## VOCABULARY

- **Active layer:** A layer of soil, above the permafrost, that thaws in the summer and refreezes in winter. This is the layer where plants can grow and microorganisms live.
- **Adaptations:** Changes in body structure, function or behavior that help an organism to survive in its environment.
- **Alpine tundra:** Periodically cold, treeless environments that occur at high elevations throughout the world
- **Annual:** A plant that completes the cycle of germination from a seed to flowering and producing seeds in one growing season and then dies
- **Arctic:** The north polar region of the earth.
- **Arctic Circle:** The area that circumscribes the earth above 66° ( north of the equator.
- **Arctic tundra:** Periodically cold, treeless environments that occur in arctic regions throughout the world, determined by latitude rather than elevation.
- **Bioclimatic zone:** A region defined by the relationships of the area's climate and living organisms.
- **Blubber:** The fat layer of marine mammals such as whales, seals and sea lions.
- **Boreal:** Northern biotic area dominated by coniferous forests.
- **Camouflage:** The natural coloring or patterning of an animal that allows it to blend in easily with its surroundings.
- **Carnivores:** Meat eaters/secondary consumers. **Circumpolar:** Around the earth, near one of the
- poles. **Coniferous:** Refers to cone bearing trees such as Douglas firs, which reproduce by way of seed-
- **Deciduous:** Refers to plants that drop all of their leaves at one time once a year.

bearing cones.

- **Dormant:** Inactive. During dormant periods, plants or animals are inactive and some or all of the life processes slow down or stop.
- **Down feathers:** Soft, fluffy feathers typically lacking a central shaft. Down feathers aid in insulation by trapping warm air close to the bird's body.

- **Ecologists:** Scientists who study living things and how they interact with one another and their environment.
- **Ecotourism:** Tourism centering around the environment. Preservation of ecosystems is vital for the existence of ecotourism.
- **Eskers:** Long thin ridges made of sand, gravel and boulders deposited by streams flowing on, in or below a glacier.
- **Evergreen:** Refers to a plant with green leaves present throughout the year. Leaves are shed and replaced individually.
- **Flight feathers:** The feathers of the wing and tail that birds use for flying.
- **Germinate:** To grow, sprout or develop.
- **Guardhair:** Long, coarse hair that forms a protective layer over the undercoat of a mammal.
- **Herbivores:** Animals feeding on producers such as plants, algae or lichens.
- **Hibernation:** A state of lowered body functions, such as metabolism, in which animals pass the winter. True hibernators do not wake up during the winter.
- **Krummholz:** stunted and misshapen growth forms of trees found at in the subalpine zone of mountains.
- **Leeward:** The side that is sheltered from the wind **Lower 48:** The continental United States south of Alaska.
- **Microenvironment:** A small, usually distinctly specialized and effectively isolated habitat.
- **Migration:** Seasonal or periodic movement from one place to another, such as to breeding or wintering grounds; migrations may be very long or very short depending upon the species.
- **Montane:** Of or relating to mountains.
- **Muskeg bog:** An often thick deposit of partially decayed vegetation in wet boreal regions.
- **Nomadic:** Moving among several locations, rather than living permanently at one site.
- **Perennial:** A plant that germinates from a seed, flowers and produces seeds. A perennial lives for two or more years, repeating flower and seed production. Shoots of perennials may die back but will grow back the next season.
- **Permafrost:** Frozen ground. Ground that remains frozen for two or more years.

- **Photosynthesis**: The process of creating energy (glucose) from carbon dioxide and water utilizing energy from sunlight. Oxygen is given off as a by-product.
- **Predators:** Animals that obtain food by killing and eating other animals.
- **Prey:** Animals that are killed and eaten by other animals.
- **Subnivean:** Living beneath the snow.
- **Taiga:** A bioclimatic zone that is characterized by conifers such as spruce, fir, and tamarack, and occurs north of the temperate deciduous forest.
- **Temperate forests:** Forests that grow in regions of moderate climates.
- **Torpor:** A semi-hibernation. A temporary state of lowered body functions (not as extreme as hibernation) in which an animal may spend periods of time. An animal may awaken from torpor in order to obtain food or pursue other activities.
- **Tundra:** Windy, treeless and periodically cold environments that occur at high latitudes and high elevations.
- **Tussocks:** Mounds formed by plants such as cotton grass.
- Underhair: Short, dense, soft hair, closest to the animal's skin which aids in insulation.Underhair is generally present during colder months and sheds in warmer months.
- **Understory:** The layer in plant ecosystems between the canopy and the forest floor; often considered the middle layer.