

Animals use various strategies to survive winter

By Kathryn Reed

Animals have a way of knowing when to prepare for winter, but if winter doesn't come, it can be a problem.

Those that use camouflage as a tactic from hiding from their predators are having a hard time of it in the Sierra this year because their white coat is standing out against the brown landscape instead of blending in with the snow.

Will Richardson, co-founder and co-executive director of the Tahoe Institute for Natural Science, spoke at the Tahoe Area Sierra Club meeting Jan. 22 about winter wildlife survival strategies.



Will Richardson talks Jan. 22 about how wildlife survive winter. Photo/LTN

In Lake Tahoe he said five species turn white in winter – two types of rabbits, long and short tail weasel, and the white-tailed ptarmigan.

“Winter presents a lot of challenges for any organism,” Richardson told the crowd of more than 60 people.

Key problems are shelter and food. Animals can choose to leave for the winter, tough it out or lower their metabolism so they can sleep through most of the winter.

Migration is common for birds. But insects and some mammals choose this option, too. Many birds head for the tropics. Millions land in Central and South America.

“What happens when you lose an acre of rain forest? What happens here?” Richardson asked rhetorically.

Facultative migration is a shorter migration; maybe just to the Carson Valley or Central Valley.

A sure sign that animals are confused by the weather this year is a barn swallow was spotted in Tahoe City this month. Richardson said he doesn't know of any time when any species of swallow has been seen in the basin in January.

Mountain quail walk out of the basin every year. The same goes for deer.

Waterfowl tend to stay in Tahoe through the winter. And they attract eagles. Richardson said this is a big year for eagles; with 15 spotted during the Christmas bird count.

Snakes do what's called hibernaculum. This means they all are huddled together in the quest to have a consistent temperature.

Frogs have one of the more unusual winter rituals. The Sierra chorus frogs are what Tahoe has the most of. When they touch an ice crystal their body starts to shutdown and their organs freeze.

“They are able to freeze solid. They have no heart, no brain function,” Richardson said.

He showed a video of a similar species of frog to what is in the basin that depicted the freezing process as well as the

thaw-warming in the spring. Scientists still aren't sure how this is possible.

Putting on a winter coat as well as extra weight are other ways animals survive winter. Feathers are a great insulator.

Richardson said no matter what strategy animals employ, preparation is critical – especially to have enough food stored.