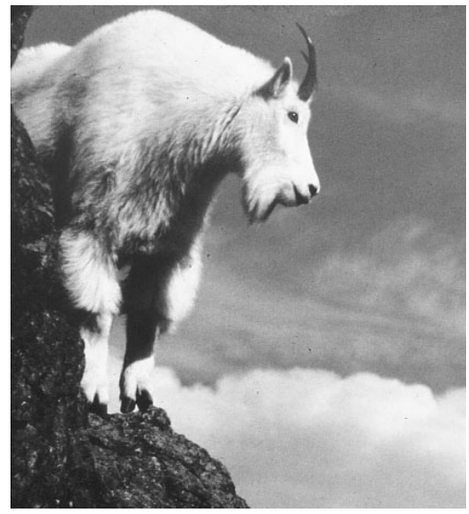
Mount Rainier National Park

National Park Service
U.S. Department of the Interior

Mammals and Life Zones

Just as people have adapted to living in nearly every climate imaginable, our fellow mammals have come to occupy many different life zones around the world. These life zones, like big neighborhoods, provide many different habitats where animals can find food, water, shelter, and space. More than fifty different kinds of mammals live in the life zones found in Mount Rainier National Park. Some are specially adapted to one life zone, while others range through several.

Imagine taking a very long walk from the edge of the park up to the summit of the mountain. What kinds of life zones would you see? What kinds of mammals would you find in each one? Looking at life zones can help us better understand and appreciate mammal adaptations and the struggle to survive—a trait all living things share.



Mountain goats live in the Alpine Zone

Lowland Forest Zone

Douglas squirrel

You're in the lowland forest when you enter the park and find yourself sheltered by giant trees, dense shrubs and brush. The old-growth forests of this zone have trees towering 250 feet (76 m) or more, reaching diameters of 100 inches (2.54 m). Found between 2,000 and 3,000 feet in elevation (610-914 m), this zone is crowded with Douglas fir, western hemlock, and western red cedar.

If you pass a pond or a lake, you might see evidence of beavers. Beavers eat tree bark and "girdle" trees which they can later use to make dams and lodges. Look for signs of gnawed trees as you walk through this zone. And listen overhead for the chirping sound of the Douglas squirrel, also known as a chickaree. You'll probably notice how it got its name: it will shout out *chickareeeeee!* as you pass.

Pacific Silver Fir Zone

Black bear cub

A subtle change in the types of trees and thickness of forest undergrowth might clue you in when you arrive at the edge of the Pacific silver fir zone. It stretches between 3,000 and 4,500 feet (914-1372 m) in elevation. The climate here is slightly cooler and wetter than in the lowland forest. You'll recognize Pacific silver fir, noble fir, western white pine, western hemlock, and Douglas fir trees all around you.

If you walk through this zone during the night, you may be lucky enough to hear the soft thwack of flying squirrels jumping and gliding from one tree to another. They have extra skin under their arms and legs, and they stretch them out and sail like kites from high up in the trees right down to the ground.

In the daylight you might catch a glimpse of a bear cub climbing up a tree. Like some other mammals, bears seasonally wander through many different life zones in search of available food.

Subalpine Zone

Elk

You know you've entered this zone when you see mountain hemlock trees. They have short, stubby needles like their cousins in the lowland forest, but these needles form beautiful star-shaped bundles on the branch. You'll still see a few Pacific silver fir, mixed in with whitebark pine. Stands of subalpine fir, Alaska yellow cedar, and Engelmann spruce will begin to appear as you climb higher. The subalpine zone is generally found between 4,500 and 6,500 feet (1372-1981 m). As you climb into this colder, snowier zone, the continuous forest gives way to patches of trees surrounded by meadows of colorful wildflowers, where deer and elk come to graze and browse in the sunshine.

Alpine Zone

Marmot

Here's one zone you can't miss—no trees grow here. Some parts of the alpine zone are covered with flowers and grasses in the summer; others are blanketed by snowfields that never melt and glaciers of blue ice. This zone starts between 6,000 and 7,500 feet (1828-2286 m) and goes all the way to the 14,410-foot (4392 m) summit of Mount Rainier!

What mammals could ever survive up here? You hear a high-pitched whistle, and in a rock pile you see what looks like a big fat mouse with round ears and no tail. A pika gathers leaves, flowers, and the fruits of alpine plants to dry in the sun and store for winter. Another rodent, the marmot (left), doesn't gather food, but hibernates instead. It can sleep more than half the year in its burrow until the snow melts.

Mammals of Mount Rainier

Bears - family *Ursidae*

black bear	*Ursus americanus*

Shrew - family *Soricidae*

common / masked shrew	*Sorex cinerea*
Trowbridge shrew	*Sorex trowbridgii*
wandering shrew	*Sorex vagrans*
dusky shrew	*Sorex monticolus*
water shrew	*Sorex palustris*
marsh shrew	*Sorex bendirii*

Mole - Family *Talpidae*

shrew-mole	*Neurotrichus gibbsii*
Townsend mole	*Scapanus townsendii*
coast mole	*Scapanus orarius*

Bats - family *Verspertilionidae*

Yuma myotis	*Myotis yumanensis*
hairy-winged bat	*Myotis volans*
silver-haired bat	*Lasionycteris noctivagans*
big brown bat	*Eptesicus fuscus*
hoary bat	*Lasiurus cinereus*
Townsend's big-eared bat	*Corynorhinus townsendii*

Marmots, squirrels, and chipmunks - family Sciuridae

hoary marmot	*Marmota caligata*
golden-mantled ground squirrel	*Spermophilus saturatus*
yellow pine chipmunk	*Tamias amoenus*
Townsend's chipmunk	*Tamias townsendii*
Douglas squirrel	*Tamiasciurus douglasii*
northern flying squirrel	*Glaucomys sabrinus*

Golden-mantled ground squirrel

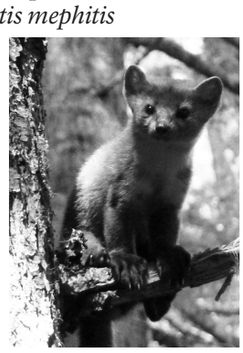
Raccoons - family *Procyonidae*

raccoon	*Procyon lotor*

Weasels, skunks, and their allies - family *Mustelidae*

American marten	*Martes americana*
fisher	*Martes pennanti*
short-tailed weasel, ermine	*Mustela erminea*
long-tailed weasel	*Mustela frenata*
mink	*Mustela vison*
spotted skunk	*Spilogale putorius*
striped skunk	*Mephitis mephitis*

Marten



Cougar

Cats - family *Felidae*

mountain lion, cougar, puma	*Puma concolor*
bobcat	*Lynx rufus*
lynx (not seen since 1906)	*Lynx canadensis*

Pocket Gophers - family *Geomyidae*

northern pocket gopher	*Thomomys talpoides*

Why *Latin*?

Most people just call animals by their common names. But it's good to know the Latin, because common names can be confusing. For example, *Aplodontia rufa* has many names: boomer, sewellel, and chehalis. It's also called a mountain beaver, even though it's not a beaver at all (see list below).

Latin names are also good for international travelers who might not know the common name but recognize the Latin. It is, after all, the language of science all over the world.

Porcupines - family *Erethizontidae*

porcupine	*Erethizon dorsatum*

Pikas - family *Ochotonidae*

pika	*Ochotona princeps*

Pika

Red Fox

Foxes, wolves, and coyotes - family *Canidae*

coyote	*Canis latrans*
red fox	*Vulpes vulpes*

Jumping mice - family *Zapodidae*

Pacific jumping mouse	*Zapus trinotatus*

Mice, rats, and voles - family *Cricetidae*

deer mouse	*Peromyscus maniculatus*
pack rat, bushy-tailed woodrat	*Neotoma cinerea*
Gapper's red-backed mouse	*Clethrionomys gapperi*
heather vole	*Phenacomys intermedius*
water vole	*Microtus richardsoni*
long-tailed vole	*Microtus longicaudus*
Townsend's vole	*Microtus townsendii*

Rabbits and hares - family *Leporidae*

snowshoe hare, varying hare	*Lepus americanus*

Deer - family *Cervidae*

elk, wapiti	*Cervus elaphus*
black-tailed deer	*Odocileus hemionus columbianus*
mule deer	*Odocileus hemionus hemionus*

Goats - family *Bovidae*

mountain goat	*Oreamnos americanus*

Beavers - family *Castoridae*

beaver	*Castor canadensis*

Apoldontias - family *Aplodontiidae*

mountain beaver, boomer	*Aplodontia rufa*

How Can I Learn More?

Check out *Cascade-Olympic Natural History* by Daniel Mathews; *Mount Rainier's Mammals* by M. L. Schamberger; and *Plants and Animals of Mount Rainier* by Joe Dreimiller. The best way to learn about mammals, though, is to look for them in the wild!