

Winter Wildlife Quiz

North American animals have numerous strategies for surviving the winter. Some migrate to warmer climates, others head for a long winter's nap, and some stay where they are and rely on fur, speed, fat, teeth, and claws to keep them safe, warm, and well fed. How much do you know about the winter behavior of North America's animals? Test your winter wildlife knowledge by taking our quiz. (Scroll down to see the answers.)

1. Which animal has the densest, warmest fur on earth?

- A. Beaver B. Sea Otter C. Polar Bear
D. Mink E. Muskox

2. How much weight might an adult Grizzly Bear gain before retiring for the winter?

- A. 50 pounds B. 100 pounds C. 200 pounds
D. 300 pounds E. 400 pounds F. All of the above

3. Which animal remains active all winter, and doesn't retire to a den for a sustained period?

- A. Eastern Chipmunk B. White-tailed Prairie Dog
C. Red Squirrel D. Black Bear E. Polar Bear

4. Choose the animal species that does NOT regularly appear in a white-furred form.

- A. Eastern Gray Squirrel B. Arctic Fox C. Grizzly Bear
D. Least Weasel E. Gray Wolf F. Black Bear

5. Which of the following species will travel to a new area for the winter?

- A. Manatee B. Caribou C. Bison
D. Snow Goose E. Snowy Owl F. All of the above

6. Animals generally put on fat for two reasons: warmth and food reserves. Which of the following species reaches the heaviest weight?

- A. Grizzly Bear B. Polar Bear
C. Northern Elephant Seal D. Walrus

7. Match the predator (1-7) with the prey (a-g) that it commonly eats.

- | | |
|---------------------------|------------------|
| 1. Arctic Fox | a) fish |
| 2. Lynx | b) squid |
| 3. Northern River Otter | c) clams |
| 4. Mink | d) seal |
| 5. Polar Bear | e) snowshoe hare |
| 6. Walrus | f) lemming |
| 7. Northern Elephant Seal | g) muskrat |

--ANSWERS--

Question 1: If you guessed the Sea Otter, you're right! Its fur is denser than the fur of any other mammal. One square inch of Sea Otter fur contains as many as 1 million hairs -- that's about the same number of hairs on the heads of *ten* humans. This water-loving mammal eats, sleeps, mates, and gives birth at sea. It lacks the layer of blubber that keeps many other marine mammals warm, and so has only its fur coat to protect it from chilly North Pacific waters. Oil spills can devastate Sea Otter populations, because the otters' coats lose their insulating properties when saturated with oil, and many affected otters die of exposure.

Question 2: All of the above! A Grizzly Bear can put on as much as 400 pounds to prepare for its winter sleep. This omnivore will eat just about anything in its quest to fatten up for the lean times. Grizzlies eat not just large mammals (elk, moose, deer) and fish, they'll eat roots, plant sprouts, berries, mushrooms, and any smaller critters, including insects, that come their way.

Question 3: The answer is the Red Squirrel. These gregarious creatures are active year-round, although they may hole up for a few days in inclement weather. The Red Squirrel's relatives the Eastern Chipmunk and White-tailed Prairie Dog are true hibernators, meaning they enter a state of dormancy during the winter in which body temperature drops to only a few degrees above air temperature, and all bodily processes greatly slow down. The hibernating animal thus conserves energy and stored fat, and is able to sleep through much of the winter.

Bears enter a protected area and sleep away the harshest part of the winter, but they do not truly hibernate, as their sleep is not deep, and their temperature falls only a few degrees below normal. Even Polar Bears retire to a den for part of the winter. Females den from November to March, during which time they give birth, while males usually den from late November to late January.

Question 4: The answer is the Grizzly Bear, which ranges in color from tawny to dark brown but is never white (except in the case of a rare albino individual). Arctic Foxes and Least Weasels vary seasonally, growing a white coat for winter camouflage (in northern populations). The Gray Wolf is a species that varies individually, ranging from white to black and any shade in between. Most Eastern Gray Squirrels are gray, but there are populations of white gray squirrels in several areas, with the largest concentration found in Olney, Illinois. And rarest of all of these white mammals are the cream-colored Black Bears that live in the coastal rain forests of British Columbia. These bears belong to a subspecies of Black Bear officially named the Kermode Bear but often referred to as the Spirit Bear.

Question 5: If you guessed all of the above you are right! At least some individuals of all of these species relocate seasonally. Even though Manatees live only in the South, they head for warmer water in the winter, some migrating tens to hundreds of miles and others merely congregating around the heated discharge from power plants. The Caribou of Alaska and Canada famously go on long mass migrations between winter and summer grounds. The Bison of the Great Plains once undertook mass migrations by the millions and ranged nearly from coast to coast. Few of the populations left are free-ranging, but some Canadian Bison still migrate about 150 miles between winter and summer grounds.

The Snow Goose is named for its white color rather than its love of snow; it summers in the Arctic but heads to the coastal United States and southward for the winter. The Snowy Owl, on the other hand, can and does survive the winter in our most northerly climes. In some years, however, if the owl's prey species (mainly lemmings) decline in population, large numbers of Snowy Owls will move into regions south of their normal range; this kind of migration is called an irruption or invasion.

Question 6: The Polar Bear, with its warm coat to keep it warm, is the svelte member of this group, reaching only about 1,100 pounds. A Grizzly Bear can weigh as much as 1,700 pounds. The largest Grizzlies are those of the southern Alaska coast and islands that are known as Alaskan Brown Bears. A Walrus can weigh nearly twice as much, topping out at 3,300 pounds. It lives in Arctic seas and needs a good solid layer of blubber to keep warm. Wisely, it spends a lot of time sunbathing on beaches or ice floes. When it does go on a prolonged dive (for up to 30 minutes) its blood flow decreases to the skin, thus conserving body heat, and increases to its vital internal organs.

The record holder among these four creatures is the Northern Elephant Seal: A male can reach 4,400 pounds! He doesn't stay that hefty, however: this seal can lose 50 percent of its weight during the mating season, when it is too busy to eat, and also fasts during the molt, when it grows a new coat. This Pacific Coast species does not live in waters as cold as the Walrus, but it spends more time in the water. It can stay underwater for nearly an hour and a half, pop up for a few minutes and dive again, so clearly it needs insulating blubber to help retain body heat.

Question 7: Lemmings are an important food source for the Arctic Fox. These small rodents undergo cyclical variations in population, increasing in number enormously when food is plentiful, then decreasing when the population outgrows the food supply. Arctic Fox populations follow these cycles, usually peaking a year after the lemmings. There is a similar relationship between the Lynx and the Snowshoe Hare, which makes up three-quarters of the Lynx's diet.

Northern River Otters mainly eat fish, and Minks fish too but their preferred prey in many areas is muskrat. Polar Bears stalk seals mainly, but also eat young Walruses, whales, fish, birds, eggs, shellfish, kelp ... whatever they can find. Walruses like clams and other mollusks so much that they can eat 3,000 to 6,000 in a single feeding. Northern Elephant Seals eat enormous quantities of squid (and they eat fish, too).