HIBERNATION HABITS OF HALIBURTON ANIMALS

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Most of the Following Information was obtained from a *Nature Conservancy Canada* pamphlet or from the Ontario Nature Website.

<u>TRUE HIBERNATION</u> a deep sleep-like state involving low body temperature, slow breathing and heart rate which conserves energy during long cold winters when little food is available. Hibernating animals do not wake up during loud noises or if moved or touched. The following two animals go into true hibernation.

Little Brown Myotis Bat (Myotis lucifugus)
Status: endangered. In cold winter months this small bat is in humid caves or abandoned mines that have a temperature above freezing. Their body temperatures and metabolic rates decrease allowing them to sleep without needing to eat or drink.

Groundhog *(Marmota monax)* Status: least concern. Also known as a woodchuck or whistlepig and is one of Canada's largest true hibernators. They go into a deep comatose sleep allowing body fat to nourish them in winter. Body temperature may drop as low as 3 degrees Celsius and heartbeat decrease to 4 or 5 per minute. Unlike most other hibernating animals they still have body fat left when they emerge from their burrows in spring.

<u>BRUMATION</u> The hibernation-like state that cold-blooded animals such as reptiles and amphibians enter into in late autumn. It lasts up to 8 months depending on the length of the winter. These animals usually wake up to drink

water and shift position if needed and then return to sleep. The following are examples of animals that 'brumate'.

Blanding's Turtle *(Emydoidia blandingii)* Status: endangered throughout most of its range. This turtle burrows itself in the cold muddy bottoms of ponds from October until early spring. Its metabolism slows so little oxygen is needed and it doesn't eat. Sometimes a Blanding's has been spotted swimming below the ice on large lakes.

Eastern Garter Snake (Thamnophis sirtalis sirtalis) Status: Unknown. Hundreds of these snakes can brumate together in a den called a hibernaculum in rock piles or rock crevices.

Northern Leopard Frog (Lithobates pipiens) Status: not endangered. They brumate at the bottom of ponds, rivers, etc. that do not freeze solid. A high concentration of glucose in vital organs prevents them from freezing.

LIGHT HIBERNATION or TORPOR   Animals that go through winter torpor have a lower body temperature, breathing rate and do not eat but they 'wake up' from time to time.

 Black Bear (Ursus americanus) Status: least concern

These bears find a winter in caves or log and tree root hollows. Pregnant females give birth in late January or early February in the den while in torpor. The cubs do not enter into torpor and begin to nurse almost immediately. The mother wakes from her torpor from time to time to see that her cubs are nursing properly or to groom them by licking them.

 Eastern Chipmunk (Tamias striatus). Status: least concern. This is a small, busy, and constantly on the move forager for three seasons of the year. It digs a winter burrow beneath the snow, goes into torpor but wakes up every few days to raise its body temperature in order to feed on the nuts and seeds it has stored in the burrow rather than relying on body fat for nourishment.

SOME ANIMALS THAT DON'T HIBERNATE---HOW THEY SURVIVE IN WINTER

 Canada Lynx (Lynx canadensis). This member of the

cat family doesn't den in winter and eats all year round. It has no problem hunting in deep snow as its large furred paws act like snowshoes.

 Algonquin Wolf (Canis lycaon or Canis lupus lycaon). Status: endangered. These wolves have two layers of fur to keep them warm in winter: a coarse outer coat and a silky under layer. They hunt in family packs to increase their success rate of gaining a winter meal.

 Moose (Alces alces) Status: special concern. A moose diet during winter consisting mostly of conifer needles and twigs provides little energy so it relies on body fat stored during warmer months and conserves energy by moving as little as possible.