Featured Creature
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Douglas's Squirrel
Tamiasciurus douglasii


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Douglas's squirrel

General Description
In his 1894 natural history classic, *The Mountains of California*, John Muir devotes an entire chapter to the Douglas's squirrel, writing,

"He is, without exception, the wildest animal I ever saw,—a fiery, sputtering little bolt of life, luxuriating in quick oxygen and the woods' best juices."

Native to the Pacific Northwest, the Douglas's squirrel (*Tamiasciurus douglasii*) is a small tree squirrel in the family Sciuridae. It's also called a chickaree or pine squirrel. Distinctly smaller than the western gray squirrel (*Sciurus griseus*) that overlaps its range, the Douglas's squirrel has a brownish-gray back, tawny-orange belly, and a white to tawny eye-ring. In summer, a dark line is clearly visible between its abdomen and back, and its winter coat sports small, dark ear tufts. The Douglas's squirrel can grow to 37 cm long (14 inches), including its tail.

Habitat and Distribution
Douglas's squirrels live year-round in conifer forests of the Pacific Northwest, from British Columbia south through western Washington and Oregon, and down into northwestern California and the Sierra Nevada. From sea level to the subalpine, Douglas's squirrels occupy stands of pine, fir, spruce, and hemlock, where their favorite foods abound: conifer seeds and fungi.

Diet and Predators
Stripping the outside scales of a cone with their sharp and ever-growing incisor teeth, Douglas's squirrels extract their conifer-seed meal from the safety of a tree branch or an easily escaped ground perch. In the fall, they busily prepare for the coming winter, since they do not hibernate. Unlike some other squirrels that scatter their food caches all around, Douglas's squirrels are larder hoarders. They collect seeds and cones in mass quantities (thus a "larder") and bury them in moist underground areas or in tree cavities that preserve the seed's nutrition, for later access. These storage areas, or middens, are often covered in the residue of cone scales below a favorite eating perch. Not a few tree seedlings have sprouted thanks to forgotten seed caches, and early foresters used to raid these middens for their valuable conifer seeds.

Douglas's squirrels also eat bird eggs, flowering plant (angiosperm) parts like berries, seeds, flowers, and leaf buds, the cambium of small branch shoots, and importantly, fungi. Like many squirrels, they feed on the reproductive structures of fungi, like mushrooms and truffles, sometimes hanging them in twig crotches to dry and store for later eating. Spread around the forest by Douglas's squirrel feces, many of these fungal spores connect with plant roots underground in vast mycorrhizal networks that nourish the plants and soil. Indeed, this squirrel's taste for fungal spores and conifer seeds ties it directly to forest health.

Northern goshawks (*Accipiter gentilis*) and large owls commonly hunt the Douglas's squirrel, though ground predators, such as bobcats, weasels, and martens, also eat them.

Behavior
Douglas squirrels defend territories year-round, though most intensely in the fall while stocking their middens with food. They are diurnal—active during the day—and sleep at night in tree cavities or in large round leaf and stick nests, called *dreys*, built high up in trees.

One distinctive feature of the Douglas's squirrel is its volume! This little squirrel makes a big noise throughout the forest with chatter, rattle calls, screeches, and chirps, variously designed to warn of danger, enhance courtship, and argue territory boundaries. Muir writes of the Douglas's squirrel,

"He is the mocking-bird of squirrels, pouring forth mixed chatter and song like a perennial fountain; barking like a dog, screaming like a hawk, chirping like a blackbird or a sparrow; while in bluff, audacious noisiness he is a very jay."

Reproduction
In late winter and early spring, courtship begins with a vocal mating chase between male and female that forms their monogamous pair bond. An average of 4 naked and blind kits are born after 5–6 weeks of gestation. Most young are weaned by 3 months, stay with the family a few more months, and are able to breed during the next year. Depending on food availability, a second litter may be born later in the summer.

Fun Facts
- Squirrel tails are amazingly useful, providing balance as the squirrel leaps through the branches, warmth during cold weather, hiding cover, and a way to communicate with other squirrels and animals.
- Sharp claws, powerful jumping muscles and hyper-flexible "reversible" hind legs enable squirrels to nimbly jump around trees and run up and down tree trunks.

Where to See
Douglas's squirrels breed in all Klamath Network parks.

More Information
https://www.dfw.state.or.us/wildlife/living_with/docs/TreeSquirrels.pdf

Listen to a Douglas's squirrel:
https://acousticatlas.org/item/589

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