



Black Bear

- Hibernates in a state of torpor (short sleeps)
- Decreases body metabolism by lowering temperature, heart rate and breathing.
- Eats lots of food in the fall to create a layer of brown fat.
- Female delays implantation: the egg is fertilized, but does not implant and grow until later date.
- Pregnant female dens in a cave.



Opossum

- Hibernates in a deep sleep in the ground, a cave, a tree
- Decreases body metabolism by lowering temperature, heart rate, and breathing.
- Eats lots of food in the fall to create a layer of brown fat.
- Huddles with others to keep warm, sometimes with woodchucks, raccoons, and skunks.

Shrew & Mole



- Increases body metabolism by raising heart rate, breathing, and temperature.
- Grows a dense coat and secretes oils to help waterproof the fur.
- Stores food to eat later.
- Tunnels under snow to find food.
- Huddles with others to keep warm.
- Eats lots of food in the fall to create a layer of brown fat.
- Hunts all winter.
- Changes diet.

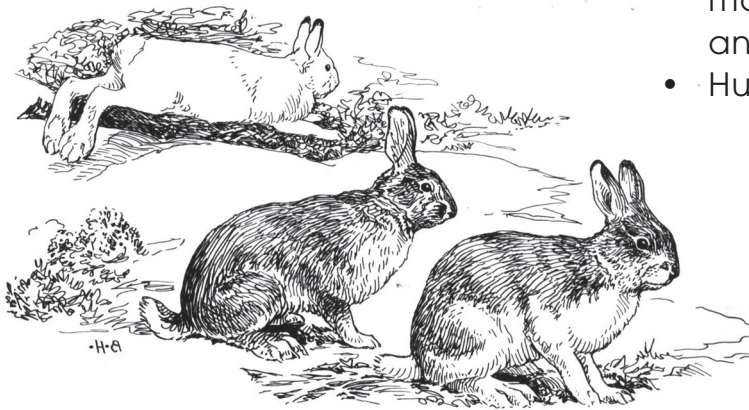
Bats



- Some hibernate in a state of torpor
- Decrease body metabolism by lowering temperature, heart rate, and breathing.
- Create a layer of brown fat.
- Wrap wings around themselves in a cave, tree, or attic.
- Delay fertilization: sperm is stored in female's body and egg is fertilized at a later date.
- Others wake up on warmer days to look for food and water.
- Others migrate to warmer areas and hunt all winter.

Snowshoe Hare

- Changes color by growing a white coat with hollow hairs without the color pigment, melanin, that have more air spaces within the hairs and thus has greater insulation.
- Hunts all winter.



Yellow-Bellied Marmot

(Woodchuck/groundhog)

- Hibernates in a deep sleep in
- rock piles or tree roots
- Decreases body metabolism by lowering temperature, heart rate, and breathing.
- Eats lots of food to create a layer of brown fat.





Northern Flying Squirrel

- Stores food to eat later.
- Huddles with others to keep warm.



California Gray Squirrel

- Builds insulated nests high in the trees.
- Stores food such as acorns for eating later.
- Hides during bad weather.

Animal Survival Information Cards



Chipmunk

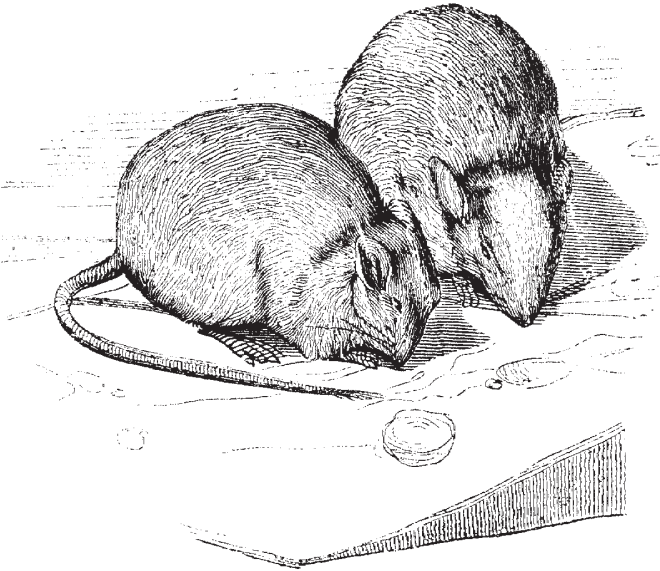
- Hibernates in a state of torpor (short sleeps)
- Decreases body metabolism by lowering temperature, heart rate and breathing.
- Stores food to eat later.



Chickaree

- Builds an insulated nest.
- Changes color.
- Stores food to eat later.

Animal Survival Information Cards



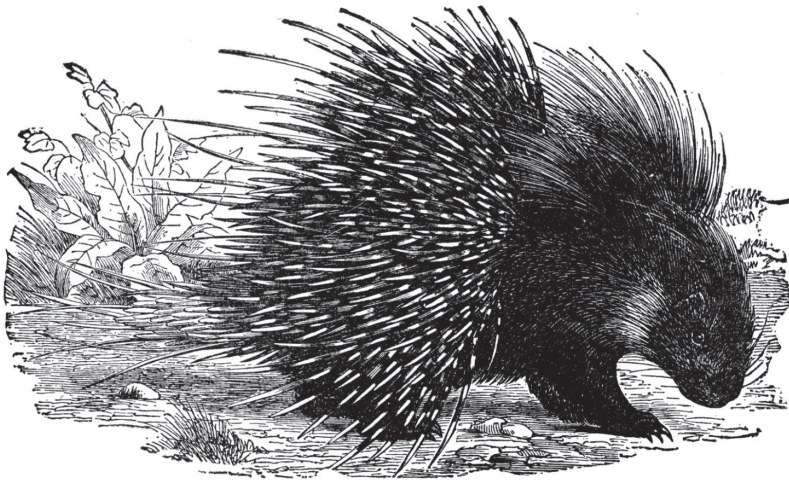
Mice

- Some hibernate in a deep sleep in the ground
- Decrease body metabolism by lowering temperature, heart rate, and breathing.
- Others hibernate in a state of torpor (short sleeps).
- Eat lots of food in the fall to create a layer of brown fat.
- Build insulated nests underground to keep warm.



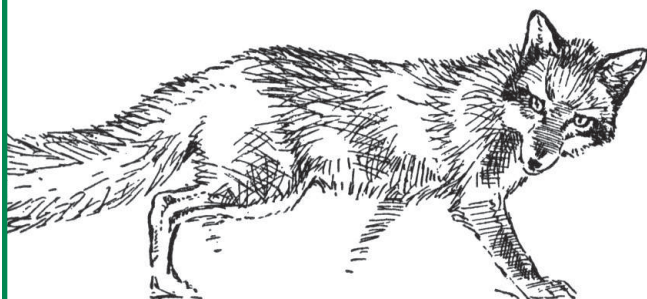
Beaver

- Eats lots of food in the fall to create a layer of brown fat.
- Stores food underwater to eat later.
- Uses an interlaced network of blood vessels as a heat exchanger to block excessive loss of heat to the environment.



American Porcupine

- Grows a dense coat.
- Males roost in trees for days, eating bark.
- Females and juveniles huddle together in dens.



Red Fox

- Grows fur on feet and between toes for greater insulation, warmth, and better mobility over the snow.
- Changes diet.
- Hunts all winter.

Animal Survival Information Cards



Raccoon

- Hibernates in a state of torpor (short sleeps)
- Decreases body metabolism by lowering temperature, heart rate and breathing.
- Huddles with others to keep warm.
- Eats lots of food in the fall to create a layer of brown fat.
- Changes diet.

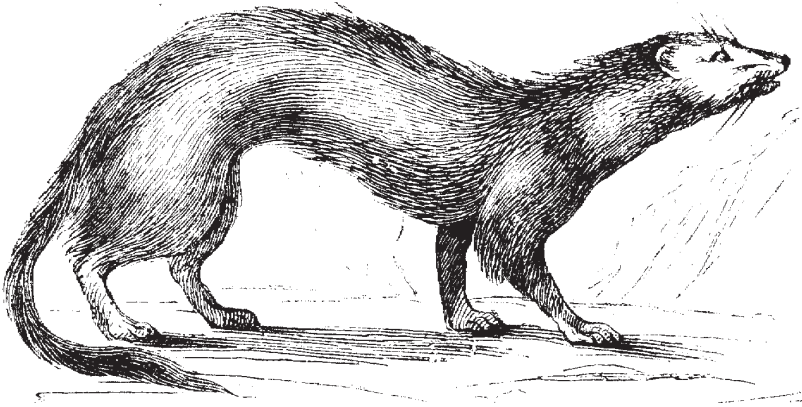


Skunk

- Hibernates in a state of torpor (short sleeps).
- Decreases body metabolism by lowering temperature, heart rate and breathing.
- Huddles with others to keep warm.
- Eats lots of food in the fall to create a layer of brown fat.

Weasel

- Tunnels under snow to find food.
- Stores food to eat later.
- Delays implantation: egg is fertilized, but does not implant and grow until later date.
- Short-tailed weasel changes color by turning white to camouflage with the snow.



Bobcat

- Migrates to a new area.
- Changes diet.
- Hunts all winter.

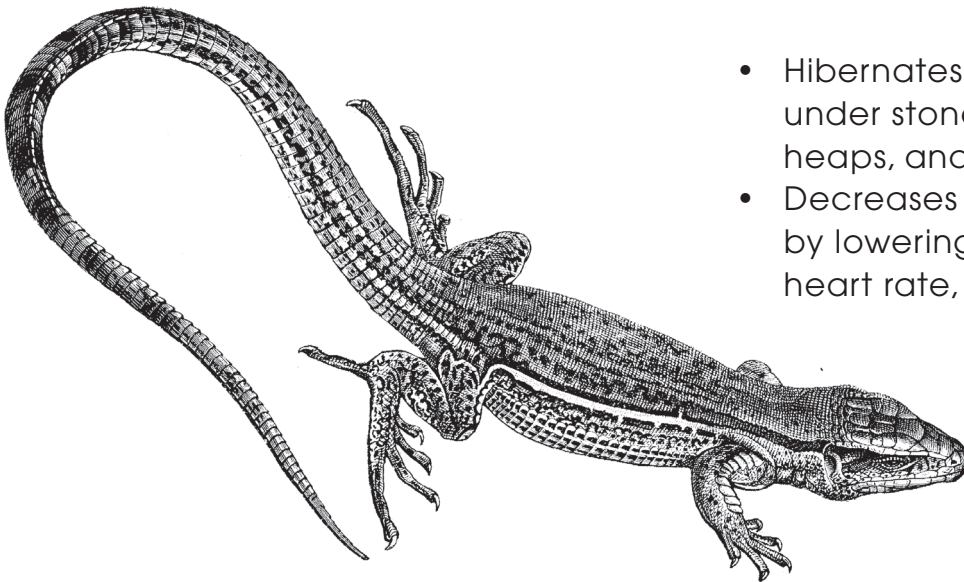


Bird

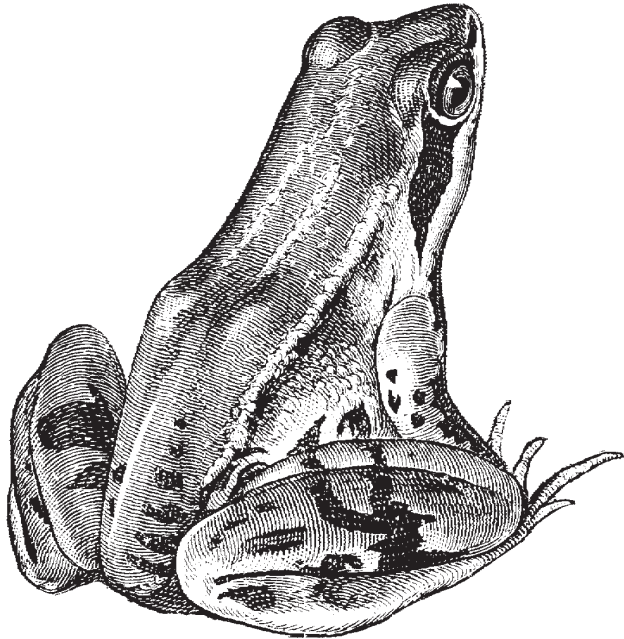


- Migrates to a new area, usually to a lower elevation.
- Changes diet.
- Hunts all winter.
- Fluffs out feathers to keep self warm.
- Goes into short periods of torpor at night.
- Generates heat by shivering.

Snake, Newt, Lizard, Turtle

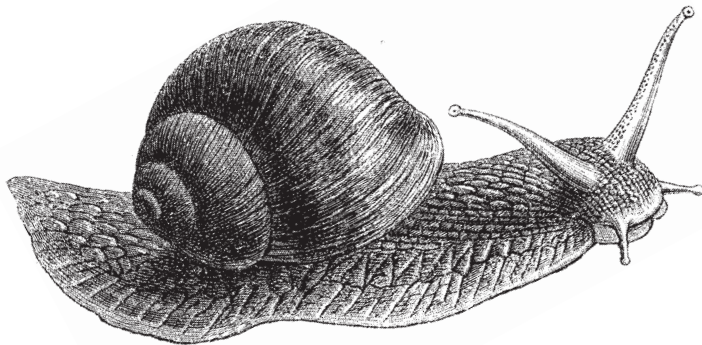


- Hibernates in a deep sleep under stones, logs, compost heaps, and old burrows.
- Decreases body metabolism by lowering temperature, heart rate, and breathing.



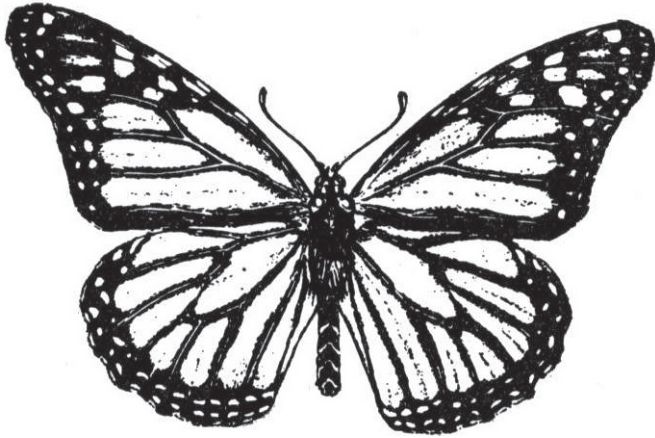
Frog

- Some hibernate in a deep sleep the ground at the bottom of streams and ponds where the water does not freeze.
- Some find shelter under leaves and dirt.
- Decreases body metabolism by lowering temperature, heart rate and breathing.



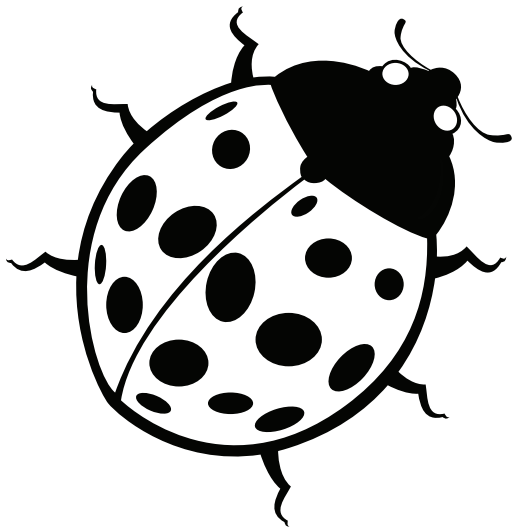
Slug, Snail, Queen Wasp, Bumblebee

- Hibernates in a state of torpor (short sleeps).
- Decreases body metabolism by lowering temperature, heart rate and breathing.
- Releases chemical to prevent itself from freezing.



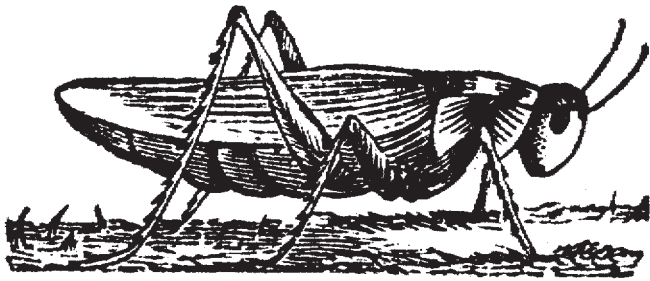
Monarch Butterfly

- Migrates to coastal and southern areas.
- Hunts all winter.



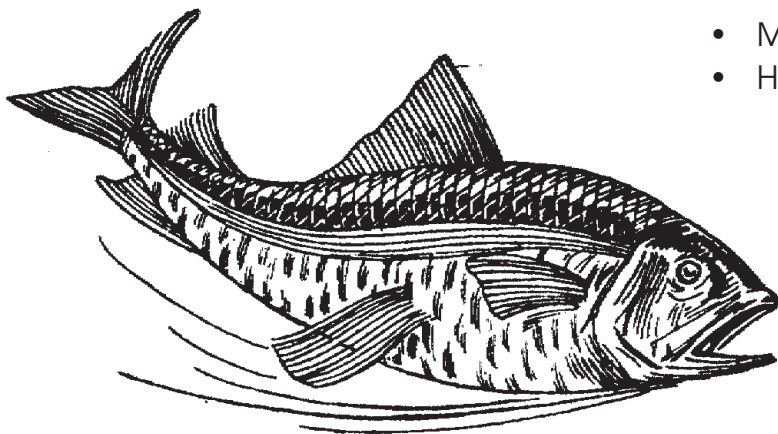
Ladybug

- Eats lots of food like aphids and pollen to create a layer of fat.



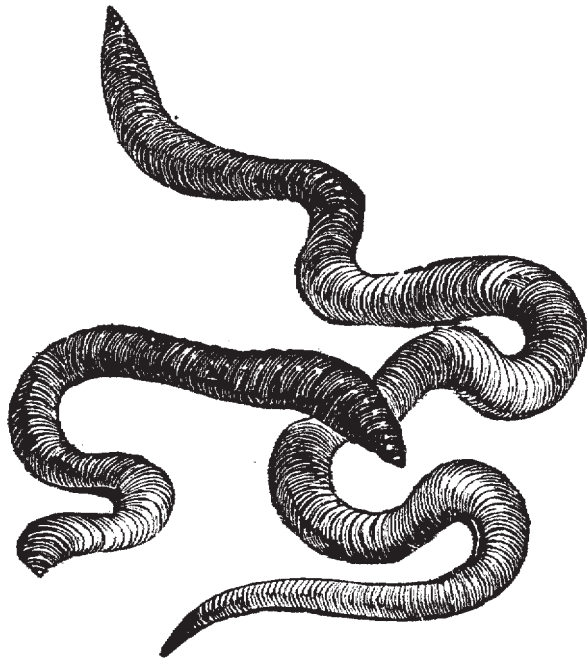
Most Insects

- Die so eggs can hatch in the spring.



Fish

- Migrates to warmer water.
- Hunts all winter.



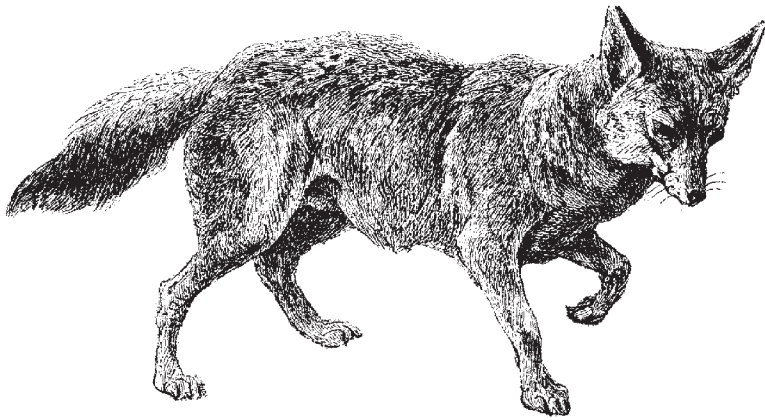
Earthworm

- Migrates down into the ground, some as far as six feet.



Deer

- Migrates to new area.
- Changes diet.
- Hunts all winter.
- Grows new hair that is hollow, which provides more insulation.



Coyote

- Grows a dense coat and secretes oils to help waterproof the fur.
- Grows fur on feet and between toes for greater insulation, warmth, and better mobility over the snow.

Migration

Hibernation

Other Physical Adaptations

Other Behavioral Adaptations