Wisconsin’s winters can be harsh on our state’s wildlife. Here are some cold-weather considerations to keep in mind when it comes to Wisconsin’s wildlife.

Wildlife in Wisconsin are well adapted to survive seasonal weather and temperature changes. The key to winter survival for most wildlife is through management of their energy budget. Wildlife manage energy in many ways, but primarily rely upon a combination of behavioral modifications (e.g. seasonal movement, habitat use and congregating), morphology (e.g. physical attributes) and physiological changes (e.g. organ function). Each wildlife species has adapted using a variety or combination of three basic survival strategies: migration, dormancy, and tolerance.

Migration allows wildlife, especially birds, to take advantage of locally available resources and more tolerable climates, but is also more energy-intensive. Wildlife may migrate short or long distances. Dormancy is a common strategy for several mammal and reptile species. By remaining dormant or inactive, wildlife can reduce their energy output and minimize their food intake. Wildlife can also tolerate winter conditions through a range of adaptations, such as fur coats and use of winter cover. However, during harsh winters, it is common for many wildlife species to become stressed due to the cold weather and a limited food supply.

Colder and snowier winters can be particularly stressful to Wisconsin’s wildlife. DNR’s wildlife staff tend to receive increased reports from concerned citizens regarding wildlife mortality events during severe winters. Wildlife rehabilitators around the state also tend to see an increase in reports of dead or injured wildlife—presumably due to effects of winter weather.
How does winter stress wildlife?

The numbers of individuals in a wildlife population naturally fluctuates depending on several factors. Wildlife mortality events occur annually; population numbers generally decrease throughout the winter season, only to rebound the following spring. However, during prolonged and severe winters, some wildlife populations may experience higher levels of mortality due to the effects of winter weather.

The biggest winter challenges for most wildlife include dry conditions, reduced food sources, and cold temperatures. Prolonged freezing temperatures can force wildlife to alter or limit their typical movements to conserve energy. Many food and fresh water sources become unavailable or inaccessible, and most resident wildlife expend large amounts of energy daily in order to maintain their body temperature. If that energy isn't replaced, they will begin to burn their fat reserves as an alternate source of energy.

Individuals in a population that are unable to build up adequate energy stores going into winter may die. Typically, the young, old, and unhealthy individuals in a population struggle to build up adequate fat reserves going into winter. By the end of a long winter, even healthy wildlife may have used up their reserved energy stores.

It is not uncommon to observe wildlife that appear emaciated or unhealthy on the landscape at the tail-end of winter. Wildlife that have struggled to find food will appear thin and weak, and may even act irregularly as they search for any available food sources. In a typical winter, wildlife such as white-tailed deer and turkey will experience minor levels of winter mortality. However, during unusually harsh winters, DNR wildlife biologists may ask that citizens report any observations of winter deer mortality to their local DNR biologist.

Large-scale die-offs of wildlife may occur when particular weather conditions affect a specific group of wildlife. For example, during the winter of 2013/2014, the prolonged freezing temperatures allowed for record ice cover on most water bodies, including the Great Lakes. With limited access to open water, hundreds of diving ducks and other waterfowl were not able to feed, and were forced inland to seek food sources. Due to their foot placement, these birds are not able to take off from dry land, and many were stranded and subsequently starved.

In the spring, as temperatures rise and the snow melts, it is possible that wildlife carcasses may begin to emerge on the landscape. The carcasses of wildlife that die throughout the winter eventually freeze and are covered by snow. When the snow melts and the weather warms, those carcasses become visible and accessible to scavengers. This is a result of natural mortality events and provides an important food source for scavenging wildlife.

Contact Your Local Wildlife Biologist

Help the department monitor wildlife health by reporting sick or dead wildlife. Look up your local wildlife biologist by visiting dnr.wi.gov and searching “staff directory,” then entering “wildlife biologist” into the subject field.
How can you help?

It is important to remember that wildlife experience environmental stressors in many different ways and use different methods to adapt. Although it is best to avoid directly interfering with wildlife in most cases, there are ways that you can help Wisconsin’s wildlife prepare for and survive Wisconsin’s harsh winters. Providing year-round access to water, native food, and habitat are some of the best options.

When it comes to providing supplemental food, there are many precautions to consider. Food placed on the landscape has the ability to cause unnatural concentrations of wildlife. While this can alter natural movements and habits, it also promotes the spread of disease. Artificial food provided to wildlife can be very difficult for them to digest, and in some cases, may cause severe illness or even death. Furthermore, since dominant individuals can exclude less competitive individuals, the food does not always reach the individuals that need it the most.

Consider planting native vegetation as an alternative to providing supplemental food. Trees and shrubs that yield nuts and berries, along with seed heads from flowers, grasses, and herbs provide the best benefit. Native vegetation can act as an important food source, and can also provide important habitat. Evergreen trees and shrubs, as well as standing dead trees or snags, give wildlife important nesting habitat and offer protection from wind and snow. Brush, rock, wood piles, fallen logs, and open water ponds also provide habitat and protection for a variety of wildlife.

One of the simplest things you can do to benefit individuals within a local population of wildlife, especially birds, is to provide bird feeders and heated baths. Bird feeders provide supplemental food in addition to what can be provided through natural vegetation plantings. Access to fresh water sources not only allows birds to bathe and drink, but are often used by many other species of wildlife. If you maintain bird feeders and baths, be sure to regularly clean them using a 10% bleach water solution to avoid the spread of disease.

You can also help monitor the health of Wisconsin’s wildlife by reporting sick or dead wildlife to your local DNR office. It is not necessary to report wildlife killed along roadways. If you observe five or more sick or dead wildlife in one area, please include the number of animals, species, if they were sick or dead, a specific location, and your contact information. For more information, visit [dnr.wi.gov](http://dnr.wi.gov) and search keyword “wildlife health.”
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