

HUMBER ARBORETUM ECO CENTRE



WINTER SURVIVAL

INTERESTING FACTS

- ✦ Hibernating groundhogs are famous in February for coming out of hibernation to see their shadow. It is believed that groundhogs go into hibernation in response to the decreasing hours of daylight in fall. During hibernation, the groundhog's metabolic rate slows and the body temperature drops to approximately 4° to 5°C. Changes in melatonin, a sleep related hormone, are believed to be the signal to wake up. The beginning of February is the midpoint of the winter solstice and is the time when groundhogs usually break hibernation.
- ✦ The Arctic Tern migrates the farthest distance of any migratory species of animal. Terns are smaller than gulls and hover over water to plunge in to catch their food. They eat live or dead fish. They are sociable birds and nest in large colonies. The summer home of the Arctic Tern is the North Atlantic and the Arctic. Its winter home is the Antarctic. This requires a journey of 15,000 to 20,000km each way!
- ✦ Humpback whales are the farthest migrating mammal, travelling a distance of 8,200km from Central America to feeding grounds off Antarctica.

COOL ACTIVITIES

Winter Survival Skit or Poetry

Divide students into small groups. Have them select an animal that either migrates, hibernates, remains active in winter or brumates. Instruct the groups to write skits describing what they are doing for the winter and what it is like. They can discuss how they are looking forward to spring or how tired they are. The skits can be written from a scientific perspective describing how animals prepare for winter including storing food, accumulating fat, preparing their den and growing thicker fur or they can be descriptive and comic with the animals talking about their observations of human activities such as sledding, building snowmen and how silly they think the humans are for not preparing for winter properly. Students may alternately wish to write and recite a poem about hibernation.

REVIEW QUESTIONS

1. What does migration mean? (ANS: the movement of animals from one area to another) Why do animals migrate? (ANS: They migrate when the conditions in their local area make it difficult to find food.)
2. What does hibernation mean? Why do animals hibernate? (ANS: Hibernation is a way for an animal to decrease it's energy needs to a bare minimum so that it can survive periods when food is scarce. During hibernation, the animal's body temperature and heart rate are lowered to conserve energy.)
3. What is brumation? (ANS: Brumation is the term used for the hibernation-like state that cold blooded animals like snakes, frogs and turtles use to survive very cold weather. They need to find a place that does not freeze either under ground or under water to survive the winter.)
4. Some animals remain active during winter but sleep during the coldest times and live off their stored fat. Who are they? (ANS: raccoons, skunks, squirrels and beavers)