyal Johnson

Marten (*Martes americana*) are members of the weasel family. Their range once covered all the coniferous forests of North America, but over-trapping and the clearing of forests have substantially reduced their range. In Alaska, they are found from the southeastern panhandle north and west to where the last of the trees disappear and the arctic tundra begins.

The marten's coat is characterized by soft, dense fur that varies in color from pale yellow to dark brown, shading to black on feet and legs. Lighter-colored martens tend to have grayish-brown tails, while darker animals have dark brown tail fur. The fur around the muzzle varies from gray to light brown with a short dark line extending up the forehead from the inner corner of each eye. The marten's throat and upper chest are usually pale buff and deeper orange. The ears are erect and rounded. Adult males weigh about 2.5 pounds and are about 25 inches in length, including the tail. Females are about one-third smaller. Martens have sharp, nonretractable claws, which they use for climbing and for holding their prey. Large, furry paws allow martens to travel over deep snow with ease. A row of stiff bristle-like hair grows at the "heel" of each front foot, acting like snowshoes for travel.

Martens are mostly solitary creatures except during the mating season. Typically, they have discrete home ranges, although in most situations transient individuals are found in areas of good habitat. The transients are most likely individuals seeking permanent home ranges. The home ranges of males do not normally overlap, although they may frequently overlap the home ranges of females. Combined studies show the home range of a male marten is approximately one square mile and that of a female, one-third square mile. Mating pairs are temporary and male martens may have several mates in the same season.

Mating occurs in July and August, but, through a process called delayed implantation, the fertilized eggs do not develop immediately. They lie dormant in the female's reproductive tract until late spring, when they implant on the uterine wall and develop rapidly. The litter, averaging three young, is born in April or early May. Young weigh about one ounce at birth and are covered with a fine, yellowish hair. The young marten's eyes do not open until they are about five weeks old. Weaning follows at six to seven weeks. Martens attain full body size at three months of age. Sexual maturity is reached at two years, although some one-year-old females may breed and bear young.

Home ranges of the marten vary in response to population levels and food availability. While hunting for food, martens follow the fringes of spruce thickets along streams or the edges of bog meadows. In southeastern Alaska, martens concentrate at lower elevations during winter, where they find food at the forest's fringe and along the beaches.

Movement patterns during these forays are erratic and seemingly aimless. When open swamps, lakes, bogs, or muskegs are crossed, the marten uses every tree for cover, perhaps for protection from large carnivores and birds of prey.

Martens depend heavily on meadow and red-back voles or mice as their primary food source over much of Alaska. Fluctuations of the food source often create corresponding variation in the marten population.

Their food habits are much more broad in southeastern Alaska, especially on some of the larger islands where they have been introduced, but where voles may or may not occur. They are also attracted to the easily obtainable food at recreational cabins and garbage dumps. After small rodents, probably the second most important food source is berries, especially blueberries, followed by small birds, eggs, and insects. The marten is a voracious and opportunistic feeder. Carrion, such as the remains of wolf or hunter-kills or salmon carcasses, often provides a meal. It has been reported that red squirrels are a major food source for martens, but this does not seem to be the case in Alaska. In fact, the two seem to get along quite well. Martens even use squirrel middens as resting sites during the day. Interestingly, red squirrels were introduced as a food source for martens to the islands of southeastern Alaska. Although martens are nocturnal foragers, they are occasionally seen during the day, especially just before stormy weather or immediately following a fresh snowfall.

Martens are widespread and locally abundant in Alaska. High fur prices during recent years have led to possible over-exploitation, especially adjacent to most southeastern Alaska communities. Destruction of marten habitat by wildfire and clear-cut logging presents the most serious management problems, since this animal is so closely tied to the ecosystem of mature forests. Recovery of these forests after disruption is very slow, and it can take many generations for a marten population, once reduced, to become abundant again.

The marten, or American sable (one of six different species of sable throughout the world, including the Russian), is Alaska's most widely trapped furbearer. A trapper may take from 100 to 200 martens per season, but most average 20 to 30. During 1920 to 1949, a period of intensive fur farming activity in the United States, extensive efforts were made to breed martens in captivity. They did not respond favorably, even though martens tame easily. In experiments, only about one in ten females would breed in captivity.

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