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# LIVING

# Black-bear myths

Over the past several weeks, an event we usually associate with spring has taken place throughout much of Peterborough County. Black bear cubs have been born. As extraordinary as winter

birth may sound, it is only a small part of what makes the black bear so interesting. The mechanisms involved in the bruin's winter sleep are probably even more remarkable. So, with all of the stories of "problem bears" in recent years, it's more important than ever to appreciate what incredible animals bears are. We also need to dispel some of the myths about why bears seem to have become so much more common and



**OUR CHANGING SEASONS**  
Drew Monkman

brazen.

A bear's life follows a simple cycle: to fatten up by eating as much as possible, to hibernate, and then to emerge in the spring to once again start feeding. Let's look at the cycle starting in the fall. During the autumn months, a bear may feed up to 20 hours a day, consuming 20,000 calories of food in the process. This can result in a weight gain of more than 45 kilograms (100 pounds). Some of the bear's favourite fall foods include hazelnuts, mountain-ash berries, acorns and beechnuts. In central Ontario, bears usually enter their dens by early November. They frequently dig out their own den on the side of a hill or under an uprooted tree. Sometimes, however, the den consists of nothing more than the shelter of a brushpile or a rock crevice. In fact, about one-third of adult male bears sleep directly on the ground, often on a pile of bunched up grasses or conifer branches.

Black bears are not true hibernators. They go into a physical state called torpor from which they are easily awakened. However, their winter sleep is quite extraordinary just the same. During this period of four to five months, the bear goes completely without food and water, and never once eliminates any body wastes. Curled up in its den, it may wake a couple of times a day, but quickly goes back to sleep. If the weather becomes exceptionally mild, some bears may actually wander around for short periods. There was a bear sighting this January in Algonquin Park.

In winter, a sleeping bear's heart rate drops to about eight beats a minute from a normal sleeping rate of 40. Breathing, too, slows to only several breaths a minute. However, the animal's body temperature only cools down by a few degrees. A true hibernator such as a groundhog experiences body temperatures close to freezing and actually enters a frigid, deathlike state from which it cannot be easily awakened. A sleeping bear, on the other hand, can be roused even by small noises.

The true miracle of bear hibernation, however, lies in the animal's unique chemistry. As mentioned above, bears do not urinate during the winter. For most animals, this would result in fatal poisoning from the build-up of urea. A sleeping bruin, however, burns fat rather than protein. It therefore produces very little urea in the first place. The urea which is produced is broken down, and the nitrogen is used to build protein. The ability to build protein while fasting allows black bears to maintain their muscle and organ tissue throughout the winter. And, without urination or defecation, the only water loss is through the animal's shallow breathing. Even this water is quickly replaced

*The main reason for the increase in bear sightings is more people living in 'cottage country' — and cottage country is bear country*



Terry Carpenter, special to The Examiner

from the bear's fat stores. If scientists could replicate the urea recycling process in humans and thereby shut down the waste cycle, they might be able to put space travellers into suspended animation for long flights

In mid-January through early February, black bears give birth to two or three cubs no larger than chipmunks. The cubs are hairless, sightless and toothless, but flourish on the sow's rich milk. They grow quickly and are quite active by the time they leave the den. They will stay with her for 16 to 17 months. Therefore, next winter's sleep will not be interrupted by the birth of cubs.

Black bears become active again in April. Male bears are the first to emerge, followed by barren females and females with yearling cubs. Mothers with new cubs are the last to emerge. A bear will have lost 15 to 40 percent of its fall weight by the time it comes out of hibernation. It will not fully gain its weight back until berries become abundant in the summer. In the spring, bears are forced to adopt a mostly vegetarian diet. They feed heavily on grass and will even eat dandelions because of their high nectar content. Bears will also consume large amounts of the new, tender leaves of aspens. It's sometimes possible to see a mother bear with its two yearling cubs munching away right in the top of one of these trees. When they can, they will also feed on protein sources such as fish or even newborn fawns or moose calves. In summer, raspberries, blueberries and

chokecherries form the bulk of their diet. Early summer is also the bear's mating season.

As a result of an increase in bear sightings, there is a perception that the number of bears has grown substantially in recent years. It is true that the bear population along the southern edge of the Canadian Shield has probably gone up over the past two or three decades. This is a zone which cuts right across Peterborough County. Abandoned farmland along the edge of the Shield is returning to "old field" habitat, which provides food and cover for bears. Raspberries, aspens and chokecherries all grow in these fields. Mild winters may be helping to improve natural food supplies as well.

According to the OMNR Bear Wise website, it is very unlikely that the cancellation of the spring bear hunt has anything to do with this increase in bear sightings or incidents with problem bears. In the years following the cancellation of the hunt, the annual decrease in the number of bears killed by hunters has been about 1,500 animals. If all of these bears had survived, something that is very unlikely, Ontario's bear population would only have grown from 100,000 animals to 107,500 (2004 statistics). The increase would be spread over the entire range where bears are hunted in Ontario. This constitutes a huge area. In addition, the argument that bear behaviour has changed and that they are displaying increased boldness because of fewer hunters is equally erroneous, according to the

website.

The main reason for the increase in bear sightings and run-ins with humans is the much greater number of people now living in "cottage country" — and cottage country just so happens to be bear country. Not only are there more summer cottagers and campers, but a lot more people now live on the lakes all year around. This means people and bears are much more likely to run into each other, especially in years when natural food is in low supply.

Problems generally arise as a result of improperly stored food and garbage. Bears quickly learn to associate human residences and campsites with readily available nourishment, especially if garbage is left outside. They may also be attracted to barbecues, composts, pet food and fruit trees. By doing things such as waiting until the morning of garbage day to put the garbage out, keeping your barbecue grill clean and picking ripe fruit up off the ground, you can greatly reduce the chances of a visit from a bear. The Ministry of Natural Resources has set up a special website that provides information on keeping bears away from our homes. Go to <http://bears.mnr.gov.on.ca/>.

## What to watch for this week

Based on the large number of great grey owl sightings in central Ontario over the last few weeks, it would appear that these majestic wanderers from the boreal forest have once again returned. At least 10 birds have been