

Tahoe basin home to a variety of unusual species

By Adam Jensen

Think of them as your next-door neighbors – the hundreds of species of wildlife inhabiting the Lake Tahoe region. From boas to beavers to salamanders that roll down hill, the area boasts some unique inhabitants. Each is adapted to its own niche in the sometimes unforgiving Sierra Nevada. Some species you may know, others maybe not, but here's a look at just a few of Lake Tahoe's wildest locals.

Showshee hares and white-tailed jackrabbits

As you're out and about this winter, there are two types of rabbit species that may be donning new coats right alongside you. Both the snowshoe hare and the white-tailed jackrabbit make their homes at Lake Tahoe, and both turn white during the winter months to camouflage themselves from predators.

While some people assume all white rabbits seen during the winter at Lake Tahoe are snowshoe hares, white-tailed jackrabbits are widespread in open country above 8,000 feet, said Will Richardson, executive director and co-founder of the Tahoe Institute for Natural Science (TINS). Snowshoe hares, the smaller of the two species, can be found "just about anywhere on the West Shore," he added.

Another common rabbit variety, cottontails, began their spread around the Lake Tahoe Basin in the early 2000s and closed the final gap in their east-to-west distribution in 2016, Richardson said. TINS is interested in speaking with people with first-hand knowledge of when the cottontails began appearing in their neighborhoods to further its understanding of the species' spread.

"I've been here 21 years, and I think the first time I saw a rabbit was five years ago," said Kathy Strain, a South Shore resident and associate professor of biology and environmental science at Lake Tahoe Community College.

The spread of the cottontails may have helped the gray fox expand its range into the area as well.

Mountain beaver

People may be familiar with the distinctive dams built by the paddle-tailed variety of American beavers, which were pre-settlement inhabitants of the Lake Tahoe region before being trapped out of existence in the area and later reintroduced.

There's another variety of beaver that also calls the area home. The mountain beaver is significantly smaller than the American beaver and lacks the distinctive tail. Richardson described the species as an "overgrown and very primitive vole."

While they don't build large dams like the American beaver, the burrowing species can still change hydrology, making perennial streams go underground through extensive tunnels it builds just under the soil surface.

"There's not a lot known about them," Richardson said. "We seem to think that they're fairly rare."

There are American beavers all around the Tahoe area, as well as muskrats, which could be confused with the mountain beaver. The muskrat has a long, flat tail, while the mountain beaver's tail isn't clearly visible.

Northern rubber boa

"Boa constrictor" and "Lake Tahoe" are not often found in the same sentence, but the area does host a species of snake that uses constriction to catch its food.

The northern rubber boa varies in color from brown to orange to pink and can be found in a variety of habitats around the lake. Desolation Wilderness, near the lake's southwest corner, offers particularly inviting environs for the snake.

The boa can reach about 2 feet in length and is not dangerous to humans. Its head-like tail confuses both predators and prey, and it has a reputation among herpetologists as having one of the better personalities among its ilk.

"If there's a sweetheart in the reptile world, it's the rubber boa," Richardson said.

One snake variety with a less stellar reputation among the public, the rattlesnake, may also be finding homes closer to the Lake Tahoe Basin.

It's pretty clear that rattlesnakes are able to reach the Lake Tahoe Basin from the west, Richardson said, noting the number of the venomous snakes that can be found at places like nearby Lover's Leap. It's unclear if they are also able to make it up from the east, Richardson said.

There is evidence that climate change is driving species to higher elevations. Whether the movement of rattlesnakes toward Lake Tahoe is temporary or a long-term trend is unclear, Richardson said.

While rattlesnakes may not be people's favorites, Richardson noted they do provide an important ecological role of controlling rodent populations that can spread disease.



The Western pearlshell mussel can be found in the Upper Truckee River.
Photo/LTN file

Western pearlshell mussel

Mussels may be more associated with the California coast than the Sierra Nevada, but some South Shore streams host a long-lived native bivalve that is an indicator of environmental health.

The average life span of the western pearlshell mussel is 60 to 70 years, although some individuals are thought to have lived more than 100 years, according to the Xerces Society for Invertebrate Conservation.

“Because this species is sedentary, sensitive to environmental changes, and long-lived, it can be an excellent biological indicator of water quality,” according to the society.

The mussels depend on trout species as part of their life cycle, as the juvenile form of the western pearlshell attach to fish prior to dropping off and burrowing into soft substrate as adults.

The native mussels should not be confused with Asian clams, an aquatic invasive species that has established populations in the lake, or quagga or zebra mussels, potentially devastating aquatic invasive species that can be found in western

waterbodies but have been kept out of Lake Tahoe through prevention efforts including mandatory boat inspections.

Mount Lyell salamander

The often dry slopes of the Sierra Nevada can be a harsh environment for amphibian species. Still, the Lake Tahoe area does support native populations of frogs, toads, and salamanders.

One of these salamander species, the Mount Lyell salamander, makes its home soaking up the water near snowfields and doesn't have an aquatic phase in its life cycle.

Living below ground and staying inactive during extreme temperatures and conditions, the small gray-to-brown salamander blends in with its granite surroundings. It has also developed an unusual way of defending itself.

"Because they live in steep, rocky, icy terrain, when they get threatened, they curl themselves into a wheel and actually roll downhill," Richardson said.

Canyon live oak

Known for its expanses of pine trees, Lake Tahoe also supports satellite populations of canyon live oak trees, which are typically found at lower elevations in the foothills.

The trees, also known as golden cup oaks, attract specific species of animal communities.

The California sister butterfly, which features an orange spot near the tips of its wings, is among the species people can find living near canyon live oaks, Richardson said.

Once completed, the Incline Village to Sand Harbor Bike Path will be a great place to look at some of Tahoe's oak trees. The hike down to Vikingsholm in Emerald Bay also provides glimpses of some huge individuals.

Spotted owl

When it comes to owls, people are most likely to hear great horned owls at Lake Tahoe, and they're most likely to see northern pygmy owls, active during the day and given away by squawking birds signaling their arrival. People could also find spotted owls – but only if they're extremely lucky.

There's a handful of breeding pairs in the area, but the nocturnal species doesn't make itself known to the casual observer, Richardson said.

As with a great deal of wildlife viewing, staying quiet, patient, and observant are keys to finding some of Lake Tahoe's more unusual wildlife. It also never hurts to be in the right place at the right time.

*Adam Jensen is the environmental education specialist with the Tahoe Regional Planning Agency. This article is republished from the winter 2017 edition of **Tahoe In Depth**.*