

Trees Vocabulary / Glossary

Abiotic: Modification of an organism so that it adjusts to a new or altered environment.

Adaptation: Non-living components of an environment.

Allowable Cut: The number of trees that can be taken from the forest annually without significantly altering the balance.

Aspen Poplar: Medium-sized deciduous trees reaching 15-30 m (50-100 ft) tall. In North America, the aspen is referred to as quaking Aspen or Trembling Aspen because the leaves "quake" or tremble in the wind.

Balsam Poplar: A fast-growing, fast suckering medium-sized (exceptionally over 30m tall), a deciduous broad-leaved tree that prefers moist to wet areas.

Bark: The visible outer covering of a tree that protects the inside.

Birch: Generally small to medium-sized trees or shrubs, mostly of northern temperate and boreal climates.

Biodiversity: Many different species living in balance with their environment.

Biotic: Living components of an environment.

Black Spruce: A small, narrow evergreen tree with a spire-like crown. It has descending branches, with dark, bluish-green needles, and upturned ends. Lower limbs sweep the ground.

Cambium: The growing part of the tree where cells form wood.

Canopy: The top branches and leaves of the trees in a forest.

Carbon Dioxide: A gas composed of carbon and oxygen, produced during respiration.

Carnivore: A meat-eating organism.

Cellular Respiration (aerobic): The chemical process of releasing energy from sugar and other organic molecules by combining it with oxygen to produce carbon dioxide and water as wastes.

Chlorophyll: Green substance in the leaves of plants that traps light energy used in photosynthesis.

Clear-cutting: A method of harvesting trees where all standing trees are removed from a section of forest at one time.

Cones: Small, woody structure of coniferous trees which produce the seeds.

Conifer / Coniferous: A tree that bears cones and has needles or scale-like leaves. Examples are pine, spruce, fir or cedars. Often referred to as evergreens or softwoods.

Consumer: An organism that feeds on other organisms in an ecosystem. Herbivores, carnivores and omnivores are consumers.

Crown: The top of a tree forms the canopy.

Deciduous: Trees and plants that lose their leaves annually every autumn.

Decomposer: An organism that breaks down material and litter.

Direct Seeding: Putting seeds directly into the forest floor rather than planting seedlings.

Ecosystem: An area of living and non-living components that form an environment.

Evergreen Tree: A tree that does not lose its leaves.

Food Chain: A representation of "who eats who" in an ecosystem. (these do not really exist but serve as a simplistic view of a part of a food web).

Food Web: Feeding relationships in an ecosystem, the transfer of energy throughout an ecosystem. It is an inter-related network of food chains.

Forest: A group of trees.

Forest Floor: The area around the base of the trees, usually covered with leaves, moss and other plants.

Forest Management: The care and use of forests. Forest management works to protect the forests.

Forest Products: Products produced from trees.

Forestry: The practice of managing, conserving and creating forests.

Growth Rings: Rings that are present on a cross-section of a tree trunk represents and determine the age of a tree.

Habitat: A preferred place where an animal or plant lives.

Hardwood: Wood made by broad-leafed, deciduous trees (aspen, birch and poplar).

Harvesting: The removal of trees for a variety of uses.

Heartwood: The non-living wood making up most of a tree stem which gives the stem strength.

Herbivore: A plant-eating organism.

Inner Bark: The inner layer which serves to take food from the leaves to parts of the tree.

Interdependence: The state of being dependent upon each other; interconnected.

Jack Pine: A coniferous species of tree which grows to heights of 30 to 70 feet (9 - 22 m) tall.

Knot: Visible imperfections in the wood grain that are circular and darker than the surrounding area.

Leaves: Their main function is the conversion of carbon dioxide, water, and UV light into sugar via photosynthesis.

Lichens: The organism resulting from the relationship between an alga and a fungus.

Lodge Pole Pine: This tree grows to 40 metres tall with a skinny stem and triangle-shaped top.

Log: The stem of the tree after it has been felled.

Logging: The cutting and transporting of trees to the mill to make products.

Maple Tree: The national tree of Canada.

Mother Tree: The largest trees in forests that act as central hubs for vast below-ground networks.

Mycelium: The root and digestive system of mushrooms.

Needles: Thin, pointy leaves that remain alive and on the tree through the winter and into the next growing season.

Omnivore: An organism that eats both plants and animals.

Outer Bark: The outer covering of woody plants.

Oxygen: A non-metallic element that exists in its free form as a colourless, odourless gas and makes up about 21 percent of the Earth's atmosphere.

Park: A forested area used for recreation.

Phloem: The inner bark tissue that transports nutrients down to the roots and backup.

Photosynthesis: The process by which a tree produces its own food (sugar).

Pinecones: Its main function is to keep a pine tree's seeds protected.

Poplar: Large deciduous trees with rounded to triangular leaves, attractive greyish bark, and small clusters of drooping flowers.

Producer: Any organism which uses energy from the sun to produce its own food.

Pulp: The soft, moist, soupy mass of wood fibres from which paper is made.

Recreation: Activities which are done for leisure.

Reforestation: The building of a new forest by planting or reseeding.

Regeneration: The process of growing back what has been lost. Forests regenerate after a fire with the growth of new seedlings.

Respiration: The process of exchanging gases with the environment.

Roots: The functions of tree roots are to absorb nutrients and water, store nutrients and food, and anchor the tree to the ground.

Sap: The fluid part of a plant rich in sugar and starch that moves up and down the plant in the phloem tissue of the bark.

Sapling: A young tree.

Sapwood: The softer outer layer of the wood in the stem between the cambium and heartwood, responsible for nutrient transportation.

Seed: The part of a plant that is able to grow into a new plant.

Seedling: A very young tree.

Seed tree Method: Method of harvesting forests where a few scattered trees are left standing in order to seed new trees.

Selective Harvesting: A method of harvesting where certain trees are selected for cutting. Only these trees are taken.

Shrub: A low growing perennial plant.

Snags: A standing tree that has begun to decay or a tree that has been felled but has caught itself on the way down.

Spruce: A medium-sized (occasionally >55m tall), evergreen conifer, with a fairly symmetrical, conical crown, a regular branching pattern that often extends to the ground, and a smooth, dark grey, scaly bark.

Stand: A group of trees in a given area.

Stomata: Little holes on the underside of leaves that allow gases to pass.

Strip-cutting: Method of harvesting forest in strip-like sections, trees left standing are intended to reside.

Tamarack: Is a boreal larch tree belonging to the pine family that loses its needles in winter.

Taproot: A tree's main root, which goes straight down into the soil.

Transpiration: The loss of water through the pores (stomata) in the leaves.

Tree: A perennial woody plant having a well-defined stem at least 3 meters high.

Tree Rings: A layer of wood produced during a tree's growing season.

Twigs: A young shoot representing the current season's growth of a woody plant.

Veins: Tubes that carry water around a leaf and help keep its shape.

White Spruce: This tree usually grows to be 24 metres tall, but under ideal conditions can grow to more than 30 metres tall. It usually lives between 250 and 350 years, but trees up to 1,000 years old have been seen.

Xylem: Microscopic tubes running the length of a plant's trunk that conduct water and minerals upward from the roots. This makes up the wood of the stem.