
GLOSSARY (including acronyms)

A

abaxial - away from the central line; turned toward the base, such as the underside of a leaf.

acaulescent - leaves clustered at or near the base of the plant; stemless or apparently so, with main stem underground.

achene - small, dry indehiscent fruit usually with one carpel and one seed.

acuminate - gradually tapering to a point, the sides somewhat concave.

acute - sharp; tapering to the apex with straight sides making an angle of less than 90 degrees.

adnate - fusion of unlike parts, as in the stamens to the corolla.

adventitious - organs unusual in position, as roots developing from stems or leaves.

AGFD - Arizona Game and Fish Department.

alkaline - having the properties of an alkali; a pH of more than 7.

alluvium - clay, silt, sand, gravel, or similar detrital material deposited by running water.

alternate - type of leaf arrangement in which only a single leaf is attached at each node. Term may also apply to other plant structures attached one per node.

ament - dense spike or raceme with apetalous pendent flowers, usually of one sex, as in the willows. (= **catkin**)

amplexicaul - clasping the stem.

androgynous - having both male and female flowers in the same inflorescence; in the genus *Carex*, with staminate flowers above the spike.

annual - plant with a one-year life cycle.

anther - pollen-bearing apical part of the stamen.

anthesis - period when the flower is open.

apetalous - without petals.

apex - uppermost point, tip.

apical - located at the tip.

appendage - secondary attached part.

appressed - lying close to or flat against another part.

areola - space marked out on a surface by cracks or ridges.

areole - small, clearly-marked space; in the Cactus Family (Cactaceae), a specialized cushion-like area on the stem equivalent to a node that bears a tuft of hairs, spines, and/or glochids.

armature - spines, barbs, prickles, or thorns (or bearing them).

arroyo - channel of an ephemeral stream in an arid region.

ascending - growing obliquely upward, often curving, but not erect.

ASP - Arizona State Parks.

auricle - ear-shaped appendage as at the summit of the leaf sheath in grasses.

auriculate - with one or more auricles.

awn - slender, bristle-like structure; the tips of glumes and lemmas on some grasses.

axil - upper or inner angle formed by two structures, as by a leaf and stem.

axile - belonging to, or situated on the axis, as with a placenta situated on the axis of a pistil.

axillary - in the axil.

axis - central line around which organs are borne, as with the stem area supporting the inflorescence.

B

banner - broad, erect, usually the largest, upper petal of some flowers of the Pea Family (Fabaceae) which generally also have wings and a keel. (= **standard**)

basal - related to, or located at the base; leaves produced at ground level.

basifixed - attached at the base.

beak - prolonged, usually narrowed tip of a thicker structure, as in some fruits and petals; a hard or firm point of projection. (= **rostrum**)

beaked - ending in a beak.

bearded - bearing long hairs, usually in tufts.

bi - prefix meaning two or twice.

bidentate - having two teeth.

biennial - plant that lives for two growing seasons, usually flowering only in the second year.

biforked - divided into two branches, as in hairs that are split near the tip into two separate branches.

bilabiate - having two lips as in an irregular corolla with united petals.

bilateral (symmetry) - divisible into identical halves in only one plane; found in "irregular" flowers such as orchids.

bisexual - in flowers, having both stamens and pistils.

BLM - Bureau of Land Management.

bladdery - thin and inflated.

blade - expanded, flattened part of a leaf or petal.

bract - reduced or modified leaf subtending a flower, usually associated with the inflorescence.

bracteate - with bracts.

bracteolate - provided with bracteoles, as at the base of a flower near the apex of a pedicel.

bracteole - secondary, usually small, bract, especially on a floral axis. (= **bractlet**)

bristle - short, stiff, ascending coarse hair or filament; a hair-like structure; in members of the Aster Family (Asteraceae), one type of pappus; in certain members of the Sedge Family (Cyperaceae) it refers to reduced perianth parts.

bulb - underground leaf bud composed of a reduced stem and scales (leaf bases).

bulblet - small bulb, usually axillary and above ground.

bulbous - enlarged, bulb-shaped structure.

bur - structure armed with spines or hooks, usually adapted for dispersal by animals.

C

caducous - falling off early or prematurely.

caespitose - growing in tufts or mats; also spelled **cespitose**.

calcareous - referring to limestone or lime-rich or calcium-rich soils.

callus - thickened extension at the base of the lemma, glume, or rachis in some grasses.

calyx - outer whorl of flowering parts, collective term for all the sepals of a flower. (Plural: **calyces**)

campanulate - bell-shaped.

capillary - thread-like.

capitate - collected into a dense, head-like cluster; with knob-like head or tip.

capsule - dry fruit composed of more than one carpel that opens by slits, lids, pores, or teeth to release seeds.

carpel - ovule-bearing part of a flower that forms either all or part of a pistil.

carpellate - having carpels.

carpophore - wiry stalk, formed from the carpel, that supports each part of a splitting fruit.

carr - wetland willow thicket.

catkin - see **ament**.

caudex - persistent, often woody base of an otherwise herbaceous stem. (Plural: **caudices**)

caulescent - with a definite leafy stem.

cauline - leaves borne on the stem, above ground; belonging to or on the stem.

cespitose - see **caespitose**.

chartaceous - with a papery texture, usually not green.

ciliate - with a marginal fringe of hairs.

cinereous - with gray or ashy white pubescence.

circumboreal - distributed around the high latitudes of the northern hemisphere in the boreal zone.

circumscissile - dehiscing along a transverse circular line, so that the top separates like a lid.

clasping - see **amplexicaul**.

clavate - club shaped, gradually thickened toward the tip.

claw - narrow base or stalk to some petals.

cleft - split about in the middle.

cobwebby - with the appearance of spider webbing, usually refers to very fine hairs.

compound (leaf) - a leaf divided into two or more leaflets.

conic - cone shaped.

congested - crowded, as in an inflorescence with many densely clustered flowers.

connate - united to a similar structure or part, often by fusion or pressure as in a bud.

contracted - narrowed or shortened in a particular place.

cordate - heart-shaped in whole or part, as a leaf with an indented base.

corm - short, bulb-like, usually underground stem, with only papery scale leaves.

corolla - collective term for all the petals of a flower, these petals may be separate or fused together.

corymb - round-topped or flat-topped inflorescence, racemose, the lower pedicels longer than the upper, flowers opening from the outside inward.

cruciform - cross-shaped.

culm - hollow or pithy (non-woody) stem found in grasses and sedges.

cuneate - wedge-shaped.

cuspidate - tipped with a cusp or a sharp, short, rigid point.

cyathium - inflorescence in some species of the Spurge Family (Euphorbiaceae), consisting of a cup-like involucre with a single pistil and male flowers with a single stamen. (Plural: **cyathia**)

cylindric - elongate and circular in cross section.

cyme - flower cluster, usually opposite-branched, in its simplest form consisting of three flowers, the central or terminal one blooming first.

cymose - with flowers in a cyme.

D

deciduous - falling off; not permanent or evergreen.

decumbent - resting on the ground, but with the tip rising up (in contrast to prostrate, in which a structure lies completely flat on the ground).

decurrent - extending downward along a stem or branch from the point of insertion.

deflexed - turned abruptly downward.

dehiscent - splitting open along regular lines, as in a fruit or anther.

deltoid - shaped like an equilateral triangle.

dentate - toothed, with the teeth directed outward rather than forward.

denticulate - minutely toothed.

depauperate - small or poorly developed, usually due to environmental conditions.

depressed - low and flattened.

dilated - expanded or widened, usually toward the apex.

dimorphic - having two forms.

dioecious - having staminate and pistillate flowers on separate plants.

discoïd - disk-like; having disk flowers.

disjunct - separated from the main, continuous portion of a species' range.

disk - central part of the flowers of some members of the Aster Family (Asteraceae).

disk flower - tubular flowers, usually with exserted petal tips, comprising all or part of the inflorescence of many members of the Aster Family (Asteraceae).

dissected - deeply, sometimes finely, divided into many segments or lobes.

distinct - separate; not united with parts in the same whorl.

divaricate - widely spreading.

divergent - spreading apart.

divided - separated to the base.

dorsal - pertaining to the back or outer surface.

dorsiventral - with an upper and lower side.

duff - organic matter on the forest floor.

drupe - fleshy fruit in which the inner layer of the ovary wall becomes hard, as in the peach.

E

elliptic - oval shaped, with the ends rounded and the widest point at the middle.

emarginate - with a small notch at the apex.

endemic - restricted to a particular geographic region or soil type.

entire - undivided; in leaves; having the leaf margins smooth rather than incised or toothed.

ephemeral - plant that completes its life cycle very rapidly. In favorable environments ephemerals may germinate, bloom, and set seed several times during a single year.

epicarp - outer layer of the fruit, the "skin."

erect - upright in relation to the ground, or sometimes perpendicular to the surface of attachment.

evergreen - bearing green leaves or stems over the winter; not deciduous.

exceed - to be longer than.

exfoliate - to come off in thin sheets.

explanate - spread out flat, as opened anthers.

exserted - projecting beyond a surrounding organ.

F

falcate - sickle-shaped.

farinose - with a mealy or powdery covering of wax.

federally listed species - any species processed through the proposed and final rulemaking stages by the U.S. Fish and Wildlife Service (FWS) as threatened or endangered.

fellfield - type of tundra that is 35-50 percent bare rock, with cushion plants, mosses, and lichens between.

fen - area of wet peat that is typically alkaline due to ground water draining from surrounding calcareous rocks.

fertile - bearing or producing reproductive structures; capable of producing fruit or spores.

fibrous - having or resembling fibers, as roots with several to many more or less equal branches but lacking a large central taproot.

filament - thread-like structure, especially the stalk of an anther.

filiform - thread-like.

fimbriate - fringed.

flaccid - soft and limp; drooping or hanging.

fleshy - thick and juicy; succulent.

flexuous - wavy or curved; zigzag.

floret - small flower, especially one in a dense cluster; reduced flower of grasses, consisting of a lemma, palea, stamens, and pistil.

flower - reproductive structure of plants.

follicle - type of dry fruit derived from a single pistil that splits open along only one suture line, as in milkweed pods.

fornix - scale or gland-like protuberance in the flower tube, as in the Borage Family (Boraginaceae). (Plural: **fornices**)

frond - leaf of a fern.

fruit - mature ovary with associated parts.

FS - United States Forest Service.

funiculus - stalk attaching the ovule or seed to the wall of the ovary, a structure of diagnostic value for Physaria species in the Mustard Family (Brassicaceae). (Plural: **funiculi**)

fusiform - tapering from the middle to both ends.

FWS - United States Fish and Wildlife Service.

G

galea - helmet-shaped petal; upper lip in certain 2-lipped corollas, as in *Castilleja*.

gamopetalous - with the petals at least partially united from the base upward.

geniculate - abruptly bent.

glabrate - almost hairless.

glabrous - without hairs.

gland - organ, usually appearing as a depression or appendage, that secretes a fluid.

glandular - bearing glands.

glaucous - slightly glaucous.

glaucous - covered with a whitish or bluish substance that often rubs off; having a wax-like covering.

globose - spherical or rounded.

glochid - minute, barbed bristle, often in tufts, typical of many members of the Cactus Family (Cactaceae)

glume - small bract at the base of a grass spikelet.

glutinous - sticky, with a sticky exudation

gneiss - coarse-grained, banded metamorphic rock in which minerals are arranged in darker and lighter layers.

graminoid - grass-like.

granite - light-colored, coarse-grained igneous rock.

granodiorite - granular intrusive quartz igneous rock, intermediate between granite and diorite; a quartzose diorite.

granular - covered with very small grains or granules; minutely mealy.

gynaecandrous - having pistillate flowers above staminate flowers, as in *Carex*.

gynoecium - collective name for the pistils.

gynophore - stalk supporting the pistil above the male flower parts and the perianth, as in the *Astragalus* species.

gypsiferous - bearing gypsum (hydrous calcium sulfate).

H

habit - the general appearance or growth form characteristic of a plant.

habitat - part of the environment where a plant grows.

head - dense cluster of usually stem-less flowers.

helicoid - coiled, spirally twisted.

hemispheric - half spherical.

herb - plant with no persistent woody stem above ground.

herbaceous - pertaining to an herb; opposed to woody; dying to the ground each year; with reference to bracts, greenish in color, usually slightly fleshy.

hirsute - with long, stiff, and spreading hairs.

hispid - clothed with stiff bristles or bristle-like hairs, usually stiff enough to penetrate the skin.

holotype - single specimen on which a species or taxon is based.

hood - erect to spreading petaloid blade with incurved margins (Asclepiadaceae).

hummock - small mound.

hyaline - very thin or membranous, transparent or translucent.

hypanthium - cup or tube formed by the fused bases of the stamens, petals, and sepals.

I

igneous - rock that was crystallized from a magma.

imbricate - overlapping like shingles.

incised - cut deeply and sharply, usually irregularly.

incurved - curved toward the axis or attachment.

indehiscent - not splitting open at maturity or not splitting regularly as by valves or along a suture.

indusium - membranous flap covering the sorus of ferns. (Plural: **indusia**)

inferior - located beneath or lower than another structure, as in the ovary of a flower located beneath the sepals and petals.

inflated - expanded like a balloon.

inflorescence - flowering part of a plant, usually referring to a cluster of flowers on a single stem.

innate - borne on the apex of the support; in an anther the antithesis of adnate; joined to another part by growing into it.

inrolled - curled or curved inwards; involute.

intermittent - not continuous.

internode - space between two successive nodes, the gap between successive points of attachment of leaves on a stem.

interrupted - discontinuous; in an inflorescence, having clusters of flowers interspersed with bare areas of stem.

involucel - secondary involucre, as in the bracts below the secondary umbels in the Parsley Family (Apiaceae).

involucre - whorl of bracts located beneath a flower cluster, as in the heads of members of the Aster Family (Asteraceae).

involute - having edges rolled inward or toward the upper surface.

keel - prominent central ridge; in some members of the Pea Family (Fabaceae), the two lowest, usually united, petals; in *Polygala*, the single lower petal.

L

lanate - woolly; densely clothed with long entangled hairs.

lanceolate - lance-shaped, much longer than broad, tapering to a tip; broadest below the middle.

lateral - on or at the side.

leaf - thin, expanded structure composed of blade, petiole, and/or stipule. Commonly used to refer to the blade only.

leaflet - any subdivision of a compound leaf.

lemma - in many members of the Grass Family (Poaceae), the lower, usually larger, of two bracts (the other being the **palea**) immediately below the floret.

ligneous - woody, or resembling wood.

ligule - membranous structure or fringe of hairs found at the junction of the leaf blade and sheath in members of the Grass Family (Poaceae); usually expanded blade of a ray flower in the Aster Family (Asteraceae).

limb - expanded and spreading part of a petal or of a corolla with united petals.

linear - narrow and flat with the sides parallel.

lip - lowermost, often highly modified, petal of a bilabate calyx or corolla as in orchids, mints, and penstemons.

loam - class of soil texture composed of sand, silt, and clay, which produces a physical property intermediate between the extremes of the three components.

lobe - division or segment of a structure, usually rounded in outline.

locule - compartment or chamber of an ovary, anther, or fruit.

lodicule - scale-like structure, one to three in number, at the base of a grass floret, forming a modified perianth.

lyrate - lyre-shaped; pinnatifid, with the terminal lobe large and rounded, the lower lobes small.

M

marcescent - withering or drying but persisting beyond a single season.

margin - edge, as in the edge of a leaf blade.

marginate - distinctly margined.

mealy - soft, dry, and crumbly textured, as in certain fruits.

membranous - thin, soft, and pliable.

-merous - suffix denoting number of parts, as 3-merous.

midrib - main, central vein of a leaf, bract, scale, or petal.

monomorphic - having one form.

monoecious - having the staminate and pistillate flowers on the same plant.

montane - relating to the biogeographical zone of relatively moist cool slopes below timberline dominated by large evergreen trees.

mottled - marked with colored spots.

mucro - minute, abrupt, often hardened, point at the apex.

mucronate - with a mucro.

muricate - rough, with short, firm, and sometimes sharp outgrowths.

N

needle - long, narrow, sharp-pointed leaves, such as those of many conifers and some clubmosses.

nerve - simple unbranched vein or slender rib of a leaf or bract.

NF - National Forest.

NM - National Monument; also New Mexico.

NNHP - Navajo Natural Heritage Program.

node - point of attachment of a leaf or leaves on a stem; the joint of a stem.

NP - National Park.

NPS - National Park Service.

nut - hard, indehiscent, usually one-seeded fruit, produced from a compound ovary.

nutlet - small, one-seeded, nut-like structure; the specialized fruit of members of the Borage (Boraginaceae) and Mint Families (Lamiaceae).

NWR - National Wildlife Refuge.

O

ob - prefix meaning inversely, upside-down.

obconic - conical, but attached at the narrower end.

obcordate - inversely cordate, with the notch at the apex.

oblanceolate - structure that is broadest near the tip and tapering to a narrower base.

oblique - with unequal sides, slanting.

oblong - much longer than broad, with nearly parallel sides; wider than linear.

obovate - egg-shaped (two dimensional), with the larger end at the apex.

obovoid - egg-shaped (three-dimensional), with the larger end at the apex.

obtuse - blunt or rounded at the apex.

ochroleucous - off-white, buff, or yellowish white.

once-pinnate - compound leaflet divided into entire leaflets (the leaflets are not further divided into lobes or secondary leaflets).

opposite - type of leaf arrangement in which two leaves are attached on opposite sides of a stem at the same node.

orbicular - flat and circular in outline.

ovary - part of the pistil of a flower that contains the ovules.

ovate - egg-shaped (two-dimensional), with the broadest end toward the base.

ovoid - egg-shaped (three-dimensional).

ovule - structure that develops into the seed.

P

pagodaeform - shaped like a pagoda.

palate - appendage in the throat of an irregular flower partly or completely closing the throat.

palea - in many members of the Grass Family (Poaceae), smaller of the two bracts (the other being the **lemma**) immediately below the floret.

pallid - deficient in color; pale or light-colored.

palmate - lobed or veined with branches arising from a common point, like the fingers of a hand.

panicle - compound inflorescence in which the central axis (main stem) bears flowering branches which are themselves branched again.

papilionaceous - butterfly-shaped corolla of many members of the Pea Family (Fabaceae), comprised of banner, wings, and keel.

papilla - minute rounded projection. (Plural: **papillae**)

pappus - appendage at the apex of the ovary; the modified sepals (calyx) of members of the Aster Family (Asteraceae) found at the top of the fruit in the form of thin bristles, feather-like plumes, scales, or sharp awns.

partition - line separating the two halves of the fruit of a mustard (Brassicaceae).

peat - highly organic soil often in bogs or fens.

pectinate - resembling a comb in having very narrow parallel segments borne at a right angle to the main axis.

pedicel - stalk of a single flower, fruit, or grass spikelet; the uppermost branch of an inflorescence bearing a head in the Aster Family (Asteraceae).

peduncle - stalk of a flower cluster.

pendent - hanging, drooping.

pendulous - hanging downward.

perennial - plant which lives for three or more years.

perianth - collective term for the calyx and corolla of a flower, usually used when there is no marked difference between the two, as in the Cactus Family (Cactaceae).

perigynium - sac-like modified bract enclosing the fruit in species of *Carex*. (Plural: **perigynia**)

perigynous - borne around the ovary, not beneath it; as when the stamens, corolla, and sepals are inserted on the floral tube.

persistent - remaining attached, as in the calyx on a fruit or remnant, dead leaves.

petal - usually colored, individual components of the corolla of a flower.

petiolate - having a petiole.

petiole - leaf stalk.

phyllary - involucre bract on the head of members of the Aster Family (Asteraceae).

pilose - covered with long, spreading, soft hairs.

pinna - primary division of a pinnately compound leaf, usually used to describe ferns. (Plural: **pinnæ**)

pinnate - with leaflets, lobes, or veins originating from several different points on each side of a main axis, as in the structure of a feather; compound leaf with the leaflets on 2 opposite sides of an elongated axis.

pinnately compound - division of a leaf blade into leaflets arranged on each side of a common leafstalk.

pinnatifid - pinnately lobed, cleft or parted, but not extending to the midrib.

pinnatisect - pinnately dissected, the cleft extending to the midrib.

pinnatilobate - with pinnately arranged lobes.

pinnule - secondary division of a fern frond; a leaflet or the ultimate segment of a compound leaf.

pistil - ovule-bearing structure of a flower, consisting of a stigma, style, and ovary; the "female" part of a flower.

pistillate - with pistils, but lacking well-developed, functional stamens; "female."

placenta - any part of the interior of an ovary that bears ovules.

playa - inland drainage basin, surrounded by sheets of alkaline or saline crust and containing a shallow, often ephemeral lake.

plumose - hairs with side hairs along the main axis like the plume of a feather.

pod - any dry, dehiscent fruit, containing several or many seeds as in the Pea Family (Fabaceae).

pollinium - waxy pollen mass of many members of the Dogbane (Apocynaceae) and Orchid (Orchidaceae) Families. (Plural: **pollinia**)

prickle - sharp, pointed, often hooked, outgrowth of the bark or epidermis.

procumbent - trailing on the ground, but not rooting.

Proposed Species - any species of fish, wildlife, or plant that is proposed by the FWS or the National Marine Fisheries Service to be listed as threatened or endangered.

prostrate - lying flat upon the ground for the entire length.

pseudoscape - false scape, as in a tulip where not all the leaves are basal; an elongated, underground stem of an apparently stemless plant.

puberulent - with very short, fine hairs.

pubescence - hairiness.

pubescent - having hairs.

pulvinate - cushion-shaped.

punctate - dotted with punctures, translucent pitted glands, or colored dots.

pungent - sharp-pointed, prickly to touch; hot to taste.

pustulate - with wart-like elevations; hairs with an expanded or wart-like base as in the Borage Family (Boraginaceae).

pustulose - hirsute, with basally swollen hairs.

R

raceme - elongate, unbranched inflorescence made up of stalked flowers attached directly to the main axis.

rachis - central elongated axis of an inflorescence or a compound leaf.

ray - primary branch of the inflorescence in members of the Parsley Family (Apiaceae).

ray flower - flower with a strap-like corolla, usually at the margin of a head in members of the Aster Family (Asteraceae);

receptacle - the axis of a flower; enlarged tip of the flowering stem that bears all or most of the flower parts in members of the Aster Family (Asteraceae).

recurved - curved downward or backwards.

reflexed - abruptly bent downward or back.

reniform - kidney shaped.

replum - internal membranous partition dividing the fruit of members of the Mustard Family (Brassicaceae) into two halves; a persistent and thickened rim.

reticulate - in the form of a network as in leaf veins.

retorse - directed backward or downward.

revolute - rolled backward from the apex or margin to the lower side.

rhizomatous - bearing rhizomes.

rhizome - prostrate stem at or below the surface bearing reduced, scaly leaves; usually rooting at the nodes.

rib - prominently raised vein or wing-like structure.

rootcrown - slow-growing, woody underground base of a perennial herb that gives rise to yearly growth of stems and leaves. (= **caudex**)

rosette - crowded cluster of leaves located at, or near the ground, at the base of a stem, generally symmetrical.

rostellum - portion of the stigma in an orchid flower involved in the transfer of pollen to the pollinator.

rostrum - see **beak**.

rosulate - with a collection of clustered leaves; in a rosette.

rugose - wrinkled.

S

saccate - shaped like a pouch or bag.

sagittate - arrow shaped, with two basal, usually acute, lobes directed downward.

saline - consisting of or containing salt.

salverform - corolla with slender tube, abruptly expanding into a flat limb at a right angle to the tube.

scabrous - rough to the touch, usually due to very short, stiff hairs or outgrowths of the epidermis.

scale - small appressed hairs, bracts, or leaves; any thin, short, often membranous structure; in the Sedge Family (Cyperaceae) often used in reference to the bracts under individual staminate and pistillate flowers; small, sharp-tipped leaves of certain clubmosses.

scape - leafless flower stalk.

scapose - with the flowers borne on a scape.

scar - mark left on a stem, branch, or nutlet.

scarious - thin, dry, and membranous, often translucent; not green.

schist - medium to coarse-grained metamorphic rock composed of parallel layers which are often waxy or flaky.

scree - accumulation of rocky debris lying on a slope or at the base of a hill.

scurfy - clothed with small scales.

second - oriented on one side of an axis, as in fruits or flowers all being on one side of a stem.

sedimentary - rock formed by the deposition and compression of mineral and rock particles.

seleniferous - containing or yielding selenium.

selenium - non-metallic element found with sulfur in various ores; often selectively concentrated by certain legumes.

Sensitive Species - plant species, subspecies, or variety for which the Regional Forester or BLM State Director has determined there is a concern for the species viability within a state, as evidenced by a significant current or predicted downward trend in populations or habitat. This includes federal candidates (C1, C2 and some C3) and federally proposed species.

sepal - individual leaf-like segment of the calyx of a flower.

septum - cross-wall or partition. (Plural: **septa**)

sericeous - covered with slender, glossy, more or less appressed hairs.

serrate - with sharp teeth pointed forward or upward.

sessile - lacking a stalk, attached directly at the base (as in a leaf without a petiole).

setose - covered with bristles.

shale - fine-grained sedimentary rock, usually composed of clays.

sheath - tubular organ or structure; lower part of the leaf that enfolds the stem in grasses, sedges, and rushes; the ring of papery leaves at each stem joint in horsetails (Equisetaceae).

shoot - young branch.

shrub - woody plant with several equally large stems from the base, usually less than 4.5 m tall.

sigmoid - curved in two directions like the letter S.

siliqua - long, slender fruit type of certain members of the Mustard Family (Brassicaceae)

simple - unbranched or undivided; in leaves refers to condition in which leaves are not divided into leaflets.

sinuate - wavy-margined.

sinus - notch or recess, usually rounded; an inward curve formed by two projecting lobes.

sobol - underground stems; elongated caudex branches.

soboliferous - bearing sobols.

solifluction - downhill movement of unconsolidated materials that have become saturated with water.

solitary - occurring singly, not as part of a group or cluster.

sorus - cluster of sporangia (structure containing spores). (Plural: **sori**)

SP - State Park.

spathaceous - like a spatula or spoon; bracts enclosing a flower cluster.

spathe - large bract sheathing or enclosing an inflorescence.

spathiform - spoon-shaped.

spatulate - oblong, but narrowed at base; having a spathe. (= **spathulate**)

spicate - having the form of or arranged along a central axis.

spike - elongated inflorescence of sessile flowers or florets.

spikelet - basic unit of the inflorescence of grasses and sedges. In grasses (Poaceae), it is composed of a pair of basal glumes subtending one or more florets. In sedges (Cyperaceae) it consists of a single bract subtending a flower.

spinescent - bearing a spine or ending in a spine-like sharp point.

spinulose - having small spines.

sporangium - spore-bearing case. (Plural: **sporangia**)

spore - reproductive body produced and dispersed by ferns, horsetails, clubmosses and other vascular plants that do not reproduce by true seeds.

spreading - diverging at nearly a right angle from a structure; nearly prostrate.

spur - tubular or sac-shaped extension of a petal or sepal.

stalk - main stem of a herbaceous plant.

stamen - pollen-producing structures (filaments and anthers); the "male" portion of a flower.

staminate - with stamens, but lacking a functional pistil; "male."

staminode - sterile stamen or any structure lacking an anther but corresponding to a stamen.

standard - see **banner**.

stellate - star-like or star-shaped; with radiating branches.

sterile - non-fertile; structure lacking reproductive parts or abilities.

stigma - apical surface of the pistil on which pollen grains land and germinate.

stipe - stalk of a fern frond; strap-like structure, derived from the column, connecting the pollinia to the viscidium in members of the Orchid Family (Orchidaceae); stalk of a pistil or pistils or of an anther cell.

stipitate - with a stipe or stalk.

stipule - leaf-like or scaly appendages (typically paired) at the base of the petiole in many plants.

stolon - horizontal stem or runner, usually growing along the surface of the ground, often rooting at the nodes and giving rise to new plants at the tip.

stoloniferous - bearing stolons.

stramineous - straw-like as color or texture.

striate - marked with fine longitudinal lines, furrows, or ridges.

strigillose - diminutive of strigose; also, **strigulose**.

strigose - covered with sharp-pointed, rigid, appressed hairs.

strigulose - intermediate between strigose and pilose.

strobilus - cone-like reproductive structure; spore-bearing structure of horsetails (Equisetaceae) and clubmosses (Lycopodiaceae). (Plural: **strobili**)

style - portion of the pistil between the ovary and the stigma.

stylopodium - enlargement or disklike expansion at the base of the style as in the Apiaceae.

sub - prefix referring to under or below.

subalpine - region lying below the alpine.

substrate - any object or material upon which an organism grows or to which an organism is attached.

subtend - to be situated immediately below, as in bracts beneath a flower.

subterminal - positioned near but not at the end of a bud, stem, or branch.

succulent - fleshy and full of juice.

suffrutescent - somewhat shrubby, woody at base but otherwise herbaceous.

sympatric - applied to species that occupy similar habitats or whose habitats overlap.

T

talus - sloping mass of coarse rock fragments accumulated at the foot of a cliff or slope.

taproot - primary root from which secondary roots arise.

tepal - division of those perianths not clearly differentiated into calyx and corolla as in the Buckwheat Family (Polygonaceae).

terete - cylindric; circular in cross section.

terminal - located at the tip of a structure.

ternate - in threes or with three parts.

ternately compound - divided into threes, as in a leaf consisting of three leaflets.

throat - orifice of a gamopetalous corolla; the expanded portion between the limb and tube proper.

TNC - The Nature Conservancy.

tomentose - with a dense wool-like covering of matted, intertangled hairs of medium length.

tooth - any small, marginal lobe, usually on the edge of a leaf blade.

tortuous - bent or twisted in various directions.

torulose - cylindrical but alternately swollen and constricted, a condition often found in the fruit of certain members of the Mustard Family (Brassicaceae).

translucent - nearly transparent.

tri - prefix meaning three or thrice.

trichome - hair or bristle extending from the epidermis.

trifoliolate - having three leaves.

trifoliolate - having three leaflets.

triforked - divided into three branches.

trigonus - three-angled, three-sided (usually refers to achenes).

truncate - squared on the end, not rounded.

tuber - thickened, subsurface structure bearing buds and providing food in reserve.

tubercle - small expanded structure, such as the base of the style in some sedges, or very large papillae on fruits.

tuberculate - having tubercles.

tuberous - producing or resembling a tuber.

tufted - close-growing cluster of stems, as in certain bunchgrasses, sedges, and mat-forming herbs.

turbinate - top-shaped.

tussock - compact, densely tufted growth form of some grasses and sedges.

twice-pinnate - two divisions of a leaf blade into leaflets arranged on each side of a common leafstalk.

twig - current year's growth of a stem; the endmost section of a branch.

U

umbel - flower cluster in which the individual flower stalks arise from a common point, like the rays of an umbrella.

unilocular - with a single locule or compartment, as in some ovaries.

USFS - United States Forest Service.

USFWS -United States Fish and Wildlife Service.

V

valve - one of the segments into which a dehiscent fruit separates.

vegetative - sterile structure of a plant, not associated with the production or dissemination of seeds, spores, or pollen.

vein - vascular bundle of a leaf or petal; nerve.

venation - arrangement of the veins of a leaf; nervation.

verticil - ring of similar organs radiating from a node.

villous - clothed with long, soft hairs, often without special orientation.

viscid - sticky; with sticky exudates.

viscidium - sticky portion of the rostellum of members of the Orchid Family (Orchidaceae).

W

whorl - see **verticil**.

whorled - three or more leaves or branches attached at the same level on stem.

wing - thin, often dry or leaf-like extension bordering a structure; in some members of the Pea Family (Fabaceae), the two lateral petals of the flower.

woolly - with long, interwoven hairs.

xeric - growing in dry places.

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