

Cold-blooded Animals:

Because their body temperature changes with their surroundings, cold-blooded vertebrates have a tough time being active in winter. Animals such as snakes, toads, frogs and lizards use a process called diapause to help them survive the winter months. This process allows them to slow down their bodily functions almost to a stop as they hide away in different types of burrows.

Many cold-blooded invertebrates overwinter in a state called torpor. These animals also burrow under stones or logs and stay there through the winter months. Special chemicals are released into their bodies as a type of "anti-freeze" that help prevent their bodies from freezing. Bumblebees are an example of an animal that uses torpor.

Mammals:

Wintering mammals begin preparing for winter as their coats of fur become thicker and they fatten themselves up during the autumn months. Extra sleep helps them conserve energy. Small mammals, such as mice and voles, make good use of a blanket of snow. Air is trapped as snowflakes fall which creates a type of insulation. Animals and/or plants under the snow are trapped in a sort of "igloo". These small mammals can then tunnel underneath the snow in search of food. Of course their activity attracts those predators higher on the food chain!

The mammals that have the hardest time are those who depend on invertebrates for food. To cope with the lack of food supply these animals, such as bats, hibernate. During hibernation the mammal's body temperature drops well below normal and the heartbeat may slow down to 3-4 per minute. Often times hibernating mammals will wake up on warm days to look for food and water. (We have seen this with our own black bears in our area).

Ways to help Wildlife in Winter:

- Be vigilant in keeping your bird feeders full with seed and suet
- Make sure to have piles of logs or leaves scattered around your property for cover (I have a "Christmas Tree Graveyard" that has served my critter neighbors well)

Want to learn more about Wildlife in Winter? Here are a couple of good reads:

- Winter World by Bernd Heinrich
- A Guide to Nature in Winter by Donald W. Stokes

In closing, here is an entertaining video of a fox hunting mice in 3 feet of snow!

Mother Earth DOES take care of her own!

<http://www.youtube.com/watch?v=D2SoGHFM18I>