

WILDLIFE: Some animals go torpid in the cold

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They also have muscles that can adjust the angle of their hair shafts to obtain maximum insulation.

All the owls in Oregon are built to handle cold. From the moment they hatch, they possess a thick blanket of fluffy down that covers their entire body. The insulating qualities are superb at keeping air trapped in the soft down, maintaining the owl's body operating temperature at about 109 degrees.

Great horned owls have been observed perched out in the open at 10 below zero, high up in cottonwood trees, looking for all the world like they were on alert for a cottontail to go hopping by. The cottontail on the other hand — on a night when the temperature is below zero — has taken cover in a thick clump of sagebrush, bitterbrush or rabbitbrush, staying out of the cold wind and conserving as much heat as possible, nearly invisible even to a hunting owl.

Ground squirrels and many other animals who make a living above the surface of the ground in summer have the ability to store fat in their muscles and under their skin. This abundance of fat tissue keeps them alive, and thick hair insulates them while sleeping below the frostline in their burrow. Some of these species are underground by September.

As snow gathers on meadows and open ground it creates a white and inhospitable-looking landscape; however, it also provides homes for mice, shrews, squirrels and voles who use tunnels to gather food.

There's a group of winter

visitors who wing their way down from the Arctic Circle who have the remarkable ability, while hovering above the snowy flat land, to sense these hiding rodents and drop on them. And as if these rough-legged hawks weren't enough for the rodents to cope with, there's also the short-tailed weasels who weave their way through the tunnels taking advantage of the easy food source.

Winter is also really hard on our native flying squirrels, who do not hibernate. Their insect prey is unavailable, so they get by with plant parts cached in old woodpecker holes. In nature, however, for every adaptation there is often a counter-adaptation. Long-tailed weasels, with their long lean bodies, find their way into chipmunk dens for easy meals, while fishers and pine martens wreak havoc on tree squirrel dens.

Those same weasels have an all-white winter coat that helps keep them camouflaged and somewhat hidden from owls and accipiters who also need food to get through winter.

Beaver and muskrats — and an occasional otter — build a very comfortable winter home of sticks and grass above the water, from which they swim out to feed. One would think such a home would be impenetrable, but there are mink and bald eagles who do their share to help the "Balance of Nature."

Our native Townsend's big-eared bat sleeps away winter in our lava caves, relying on its fat reserves to keep it alive. From a biological perspective, they appear to be dead, their heartbeat and breathing almost undetectable. The winter temperature in lava caves is a constant 40 degrees, which is ideal for hibernating bats; however, research has revealed that bats wake up at least three

times during hibernation and fly around in the cave to recharge their blood with oxygen.

Excess fat in winter is the most significant physical element in helping wildlife to survive. Our Western population of monarch butterflies use it for fuel and food to make their long and arduous flight from northern latitudes to the warm climes of California where they gather in the coastal forests to spend winter.

Hummingbirds that sometimes elect to spend winter here instead of going south with their kin also use fat to survive. They can go into a stupor for three days and nights without food or warmth. There may even be a Calliope or Anna's hummingbird coming to feeders in the Sisters Country right now that survived the 12-below night. They become active with just enough warmth during the day for them to leave their shelter and slurp up sugar water.

But sugar water is not food; it's a hot-shot substitute that may keep them alive, but they also must have the protein of insects they devour when they're after nectar as they feed from flower to flower during the summer. This is why it's important to take down feeders in fall.

Wintering birds as a whole need that same protein as well as water. When a bird attempts to slake its thirst using its body heat to melt snow and ice into water, it uses too much of their precious fat reserve. Yes, sage grouse can get away with it, but robins and most feeder-birds can not. They must have flowing or open water to stay alive.

The robins around Sisters Country in winter have migrated from the north ("ours" are in Sacramento). They can get by on juniper

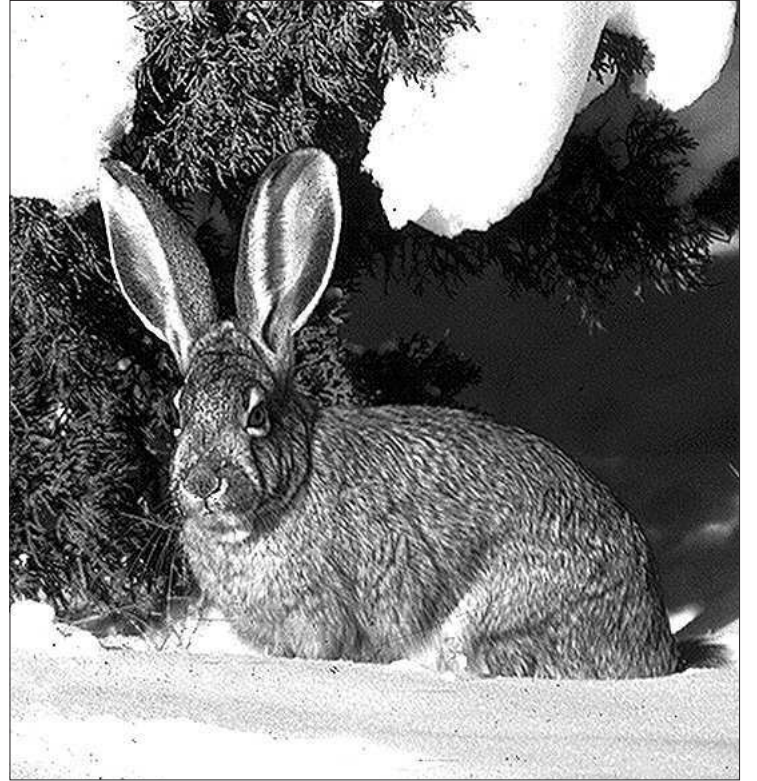


PHOTO BY JIM ANDERSON

Black-tailed jackrabbit, hunkered down in the snow.

berries, old apples and other fruit, but without water, they'll go into serious stress. The colder it is outside, the more birds need water.

Other migrating birds have a tough time of it as well. As we have seen, waterbirds crash when they're making their night migratory flight and run into a weather front. They quickly run out of fuel (fat), and in the case of grebes, will usually die if they can't find water to land and refuel in. That's when wildlife rehabbers like Elise Wolf of Sisters become very busy trying to heal injuries on grounded waterbirds and keeping them fed until they have the strength and food

to go on, when the weather cooperates.

Then there are the "snow-birds" that migrate to warmer climes. The white-throated swifts nesting at Ft. Rock feed on the huge insect population in the irrigated hay fields. But the swift families leave their nesting area at the end of summer. At the moment, we don't know exactly where they spend winter, but swifts have the remarkable ability to stay airborne for over 200 days, feeding on the wing.

Mule deer hanging around Sisters in winter are having a tough time of it. The well-meaning people who

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