

abiotic factors	all of the non-living things in an ecosystem like geology, hydrology, humidity, light, soil, temperature, topography, water, and wind
achene	a small, dry one-seeded fruit that does not open to release the seed
aerial roots	roots that grow above ground, most often on the stems of climbers
aerosol	suspension of fine solid particles or liquid droplets in air
air pressure	the force exerted on a surface, in all directions, by the weight of air
algal bloom	excessive growth of algae at the surface of water bodies due to warmer than usual temperature, or to oversupply of nutrients such as phosphorus, nitrogen and iron
allelopathic	releasing substances that suppress the germination or growth of other plants
alluvial	deposited by rivers
alterative	herbal preparation consumed to gradually improve the functioning of organs and thus promote assimilation of nutrients and elimination of metabolic waste products; sometimes called blood cleanser
alternate	leaves growing one at a time from a leaf node, switching between two different sides of the stem
anasarca	when cavities and tissues have excess fluid and cause swelling of the entire body; known as dropsy or edema when only a part of the body is affected
androecium	all the stamens of a flower
annual	plant that lives for a year or less and reproduces itself by seed
anthropogenic	resulting from human activity
apetalous	without petals
arboreta	plural of arboretum, a garden that is dedicated to planting trees for scientific and educational purposes
arthropod	an invertebrate animal such as crustacean, insect, mollusk, spider, or worm
astringent	causes contraction of body tissues such as the skin; with the capacity to reduce bleeding from minor abrasions of the skin

atmosphere	the layer(s) of gases surrounding the Earth and other planets
awn	a fine bristle associated with the bracts of grass florets
axil	the angle between a leaf stalk and the stem from which it is growing
barren	area of thin soil, sand or rocks where less than one third of area is covered by vegetation
basal	forming a bottom layer
bedrock	layer of solid rock beneath soil
berry	a fruit with seeds enclosed within flesh pulp, e.g. banana, blueberry, cranberry, tomato
biennial	plant that lives for two years before flowering and setting seed and then dies; compare with annual and perennial
biotic factors	all the living organisms within an ecosystem like animals, bacteria, fungi, plants and any other living things
bottomland	flat, low-lying land along a river, subject to overflow during floods
brackish	characteristic that results when seawater mixes with fresh water, as in bays and estuaries; it is saltier than fresh water, but not as salty as seawater
bract	leaflike structure positioned beneath a flower or inflorescence; usually green but can be quite colorful like the red bracts of poinsettias, or the white bracts of dogwoods
bulb	a short stem protected by fleshy leaves containing nutrient reserves; usually in the form of an underground organ that can survive the winter; e.g. daffodil, garlic, onion
bulbil	a bulb-like structure in the axil of a leaf or base of a stem that can form a new plant
calyx	the outermost whorl of flower parts consisting of the sepals; often green and serves to protect the developing petals
cane	the flexible woody stem of raspberry and blackberry plants
canopy	the uppermost branches of trees in a forest that can sometimes form a continuous layer of foliage, casting shade over vegetation beneath

capitulum	or flower head; a compact cluster of many small stalkless flowers or florets, that gives the appearance of being a single flower
capsule	a dry fruit that splits open when ripe to release mature seeds
carpel	female reproductive organ of flower; consists of stigma, style, and ovary
cathartic	medication that stimulates or facilitates the evacuation of the bowels; same as laxative and purgative
catkin	a spike of either male or female flowers that usually do not have petals
chlorophyll	a green pigment in plants that absorbs light to provide energy for transforming carbon dioxide and water into sugars
clastic	rocks composed of broken pieces of older rocks
climber	without a weight-bearing vertical stem of its own, a plant that depends on taller surrounding vegetation to reach an environment of suitable light for photosynthesis
clonal	genetically identical
cold front	forms when a cold air mass pushes into a warmer air mass
composite flower head	a complex flower like structure that consists of two types of flowers or florets; disk flowers or florets make up the central portion of the "flower"; and the strap-like ray flowers or florets make up the "petals"
compound leaf	a leaf that consist of several distinct parts, or leaflets, all joined to the same leaf stem
conduction	direct transmission of heat between adjacent regions of differing temperature without material movement
conglomerate	sedimentary rock containing substantial gravel-sized (2-64 mm) older rocks
conifer	tree with evergreen needlelike or scalelike leaves, produce seed-bearing cones; examples include cedar, fir, hemlock, and pine
conspecific	an organism of the same species
convection	the transfer of heat within a fluid caused by the tendency of hotter (less dense) material to rise and colder (denser) material to sink under the influence of gravity

corolla	all the petals of a flower; often colorful to attract pollinators to visit the reproductive organs protected within
creeper	a plant that grows along the ground by extending its stem or branches
crown	the uppermost spreading branches of a plant
crustacean	includes aquatic arthropods such as barnacle, crab, lobster, shrimp
cultivar	a variety of plant resulting from selective breeding; does not occur in nature
dabbling	duck that moves its bill around in shallow water to look for food
dabbling	moving the bill around in shallow water while foraging
deciduous	the annual shedding of leaves during autumn
decoction	concentrated essence that results from boiling plant material
decomposition	a natural process in which the tissues of a dead organism are broken down into simpler forms that become nutrients for other organisms; thus recycling the nutrients in an ecosystem
defecate	discharge of feces from the body
dew point	the temperature of the air at saturation
diaphoretic	a medicinal preparation that induced sweating
dimorphic	occurring in two distinct forms, in birds the male tends to have more colorful plumage than the female
dioecious	male and female reproductive organs are in separate individuals, dioecious plants have either male flowers or female flowers so self-pollination would be impossible
disk flower	the tiny flowers located at the center of a composite flower head; sunflower seeds develop from numerous disk flowers
disperse	spread over a large area
diuretic	a medication that increases the passing of urine
diurnal	daily
dominant species	a species that is represented by many more individuals than other species in the area
dormant	when normal physical activities and functions are suspended or slowed, such as trees during late fall and winter

dropsy	excess of fluid gathered in the cavities or tissues in an area of the body; also known as edema; called anasarca when over whole body
eczema	a condition where patches of skin become inflamed, itchy, cracked, rough, or erupt in blisters
edema	when cavities and tissues in a part of the body has excess fluid; also known as dropsy; called anasarca when over whole body
elliptical	oval, shaped like an elongated circle
emetic	a medication or substance that causes vomiting
endangered	seriously at risk of extinction
epidermis	the outer layer of tissue in a plant
estuary	the tidal mouth of a large river, where the tide meets the stream
Eurasia	refers to the combined land mass of Europe and Asia
evaporate	turn from liquid into vapor
evergreen	green leaves retained throughout the year as in the forb American shinleaf , and in trees like the American holly , eastern red cedar
exoskeleton	a rigid external covering that provides both support and protection for some invertebrate animals
extinct	absence of living individuals of a species
family	a grouping of species that have similar characteristics but may be further grouped into different genera
fertilize	causing the development of a new individual by delivering pollen grains that successfully fuse with a plant's ovule(s)
filter-feeders	animals that feed by straining suspended matter and food particles from water, typically by passing the water over a specialized filtering structure
fledge	develop wing feathers that are sufficiently formed for flight
flora	all the plants growing in a particular region or habitat
floret	refers to the small flowers in the flower spike of grasses; also to the many small flowers that form the composite flower head of an aster; a daisy "flower" consists of two kinds of florets, disk florets in the center and long ray florets that look like petals; dandelions only have ray florets

flower	plant structure involved in sexual reproduction; consisting of 4 basic parts: sepals (calyx), petals (corolla), stamens (androecium) and pistils (gynoecium)
flower head	or capitulum; a compact cluster of many small stalkless flowers or florets, that gives the appearance of being a single flower
foliage	collective mass of plant leaves
forage	searching far and wide for food
forb	small, herbaceous, non-woody flowering plant; one of five growth forms used to classify land plants based on structural features rather than taxonomic relationship to other plants
forest	a large area covered with growing trees and undergrowth
forest composition	the variety of plant species and growth forms
forest structure	relative distribution of large- and small-stemmed plants and the distribution of foliage from the ground to the canopy
fossil	remains or impression of prehistoric life embedded in stratified rock, usually formed from the hard parts of the organism
fruit	seed-bearing structure that develops from the pistil of a flower
gastritis	inflammation of the lining of the stomach
genus	group of species with similar characteristics that share a name to indicate their close relationship; the genus or generic name is always capitalized followed by the species name in lower case; plural for genus is genera
germination	process of seeds or spores developing into a plant
glacial striation	scratch marks cut into bedrock through glacial abrasion
glacial till	accumulations of unsorted, unstratified mixtures of clay, silt, sand, gravel, and boulders left by a glacier
glaciated	covered by glaciers or ice sheets
glacier	a perennial accumulation of ice, snow, water, rocks and sediments formed from compaction of unmelted snow and moves under the influence of gravity
glean	gathering something bit by bit, slowly and carefully
grafted	a branch that produces desirable flowers and fruits is joined to a rootstock of a different plant

graminoid	non-woody, seed-bearing plants like orchard grass , saltmarsh rush or nut flatsedge , one of five growth forms used to classify land plants based on structural features
greenhouse effect	the trapping of the sun's warmth in earth's lower atmosphere
grove	a group of trees with minimal or no undergrowth
growth form	a means of classifying land plants based on their structural features rather than taxonomic relationship, five categories include herb, forb, shrub, tree, and climber
growth ring	concentric layer of wood that corresponds to the amount of wood produced during one growing season
gynoecium	all the pistils or carpels of a flower
habitat	set of living and nonliving features typical of a particular environment such as forest habitat, marsh habitat, desert habitat
hedgerow	a densely-spaced row of trees and shrubs, wild or planted, that borders a field or road; also used to delineate adjacent properties
herb	a flowering plant with non-woody stems that die after the growing season; can be annual, biennial or perennial
herbaceous	with little to no woody tissue in the stem; often living only for one growing season
herbal	when used as a noun, refers to a book that describes herbaceous plants and their culinary and medicinal properties
herbarium	a facility where systematically arranged collections of dried plants are kept as reference material for identified species
high species diversity	high in number of species where each species is only represented by a few individuals
horticultural	cultivation and management of garden plants, usually involving decorative rather than food-producing species
horticulturalist	individual who cultivates and manages decorative rather than food-producing plants in a garden or landscape
igneous	a rock type formed from cooled magma from the core of the earth
indigenous	found at a locality naturally, with no human intervention, same as native

inflorescence	cluster of flowers on the flower-bearing stem(s) of a plant
infusion	liquid mixture that results when parts of a plant are soaked in water
interface	the common boundary between two differently configured areas, such as woodland versus grassy field, where interaction can occur
intertidal	the shoreline area that is covered by water at high tide and uncovered at low tide
introduced	something brought to areas outside of its natural range either intentionally or unintentionally by humans
inundation	condition of being flooded
invasive	referring to introduced species that grow and spread quickly to the detriment of local species and ecological processes
jaundice	a yellowing of the skin or eyes due to malfunctions of the liver or bile duct
juvenile	young plant or animal that is not yet reproductive
larva	(larvae when plural) the active immature form of insects or other animals that go through distinct transformations before reaching the adult form
latitude	then north-south position of a point on the earth's surface
laxative	medication that stimulates or facilitates the evacuation of the bowels; same as cathartic and purgative
leaf litter	a layer of decomposing leaves and other plant debris on top of the soil
lemma	lower bract covering the floret of a grass
lenticel	a porous tissue in the stem of woody plants that allows direct gas exchange between the internal tissue and the atmosphere
liana	a woody climbing plant that does not support its own weight
Linnaeus	18th century Swedish botanist who developed the current system of classifying and naming plant and animal species uniquely; two names respectively designate the genus and species of an organism
magma	hot fluid or semi-fluid material beneath the earth's crust
maritime	found in or near the sea; climate that is moist and temperate because of proximity to the ocean

marsh	a low-lying area of land that is flooded at high tide, or during the rainy season
mature	grown to large adult size and producing flowers and fruits
metabolic rate	rate at which metabolism occurs in living organisms
metabolism	the chemical processes that occur within an organism to maintain life
metamorphose	in geology, changing in structure or composition of a rock due to heat or pressure
mollusk	an invertebrate phylum than includes animals like clams, snails, slugs, mussels, octopuses
monoecious	having both male and female reproductive organs in the same individual; monoecious plants have both male and female flowers on the same individual thus self-pollination could occur
monospecific	consisting of only one species
narcotic	a drug; having the property of relieving pain and inducing drowsiness or a state of near-unconsciousness
native	occurring at a locality naturally, without human intervention; same as indigenous
naturalized	referring to introduced species able to reproduce in the wild to maintain their population without human intervention
nitrogen fixing	process in which nonreactive atmospheric nitrogen is converted into nitrogenous compounds useful in metabolic processes
offspring	the young produced by a single organism or by two organisms in the case of sexual reproduction; same as progeny
omnivorous	eating whatever food is available whether animal or plant based
opposite	paired leaves growing from the same leaf node, one on each side of the stem
ornamental	decorative with no practical purpose
orogeny	folding and deformation of the earth's crust by lateral compression to form a mountain range
outcrop	a visible exposure of the bedrock on the surface
ovule	the part of the ovary that fuses with pollen to become a seed
palea	the upper bract covering the floret of a grass

panicle	a loosely branching cluster of flowers or fruits
pappus	tufts of hair on a seed that helps in wind dispersal
parasite	an organism that exploits another organism (host) for nutrients or other benefits to the detriment of the host
pathogen	microorganism such as bacterium or virus that can cause disease
perennial	plant that lives for several to many years; perennial forbs have above ground parts that die back yearly but a persistent root system
petiole	a slender stalk that attaches the leaf to the stem
phenology	the study of seasonal or cyclical events in plants (leafing, flowering, fruiting) and animals (breeding, migration, molt, wintering)
phloem	vascular tissue that conducts sugars and other metabolic products from leaves to the rest of the plant
photosynthesis	process by which green plants use sunlight and chlorophyll to synthesize foods and structural materials from carbon dioxide and water, generating oxygen as a byproduct
photosynthetic	related to or involved in using chlorophyll to synthesize foods and structural materials from carbon dioxide and water, generating oxygen as a byproduct
phytotoxic	poisonous to plants
pinnately compound	an arrangement of leaflets analogous to the pattern of a feather where leaflets are attached on opposite sides of a long axis
pioneer species	hardy species that are the first to colonize a habitat after disturbance due to either human activity or natural events has removed standing vegetation
pistil	female reproductive organ of flower made up of one or more carpels
pistillate	having pistils but no stamens
polar jet stream	narrow, powerful (100-200 mph), meandering winds in the upper atmosphere (8-10 miles up)
pollination	the transfer of pollen from the anther of one flower, usually to the stigma of another flower to facilitate fertilization of the ovule

population	organisms of the same species that interbreed and live in a particular area
potherb	an herbaceous plant with leaves, stems, and flowers that are used as a vegetable or seasoning; could be either cultivated or foraged
poultice	a soft, moist mass applied to the body, often to a wound, to relieve soreness or inflammation
prickle	small, stiff, outgrowth of the epidermis; no vascular bundle present
progeny	descendant(s) of animal or plant, same as offspring
proto-	original or primitive
purgative	medication that stimulates or facilitates the evacuation of the bowels; same as cathartic and purgative
raft	a dense flock of swimming birds like cormorants, ducks and geese that can sometimes number in the hundreds or thousands
raptors	birds of prey like eagles, falcons, hawks, and owls
ray flower	a tiny flower with a single strap-like petal that forms the outer ring of a composite flower head; each "petal" of a daisy is actually a ray flower
regeneration	regrowth of previously existing vegetation after disturbance or removal
rhizome	a horizontal, underground stem that puts out new shoots and roots as it grows continuously
rift	a linear zone where the earth's crust is being pulled apart
rose hip	fruit of a rose
rosette	a radiating arrangement of horizontally spreading leaves at the base of a low-growing plant
rubble pile	mound of large undressed boulders left behind from construction of the breakwater in the 60's; southeast of entrance to causeway
runoff	occurs when there is more water than can be absorbed by the ground beneath; the excess water flows into nearby streams and ponds carrying with it sediments and chemicals from across the land surface

saline	containing salt
samara	a winged dry fruit that can be carried by wind or water away from the parent tree
sandstone	a sedimentary rock that consists of sand or quartz grains (0.05-2 mm) cemented together, gray sandstone was formed through centuries of sediment deposition followed by solidification from the compressive weight of overlying layers of sediments.
sapling	a small, young tree growing in the understory with a slender stem that is not yet producing flowers and fruits
sediment	material broken down by weathering and erosion and subsequently transported by wind or water that is deposited as layers on the surface of land or at the bottom of a body of water
seed dispersal	refers to the movement or transport of seeds away from the parent plant
seed head	a flower head that is fruiting and contains seeds; the common dandelion presents a familiar example
self-fertilize	pollen fertilizes ovule from same plant; self-pollinate
self-incompatible	ovule cannot be fertilized by pollen from same plant
sessile	in the case of animals, fixed in place, immobile; in the case of a plant part, attached directly by its base to a stem without a stalk or peduncle
shrub	relatively small woody plants compared to trees with several branches close to the ground like the common blackberry , rambler rose or burning bush ; one of five growth forms used to classify land plants based on structural features rather than taxonomic relationship
siltstone	sedimentary rock composed mostly of silt-sized (0.01-0.1 mm) particles
simple leaf	an undivided leaf
solar radiation	energy emitted by the sun and transmitted as waves or particles, mostly reaching the earth as visible or infrared light
species	refers to a group of similar organisms that can interbreed naturally to produce fertile offspring
specific epithet	the second part of the two-parted scientific name; the first part would be the generic name

specimen	a typical example of a species used in scientific study
speculum	a bright patch of feathers on the secondary wing feathers, often with a metallic sheen
spine	a slender, sharp, firm structure derived from a leaf or part of a leaf that is round in cross section
stamen	male reproductive organ of flower; consists of anther with pollen, on a filament
staminate	having stamens but no pistils
stigma	part of a pistil that receives the pollen during pollination
stolon	stem that creeps along the surface or just beneath the ground to produce a clone of the original plant
storm drain	prevents flooding of streets by draining excess ground water, and rain from impervious surfaces such as paved streets, car parks, parking lots, footpaths, sidewalks, and roofs
style	extension of ovary in a flower, usually elongated and narrow, terminating as the stigma
substrate	material on which a plant grows, and from which nutrients are obtained
subtidal	refers to the portion of the shoreline below low tide; usually submerged but may be exposed at the lowest low tides
sucker	a shoot growing from the base of a woody plant, or from a root some distance away from the main stem
symbiosis	a long-term biological relationship between two distinct types of organisms
taproot	a thick dominant root that grows vertically downwards, usually tapering, from which smaller roots grow laterally; functions as a storage organ, as in beets, carrots and dandelions
temperate regions	areas between the tropics and the polar circles where the temperatures are relatively moderate and there are four seasons
tendrils	usually found on climbing plants, a sensitive thread-like appendage modified from a leaf, stipule or stem, that extends away from the plant and grows in a spiral manner once it reaches some form of support for attachment
thorn	a short stiff and pointed structure that is a modified branch so may contain a vascular bundle or remnants of it

tidal	related to or affected by tides
tide	alternating rise and fall of sea level due to the combined gravitational forces of the sun and moon and the rotation of the earth
tillering	developing lateral shoots from the base of the stem
tincture	a medicine made by dissolving the curative substance in alcohol
tonic	a medicinal preparation that invigorates the body, or gives a feeling of wellbeing
transpiration	water is absorbed through roots and then lost as vapor through pores in the leaves, flowers or stems; thus, the plant is cooled, and minerals and water are transported from the soil to the leaves where photosynthesis occurs
tree	large, single-stem woody plants branching some distance from the ground such as black oak , gray birch , and red maple ; one of five growth forms used to classify land plants based on structural features rather than taxonomic relationships
trichome	an outgrowth, often hair-like, from the epidermis of a plant
trilobite	extinct fossil arthropods recognized by their distinct, three-lobe form
tuber	enlarged underground stem that contains food reserves, and buds that grow into new plants; e.g. potato
tundra	a vast and flat treeless region of the Arctic where the subsoil is permanently frozen
undergrowth	aggregate of forbs, graminoids, shrubs and saplings growing under trees
understory	layer of vegetation beneath the canopy of large trees, can consist of forbs, graminoids, shrubs, saplings, small trees, and the stems of vines
upland	an area of high or hilly land
vascular	referring to plant tissue that consists of conducting vessels
vascular bundle	a grouping of conducting vessels in plants with phloem on the outside and xylem on the inside
vegetative	relating to growth rather than reproduction
vernal pond	a low-lying depression within woodland that is seasonally filled by rains or snow melt during the winter and spring months

vine	a climbing or trailing plant
warm front	forms when a warm air mass at the surface rises above the cool air mass
water cycle	the constant transfer of earth's water among the oceans, the land, and the atmosphere
wave length	the distance over which the wave's shape repeats
weathering	wearing away or alteration of a rock by prolonged exposure to air
weed	a wild plant growing where it is not wanted; such as in a garden or cultivated field; can refer to either a native or an introduced species
westerly	wind blowing from the west
wildlife	all animals occurring in the wild
wind-dispersed	carried away from parent plant by wind
woodland	land covered with trees
woods	a small area that is covered with growing trees and undergrowth
xylem	vascular tissue that conducts water and dissolved nutrients from the roots to the other parts of a plant; also forms the woody component of the stem
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