

The miracle of Manitoba winter survival



Michele Kading
COMMUNITY
CORRESPONDENT

ST. VITAL

Winter is a beautiful time of year to get out and explore the trails along the Seine River. There is nothing like a brisk walk under a bright blue, sunny sky with snow squeaking beneath your boots.

As a naturalist, I have always marvelled at how any living thing can survive these beautiful but harsh conditions. How do tiny little chickadees survive? How do squirrels, mice, and muskrats stay warm? How do predators like foxes, coyotes, and owls catch prey hidden under the snow? What happens to the insects? How do snakes, turtles, and frogs prevent themselves from freezing and dying?

You can find the answers to these questions and hundreds more in the 2003 national bestseller *Winter World — the Ingenuity of Animal Survival*. Like Rachel Carson, the author Bernd Heinrich has a scientific eye and the soul of a poet.

Here are a few teasers to increase your appreciation for the wildlife that can survive Manitoba's winter world:

- Mice and voles are active all winter. They live in the subnivean space (beneath the snow) at the surface of the ground where the temperature stays close to freezing point.
- Foxes and coyotes locate mice by sound. They use their front paws to crash through the snow, bouncing to collapse tunnels and trap their prey.



Supplied photo

The next time you're outside when it's -30, take a moment to think about the miraculous ways wildlife species such as the great grey owl (pictured) have adapted to survive Manitoba winters.

- Great grey owls can hear a meadow vole under the snow from 30 metres away. They plunge feet-first from 25 feet in the air. Their balled up feet can punch through a snow crust thick enough to support a person.
- Chickadees have denser plumage than other birds their size to reduce heat loss. They can lower their body temperature by 10 to 12 degrees at night to stretch their fat reserves but cannot survive long without eating.
- Mourning cloak butterflies overwinter only as adults.
- Painted turtles can live for four months in an oxygen-deprived state in the mud at the bottom of a pond at 3 degrees C.

- Toads dig several feet into the ground to get below the frost line.
 - Wood frogs, gray tree frogs, spring peepers, and chorus frogs can survive having up to 65% of the water in their bodies freeze.
- The next time you are outside when it is -30, take a moment to think about the miraculous ways that wildlife species have adapted to survive Manitoba winters. You may appreciate these extraordinary creatures even more when they reappear in spring.

Michele Kading is a community correspondent for St. Vital and the executive director of Save Our Seine.