

Tiny omnivorous mammal maintains low profile on refuge

by Stephanie Rickabaugh

At birth I weigh about one ounce, have yellowish hair and my eyes are shut. At maturity I weigh three pounds or more. I am an omnivore, eating both plants and animals, and I spend most of my time in old-growth forest. In fact, research on the Kenai National Wildlife Refuge has shown that I primarily feed on voles, berries, birds, eggs, and insects, although I like voles best.

As an adult, I am larger than a weasel and my coat is yellow to dark brown in color. I am a solitary species and will actively defend my territory from other individuals except during mating season in July and August, when males and females cross territorial boundaries.

After mating, our females delay implantation of fertilized eggs for six months because they don't want the babies born until the following April. (An implanted egg takes only 27 days to grow a deliverable pup.) Average litter size is three pups. Our home range size varies according to food availability, but can be from one to 15 square miles. Good snow depth for insulation is very important to my survival during the winter months. Some of my calls have been described as "chirping" sounds.

As you may have guessed, the creature in question is a marten, or *Martes americana*, a fur-bearing relative of the mink and wolverine. Marten have slender torsos, long legs, bushy tails and well-developed markings on their fur. Marten populations are scattered throughout the boreal and forested mountain areas across North America.

In Alaska, marten range from Southeast to the northern and western forested areas of the Interior. Marten are one of the most habitat-specialized of the North American carnivores, generally being found only in old-growth forests.

Due to minimal fat reserves, marten do not hibernate during the winter and must actively search for food all year long. People used to believe that marten traveled from tree to tree and ate primarily squirrels, but radio-collar studies have shown that martens cover large home ranges, moving mostly on the ground or snow surface. Their large furry paws and small body mass allow for easy travel over (and beneath) deep

snow. Furthermore, refuge studies of scat samples have shown voles to be their number one dietary favorite.

I have heard stories of people lying in their tents and hearing a marten chirping. They describe the chirping sound as similar to that of "velociraptors" in the movie "Jurassic Park." Once folks have the nerve to crawl out of the tent to investigate the chirping, they generally find a marten rather than a dreaded velociraptor. I, on the other hand, have spent weeks in the woods in Alaska and have never seen a marten.

Historical marten abundance and distribution on the peninsula are not well documented. Fur records and daily logs from the Alaska Commercial Company during the 19th century report some marten pelts being purchased on the Kenai Peninsula but don't say where the animals were collected. Historical reports from hunters and trappers generally indicate that few marten were taken on the western Kenai in the 1930s and 1940s.

The Alaska Department of Fish and Game began sealing marten pelts with the 1988-89 season, so the peninsulawide harvest was not accurately tracked prior to that time.

There appear to be many more marten on the Prince William Sound side of the peninsula, in the old growth forest along the coast.

For example, 484 marten were taken in the Portage-Seward area (Game Management Unit 7) in the most recent five-year period (1996-2001), whereas only 14 marten were taken on the Kenai refuge in the 37-year period of 1960-1997.

How do we explain this extreme difference?

The most likely explanation is that our western Kenai forests are basically too young for marten. Frequent wildfires have recycled the forests on the western side of the peninsula, and classic old-growth forest has not had time to develop on a wide scale. There are old-growth forest stands on the south side of Kachemak Bay, but most of the western peninsula has younger forests that have burned within the last 400 years or so.

These "young" forests lack the abundant large fallen woody debris that marten like for winter shelter.

Maybe with all the beetle-killed trees coming down nowadays, the prospects for marten habitat could be improving dramatically.

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Prior to moving to Alaska, she worked with the U.S. Forest Service tracking pine marten in Northern California. Previous Refuge Notebook columns can be viewed on the Web at <http://kenai.fws.gov>.