



Table Rocks Curriculum

Glossary

Abiotic: nonliving factor or element in an environment, such as light, water, temperature, rock, or oxygen.

ACEC: Area of Critical Environmental Concern. A designation used by the BLM (Bureau of Land Management) to protect and manage unique areas of regional significance, such as the Table Rocks, which have unique plants and wildlife, historical or cultural significance, scenic value, or the possibility of natural hazard (such as landslides or seismic activity). ACEC's are typically managed to preserve their biological, scenic, cultural, recreational, educational, and/or historical values.

Adaptation: change in organisms that allow them to live successfully in an environment.

Allelopathy: inhibition of growth in one plant species by chemicals produced by another species.

Amensalism: ecological relationship between two or more organisms in which one species is unaffected while the other is harmed.

Amphibian: four-legged vertebrate of the class Amphibia. They breathe by using lungs, gills or through their moist, glandular skin. Their eggs do not have a shell but are protected by a jelly-like layer.

Andesite: common extrusive igneous rock, typically dark gray or black.

Animism: belief that all things, animate and inanimate, possess an innate soul and hold spiritual value.

Anther: pollen-producing portion of a stamen (anther + filament = stamen)

Anthropogenic: caused or produced by human activities.

Anthropologist: specialist who conducts scientific and humanistic studies of the culture and evolution of humans.

Anthropology: study of humankind, from its beginnings to the present day.

Aquatic: living in, on, or near water.

Archaeology: study of past human cultures through analysis of material evidence such as artifacts, buildings, and natural features of the landscape.

Artifact: object produced or shaped by human craft, especially a tool, weapon, or ornament of archaeological or historical interest.

Atlatl: tool that uses leverage to achieve greater velocity in throwing spears. It consists of a shaft with a handle on one end and a spur or cup on the other, against which the butt of the spear rests. The spear is thrown by the action of the upper arm and wrist in conjunction with a shift of balance of the body. An atlatl can readily cast a well made spear to ranges greater than 100 meters.

Basalt: most common type of extrusive igneous rock, typically dark gray and fine-grained.

Basketry: craft or process of making baskets or similar woven objects. Native American basket makers utilize plant materials such as willow bark and bear grass.

Bell Shaped: shaped like a bell; used in reference to tubular flowers that are narrower at the base and become wider toward the rim.

Biodiversity: variety and complexity of species present and interacting in an ecosystem and the relative abundance of each.

Biotic: environmental factor related to or produced by living organisms.

Bilateral: having one line of symmetry; composed of two sides which are mirror images of each other.

Black oak acorns: fruit of the California black oak tree, an important food source for Native American people, as well as for many animals.

Burden basket: large, funnel-shaped basket used by Native American people and worn on the back. It is used to hold collected food items such as acorns and camas bulbs and is held in place by a single strap around the forehead.

Botanist: specialist who studies plants.

Botany: study of plants.

Camas: purple-flowered plant in the lily family with an underground bulb that served as an important food source for many Native Americans.

Carnivore: animal that consumes other animals.

Carrion: dead animal, a food source for scavengers such as vultures.

Catkin: dangling cluster of male flowers, characteristic of willows, birches, oaks, and alders.

Chaparral: plant community dominated by dense, drought-resistant, broadleaf, evergreen, or wintergreen shrubs. Chaparral typically occurs in Mediterranean climates, where summers are hot and dry and most precipitation falls during the mild winters.

Chemical change: change involving the formation of a new substance that was not previously present via the recombination of the atoms or molecules of the starting substance(s).

Climate: kind of weather conditions and patterns generally characteristic of a region, based on temperature, humidity, precipitation, clouds, and wind.

Cool burn: low-intensity fire that clears ground vegetation but typically does not kill larger trees. Such a fire can promote forest regeneration by replenishing soil nutrients and creating an environment more conducive to seed germination.

Coloration: colors found on an organism. Some have colors that help them blend into their environment. Others have bright colors to attract mates (or pollinators, in the case of flowers) or to warn potential predators that they are poisonous or otherwise dangerous.

Commensalism: ecological relationship between two organisms of different species in which one organism benefits, while the other is generally neither helped nor harmed.

Community: all organisms in a particular habitat that are bound together by food chains and other interrelationships.

Competition: ecological relationship in which two or more organisms vie for the same resource. Competition can occur between two different species or between two individuals of the same species.

Composite volcano: steep-sided, cone-shaped volcano with a central crater or vent at the top (also called a “stratovolcano”). They tend to erupt explosively.

Conglomerate: sedimentary rock made of rounded pebbles, cobbles, and boulders, in a fine-grained matrix.

Consumer: organism that obtains energy by feeding on other organisms and/or their remains.

Corolla: petals of a flower considered as a group or unit.

Crustacean: arthropod of the subphylum Crustacea. The majority are aquatic, but a few groups have adapted to life on land. They have a segmented body, jointed appendages, and a stiff exoskeleton. Crustaceans include lobster, shrimp, crab, barnacles, and fairy shrimp.

Culture: the total, generally organized way of life, including learned beliefs and behaviors, values, norms, and institutions shared by members of a society or group and passed on from generation to generation. Culture includes knowledge, language, habits, art, actions, customs, traditions, technology, and artifacts.

Cultural relativism: perspective that all cultures are equally valid and that one cannot judge aspects of one culture by the standards of another. Encompasses the idea that all religious, ethical, aesthetic, and political beliefs are completely relative to the individual within a cultural identity.

Cyst: hard, spongy shell that protects the embryo of a vernal pool fairy shrimp.

Decomposer: organism that feeds on dead material and causes it to breakdown into basic nutrients that can then be recycled through the ecosystem.

Deposition: accumulation or lying down of matter by a natural process such as erosion or water flow. For example: the laying down of sediments in a river.

Dichotomous key: guide that aids identification of a plant species. Though traditionally used for identifying biological specimens, keys have also been applied to diseases, rock, and mineral specimens. The key works by offering two alternatives at each juncture and the choice of one of those alternatives determines the next step.

Dispersal: spreading of seed away from the parent plant to insure species survival.

Dormant: period in an organism's life cycle when growth and development is temporarily suspended. This helps an organism to conserve energy and tends to be closely connected to environmental conditions.

Ecological relationship: connection between organisms in an ecosystem with each other, the ecosystem, and the ecosystem itself with other ecosystems.

Ecological value: undisturbed interactions among the full diversity of naturally occurring species in a landscape.

Ecology: study of the interactions between organisms and their environment; where organisms are found, how many occur there, and why.

Ecosystem: interacting system of a biological community and its nonliving environment.

Ectothermic: "cold-blooded" animal that relies on external warmth (the sun) to raise its body temperature so that it can become active. To cool the body, ectotherms seek out a cooler environment.

Endemic: only found in one particular place. For example, the dwarf woolly meadowfoam is endemic to the Table Rocks.

Endothermic: "warm-blooded" animal that maintains its body temperature at a constant level.

Environment: sum of all external conditions and influences that effect the development and ultimately, the survival of an organism or group of organisms.

Erosion: wearing away of the land surface by wind or water. Occurs naturally from weather or runoff, but it is often intensified by human activities.

Ethnobotany: study of the relationship between plants and people.

Ethnocentrism: tendency to look at the world primarily from the perspective of one's own culture; the belief that one's own ethnic group is the most important and that some or all aspects of its culture are superior to those of other groups.

Evaporation: physical change of state of matter in which a liquid is transformed into a vapor or gas.

Exoskeleton: external, anatomical feature that provides protection and structural support for an animal's body such as an insect or crustacean.

Extrusive: refers to certain types of igneous rocks that have solidified from a molten state on the earth's surface rather than within the earth.

Filament: stalk of a stamen that supports the anther. (anther + filament = stamen)

Fire line: wide line that has been cleared in a forest of all flammable material and scraped down to the soil level to deter or prevent the advancement of a wildfire.

Fire-dependent: requiring periodic fire to maintain health or stimulate regeneration; may be used to describe an individual species or an entire ecosystem.

Fire regime: natural and historical pattern of fire characteristic of a particular region or ecosystem. Fire size, intensity, frequency, and seasonality are all components of fire regime.

Fire triangle: three components necessary for a fire to start and continue burning; oxygen, heat, and fuel. Without all three elements, a fire cannot burn.

Food chain: transfer of food energy from organisms in one nutritional level to those in another. For example, in a simple food chain, a green plant may be consumed by a leaf-eating insect; and the insect, in turn, may be consumed by an insect-eating bird.

Food web: complex and interconnected series of food chains in an ecosystem.

Fruit: mature ovary of a plant protecting seeds as they grow; can be fleshy and juicy—like an apple or an orange—or dry like nuts or wheat.

Fuel: any combustible material, such as logs, twigs, grass, paper, cardboard, dry leaves, or brush.

Gall: abnormal swelling of plant tissue due to a parasite or fungus. For example, oak galls are round, spongy growths which contain the larvae of gall wasps.

Gas: compound that characteristically has no fixed shape or volume; its molecules will spread out to fill all the available space.

Generalist: organism that can consume a variety of food sources or survive in a variety of habitats.

Germination: to develop into a plant or individual, such as a seed, spore, or bulb.

Habitat: area providing a species with all the necessary components that it needs to survive; a home.

Hatchling: newborn animal such as a bird, reptile, or fish that has recently emerged from an egg.

Herbivore: animal that is adapted to eat plant matter.

Hypothesis: explanation or educated guess, based on knowledge and research that can be tested.

Igneous: volcanic rock; formed by solidification of cooled magma.

Impermeable: relating to a material through which substances such as liquids and gasses cannot pass.

Insect: animal of the class Insecta, having an adult stage that is characterized by three main body segments, three pairs of legs, and (usually) two pairs of wings. Insects are the most diverse group of animals on earth with over a million known species, more than all other animals combined.

Interdependent: mutually dependent; depending on each other

Intrusive: having solidified from a molten state beneath the earth's surface rather than aboveground (used in reference to certain igneous rocks).

Invasive plant: non-native plant that spreads aggressively and takes over the habitat of native plants; having the ability to thrive and spread outside its native range, often because it lacks natural predators to keep it in check.

Invertebrate: any animal lacking a backbone. Major groups include insects, crustaceans, spiders, mollusks (snails, slugs, clams, octopi.), and worms.

Iridescent: having lustrous coloration that changes depending on the angle at which light strikes it. Animals such as hummingbirds and certain butterflies display this coloration.

Juvenile: life stage in which an organism has not fully grown or matured either in appearance or reproductive ability.

Land management: process of managing the use and development of land resources in a way that sustains health, diversity, and productivity of public lands for the use and enjoyment of present and future generations; managing land to maintain the uses and values of the land, including ecological, cultural, historical, recreational, and economical through the extraction of resources.

Lateral root: root that extends horizontally from the primary root of the plant and serves to anchor the plant securely into the soil. This branching of roots also contributes to water uptake, and facilitates the extraction of nutrients required for the growth and development of the plant.

Lava: molten rock that reaches the earth's surface through a volcano during an eruption.

Lipped: having a projection or edge that spreads outward or curves backward; used when referring to the petals of some plants.

Liquid: state of matter in which a substance exhibits a characteristic readiness to flow; the molecules in a liquid state cohere to each other rather than spreading out indefinitely; not a gas or a solid.

Macro-invertebrate: animal lacking a backbone that is large enough to see with the naked eye; referring to aquatic insect larvae such as a dragonfly or stonefly.

Magma: molten rock under the earth's crust from which igneous rocks are formed.

Mammal: vertebrate animal of the class Mammalia, having the body more or less covered with hair, nourishing the young with milk from the mammary glands, and (with a few exceptions) giving birth to live young.

Matter: any physical substance that takes up space; can be in the form of a solid, liquid, or gas.

Metamorphosis: profound change from one stage to another in the life stages of an organism; usually accompanied by a change in habitat or behavior, such as a caterpillar metamorphosing into a butterfly, or tadpoles into frogs.

Mixed woodland: plant community composed of a variety of tree and shrub species. The mixed woodland of the Table Rocks includes ponderosa pine, Douglas-fir, Pacific madrone, California black oak, and many other species.

Mortar: stone bowl used with a pestle used to grind up grains or seeds such as acorns. A mortar may be a portable bowl or a depression worn into a natural rock surface.

Mounded prairie: plant community that is characterized by gently undulating topography and dominated by many species of grasses and wildflowers.

Multiple use: various resource values and uses of public lands including recreation, habitat health, preservation for future generations, and resource extraction.

Mutualism: symbiotic relationship between organisms of two different species in which both benefit from the association.

Native: (noun) member of the original population of a given area; (adjective) naturally occurring in a given area.

Nectar: sweet liquid secreted by various flowers to attract pollinators.

Neutrality: absence of an ecological relationship between species; the state in which two or more different species coexist without any effect on each other. More of a hypothetical example than a biological reality.

Niche: ecological role an organism fulfills in its ecosystem; specific places where an organism can live.

Non-native: not occurring naturally in a given area; species usually introduced by humans, intentionally or accidentally. Lacking natural predators in their new homes, species sometimes dominate areas at the expense of native species.

Noxious weed: invasive plant that has been designated by the government as harmful to public health, agriculture, recreation, wildlife, and property.

Oak Savannah: plant community characterized by widely spaced oak trees amidst extensive areas of grassland. This plant community is present on the flanks of the Table Rocks.

Offspring: children or descendants of an organism.

Omnivore: organism that feeds on both plants and animals.

Oral Tradition: method of passing down information through generations by way of mouth; storytelling.

Organic: derived from living organisms.

Organism: any living form of life.

Ovary: part of a flower that contains the immature seeds (ovules) of a plant.

Ovule: immature seeds of a plant.

Parasite: organism that lives in or on another organism (the host), taking nourishment from the host while contributing nothing to the survival of the host.

Parasitism: type of symbiotic relationship in which one species (the parasite) benefits at the expense of another (the host).

Pestle: club-shaped, hand-held tool for pounding or grinding substances in a mortar.

Petal: part of a flower immediately surrounding the reproductive organs of a flower; often brightly colored or sweet-scented to attract pollinators.

Physical Change: change of state between a liquid, solid, or gas that does not involve a change in the chemical composition (e.g., freezing is a physical change because both water and ice are H₂O).

Pistil: female organ of a flower, typically located at the flower's center and consisting of the ovary, style, and stigma.

Pollen: tiny powder-like grains produced by the anthers of plants; each pollen grain consists of male reproductive cells.

Pollinator: organism that inadvertently transfers pollen from the anther of one flower to the pistil of another flower while collecting or feeding on pollen or nectar.

Pollination: transfer of pollen from the anther of one flower to the pistil of another flower of the same species, allowing the plant to reproduce.

Pollution: introduction of harmful substances into the air, water, or land due to human activities (e.g., oil spill), or natural sources (e.g., volcanic eruption).

Population: number of individuals of given species in a given area.

Predation: act of hunting, killing, and eating other organisms.

Predator: animal that hunts or captures other animals for food.

Prescribed burn: careful and planned use of fire in a predetermined area in a forest with the intention of reducing fuel loads, preventing extreme wildfires, reducing crowding, and restoring health to fire adapted environments in a predetermined area.

Prey: animal that is a food source for another animal.

Producer: organism that makes its own food via photosynthesis (by green plants) or chemosynthesis (anaerobic bacteria).

Pyrophyte: plant which tolerates or depends on fire.

Public land: land owned by the citizens and administrators and managed by local, state, or federal government agencies.

Radial: having multiple lines of symmetry; a developed uniformity around a central axis like the spokes on a wheel. Most flowers are radially symmetric, as are a few animals, such as jellyfish.

Reptile: any cold-blooded vertebrate of the class Reptilia, that have an external covering of scales, breathe using lungs; and most lay eggs; includes snakes, lizards, crocodiles, turtles, and dinosaurs.

Resin: sticky substance secreted by pine trees and certain other plants to repel potential insect infestations, disease, or to heal wounds.

Resources: necessary components to life required for the survival of an organism; e.g., food, water, space, shelter, sunlight, or mates.

Resource competition: struggle among organisms of the same or different species for food, space, water, shelter, sunlight, or mates.

Riparian: area adjacent to a stream or river; ecologically diverse areas that contribute to the health of other ecosystems by filtering out pollutants and preventing erosion.

Root: part of a plant that grows into the soil, anchoring the plant and absorbing water and nutrients.

Sand Basin: shallow basin, shaped like a bowl, dug into a sandy area near a stream or river that Native American people used to rinse acorn meal in order to remove the tannic acid.

Sandstone: soft type of sedimentary rock consisting of layer of sand pressed together.

Scarification: scraping, cracking, burning, or weakening the hard outer coating of a seed to speed germination.

Scavenger: animal that eats the dead remains of other animals or plants.

Scoriaceous: volcanic rock that is filled with small air pockets formed when lava cools very quickly in contact with water; steam from the water creates bubbles in the lava.

Seasonal: having to do with the seasons of the year; associated with one particular season, or changing with the seasons.

Sedimentary: type of rock formed by the deposition, consolidation, and hardening of sediments over time; sandstone or conglomerates are examples of sedimentary rocks.

Semi-permanent home: type of shelter used by the Takelma people during the winter; semi-permanent homes were built out of pine planks and bark and were intended to last only one season.

Sepal: one of a set of modified leaves surrounding a flower, just below the petals.

Serotinous: pine cone or other seed case that requires heat from a fire to open and release seeds.

Seed: mature plant ovule containing an embryo capable of growing into a new plant; the reproductive means of a plant.

Shield volcano: broad, gently sloping volcano that erupts in many slow flows pouring in all directions from a central cone or vent; a volcano resembling the shape of a warrior's shield. The volcano that created the lava atop the Table Rocks, Mt. Olson, was a shield volcano.

Shrub: woody plant smaller than a tree with several stems arising from the base rather than one primary trunk; a bush.

Snag: standing dead tree or stump in an ecosystem; an important component of habitat for many animals

Solid: state of matter that is firm, hard, or compact in substance; matter that is not liquid or gaseous.

Specialist: person with a particular area of expertise; organism with very particular, inflexible needs in terms of habitat or food (contrast with generalist).

Species: class of related individuals that resemble each other and are able to breed among themselves, but are not able to breed with members of another species.

Stamen: pollen-producing organ of a flower, (filament + anther = stamen)

Stem: above ground part of a plant that supports a leaf, flower, or fruit.

Stigma: tip of the style (female organ in plants), on which pollen is deposited. The stigma is typically broader than the style and sticky to facilitate receiving pollen (stigma + style = pistil)

Stratigraphy: study of the chronological order and geographic or rock layers. It is an important tool in dating rock layers.

Style: the stalk, or middle part, of the female organ in plants, that extends upward from the ovary; the tip of the style is called the stigma and is where pollen is received (stigma + style = pistil)

Succession: gradual process incurred by the change in the number of individuals of each species of a community and by establishment of new species populations that may gradually replace the original inhabitants.

Sweat lodge: temporary structure serving as a sauna where water is poured over heated rocks to create steam; important in Native American culture, especially ceremonially.

Symbiotic (relationship): (*adj*) relationship between two or more species in which both organisms benefit; one species benefits at the other's expense or neither species benefits.

Symbiosis: (*noun*) close ecological relationship between individuals of two (or more) species that may or may not necessarily benefit each individual.

Takelma: North American Native Americans of southwestern Oregon.

Talons: sharp claws of a bird of prey, such as an eagle, hawk, or falcon.

Tannin/tannic acid: bitter tasting acidic substance present in a number of plants, especially in the bark and acorns of oak trees. Tannins produce an astringent, mouth puckering sensation. Tannic acid is removed when acorns are processed for human consumption.

Tap root: straight descending root that anchors the plant and provides stability and is the central axis off of which other roots sprout.

Trait: characteristic of an organism that may be inherited (genetic), environmentally determined, or somewhere in between.

Tubular: tube-shaped; referring to flowers where the petals are fused together and elongated to form a tube.

Umbel: flat-topped or dome-shaped cluster of flowers, in which the flower stalks radiate from a common point atop the stem, much like the stays of an umbrella.

Unconformity: missing interval in the geologic record.

Underbrush: small shrubs, trees, grass, or other plants growing beneath the taller trees in a forest.

Vertebrate: any animal that has a backbone.

Vernal pool: seasonal wetland that is filled by snowmelt or spring rains and dries up completely during the summer season; important habitat for the western toad, Pacific tree frog, and vernal pool fairy shrimp (all present on the Table Rocks).

Weathering: break down of rock over time by wind, ice, rain, plant roots, or lichen.

Weed: any plant growing in a place where it is not wanted.

Weir: temporary dam placed across a river to raise or divert the water for the purpose of catching fish.

White oak acorns: fruit of the Oregon white oak tree, an important food source for the Native American people, as well as for many animals.

Written History: historical information that is contained in books or other written forms (contrast with oral history).