

A Glossary of Wetland Terminology

Aerobic: Occurring in the presence of free oxygen, either as a gas in the atmosphere or dissolved in water.

Alkaline: Water or soil with a pH greater than 7.4. Relatively high concentration of available base cations.

Anaerobic: Occurring in conditions devoid of oxygen.

Annual flood: Flooding occurs at least once in most years.

Biogeoclimatic subzone: A climatic region characterized by a unique climax plant association on zonal sites.

Biogeoclimatic zone: A climatic region with similar broad macroclimate characterized by the dominance of specific shade-tolerant "climax" tree species.

Brown mosses: A guild of peatland mosses usually indicating richer site conditions. Includes *Campyllum stellatum*, *Drepanocladus* spp., *Scorpidium scorpioides*, and *Tomenthypnum nitens*.

Canopy: Cover of branches and leaves formed collectively by the crowns of trees, shrubs or other plants.

Capillary action: Particles attract soil moisture and surface tension is strong enough to cause moisture to rise up through the soil, above the water table.

Capillary: In a soil, the fine spaces between soil particles.

Class, site: Ecosystems with broadly similar vegetation physiognomy (or species guild), hydrology, and water quality (NWWG 1997).

Clayey: Predominant textural classes are clay, silty clay, sandy clay or clay loam.

Climax community: A self-perpetuating community whose species composition is expected to be relatively stable and long lasting.

Closed basin or pond: Basin receives water from surrounding upland only, no inlet or outlet channel.

Coarse sedges: Large, broad-leaved sedge species including *Carex utriculata*, *Carex aquatilis*, *Carex sitchensis*, and *Carex exsiccata*.

Common species: Species that can occur in a site association, but do not define the community. They usually have a presence > 20% and a cover > 1%.

Common: Occurs frequently, and representative ecosystems are readily found but it is not a predominant association of the region (Steen and Roberts 1988).

Constant species: Species that occur in a classification unit with relatively high frequency but low mean cover that may help to define the community. They are defined as having presence of > 66% and cover <10%.

Diagnostic species: A species that occur primarily within a single classification unit.

Diatomaceous earth: Composed mainly of the siliceous shells of diatoms. It is frequently more nearly mineral than organic in composition.

Disclimax: A self-perpetuating community that strongly differs in species composition from the edaphic or climatic climax expected for the site; normal succession has been arrested by an external physical or anthropogenic factor. Results from changes to physical characteristics of the site, associated with disturbances such as fire, intensive grazing, or avalanche (Province of BC 1998).

Dominant species: The structurally most dominant species within a site or the species which contributes greatest vegetation cover to the community.

Drawdown: Decrease in water level of lakes or streams, exposing substrate that is normally submerged.

Dwarf shrub: Plants with woody stems that are generally less than 15 cm tall at maturity. Includes *Andromeda polifolia*, *Arctostaphylos uva-ursi*, *Empetrum nigrum*, *Gaultheria hispidula*, *Kalmia microphylla*, *Linnaea borealis*, *Oxycoccus oxycoccus*, *Rubus chamaemorus*, *Rubus pedatus*, *Vaccinium caespitosum*, and *Vaccinium vitis-idaea* are the most common wetland dwarf shrub species.

Emergents: Upright plants rooted in water or exposed to seasonal flooding, emerging above water surface. Does not include some submergents which normally lie entirely underwater but have flowering parts which break the surface.

Ericaceous shrub: Shrubs of family Ericaceae. *Andromeda*, *Chamaedaphne*, *Gaultheria*, *Kalmia*, *Ledum*, *Oxycoccus* and *Vaccinium* are the most common wetland genera.

Eutrophic: Very rich nutritional status, abundant supply of nutrients.

Feathermosses: Upland moss species with a feather-like form including *Hylocomium splendens*, *Pleurozium schreberi*, and *Ptilium crista-castrensis*.

Fibric: Poorly decomposed peat with large amounts of well-preserved fiber readily identifiable as to botanical origin.

Flark: Elongated wet depressions separated by raised ribs in patterned peatlands. The long axis is always perpendicular to the direction of water flow.

Floating mat: Mat of peat held together by roots and rhizomes underlain by water or fluid, loose peat (NWWG, 1988).

Floating-leaved plants: Rooted or free-floating plants with leaves normally floating on water surface.

Flooding: Surface inundation by moderate to fast moving water. Usually associated with sedimentation and erosion.

Fluvial: Sites occurring along flowing water courses, the water course itself, and the surrounding (riparian) terrain and vegetation. Subject to flooding and sedimentation processes (Province of BC 1998).

Forb: Any herb that is neither a grass, sedge nor rush.

Frequent flooding: Flood return interval of 2-5 years.

Gleyed: A soil condition resulting from prolonged soil saturation, which is manifested by the presence of bluish or greenish colors throughout the soil mass or in mottles (usually orange spots or streaks).

Graminoid: Plants with a grass-like growth form including rushes (Juncaceae), grasses (Poaceae), and sedges (Cyperaceae).

Groundwater: Water passing through or standing in soil and underlying strata. Free to move by gravity (NWWG 1988).

Herb: Non-woody vascular plants.

Hollow: A wet depression or pool found between hummocks or mounds. **2** A sunken basin or depression, often sloped and having an outflow. Includes gullies with slow streams where there is little sedimentation or erosion.

Humic: Highly decomposed organic material. Small amounts of fiber can be identified to botanical origin (NWWG 1988).

Hummock: A mound composed of organic materials. Often peat, *Sphagnum* or other moss. Slight hummocks are 0.3-1 m high and spaced >7 m apart. Moderate hummocks are 0.3-1 m tall and spaced 3-7 m apart. Strong hummocks are 0.3-1 m tall spaced 1-3 m apart.

Humus: Dead and decaying organic material at the soil surface.

Hydric: **1.** A site where water removed so slowly that water table is at or above the soil surface all year. **2.** A Gleysol or Organic soil..

Hydrogeomorphic Classification: Classification of wetland and riparian ecosystems based on hydrological and geomorphological features and processes.

Hydrophytic plant species: Any plant adapted for growing on permanently saturated soils deficient in oxygen.

Hygic: Water removed slowly enough to keep soil wet for most of the growing season; permanent seepage and mottling usually below 30cm in depth.

Hypereutrophic: Sites with very high salinity or alkalinity.

Inundation: Surface flooding by standing or slow moving water.

Lacustrine: Sites adjacent to lakes and ponds directly affected by lake wave action, sedimentation, and flooding.

Lagg: Depressed margin of a peatland: generally wetter than the central area, often contains open water.

Lawn: Relatively flat expanse of wetland moss usually raised above water level. Contrast with hummock and hollow.

Lifeform: A plant growth form which displays an obvious relationship to important environmental factors (Mueller-Dombois and Ellenberg, 1974).

Limnic material: Composed of coprogenous earth (sedimentary peat), diatomaceous earth, or marl.

Linked basin: Basin receives water from upland and an inflow stream; excess water flows through an outflow. Includes basins with slow streams where there is little sedimentation or erosion (Province of BC 1998).

Loamy: Textural classes are loam and sandy loam (Steen and Roberts 1988).

Marl: Sediments composed of shells of aquatic animals and CaCO₃ precipitated in water.

Mesic: **1.** Organic material in an intermediate stage of decomposition where some fibers can be identified as to botanical origin. **2.** Average soil moisture regime

Microtopography: Small scale (i.e. < 2 m) variations in surface elevation (e.g. hummocks and hollows).

Minerotrophic indicator species: Plant species requiring relatively high concentrations of nutrients associated with mineral groundwater. Intolerant of bog (ombrotrophic) conditions. Includes both swamp and fen indicators.

Minerotrophic: Nourished by mineral water. Refers to wetlands which receive nutrients from flowing or percolating mineral groundwater (NWWG 1988).

Mire: British term embracing all kinds of peatlands and peatland vegetation (modified from NWWG 1988).

Moderately acidic: Having a soil pH value between 4.5 and 5.5.

Moist: No soil water deficit occurs. Current need for water does not exceed supply, temporary groundwater table may be present (Pojar et al. 1987).

Montane: A high elevation region occurring below the subalpine

Mound: Mounds composed of mineral materials.

Muskeg: Algonquin term for peatland. Usually applied to areas with Sphagnum mosses, tussocky sedges and an open growth of scrubby trees (Modified from NWWG 1988).

Neutral pH: Having a soil pH value between 6.5 and 7.4. Available base cation concentration is high enough to buffer acidic conditions.

Occasional flooding: Flood interval greater than 5 years.

Oligotrophic: Relatively poor in nutrients.

Ombrotrophic: Nourished by rain. Peatlands entirely dependent on nutrients deposited by precipitation (NWWG 1988).

Overflow basin: Basin receives water from upland only; excess water flows through an outlet channel (Province of BC 1998).

Paludification: Succession or conversion of upland or mineral wetland habitats to peatland through accumulation of peat.

Palustrine hollow: Hollow receives ground water from upslope; excess water flows through channel or watertrack.

Palustrine: Basins, depression, slopes, and small water bodies with a continually high water table and poor drainage Wetland landscape units.

Patterned peatland: Peatlands marked by distinct patterns of vegetation in a rib/flark, net/flark, or hummock flark form. with elevated adjusted to the seepage of water that carries nutrients essential to growth of plants forming the patterns.

Peat: Partly decomposed plant material deposited under saturated soil conditions.

Peatland: A generic term including all types of peat-covered terrain. Many peatlands are a complex of swamps, bogs, and fens, sometimes called a "mire complex" (NWWG 1988).

Physiognomic: Referring to vegetation structure or strata.

Rarely flooded: Flooding occurs only during extreme events.

Riparian: Along the bank of a river or lake.

Saline: The presence of soluble salts in the soil parent material. Salts are commonly visible as crystals or veins, or surface crusts but sometimes are not evident morphologically. The presence of salt-tolerant plants is a good indicator of excessive salts in the soil.

Sandy: Textural classes are loamy sand and sand (Steen and Roberts 1988).

Saturated: A soil condition in which all voids (pore spaces) between soil particles are filled with water.

Sedimentary peat (coprogenous earth): Peat formed beneath a body of standing water composed of aquatic plant debris modified by aquatic animals. Material is loosely consolidated, slightly sticky, dark brown to black and usually well decomposed (humic). Synonyms: aquatic peat, loonshit, allochthonous peat, detrital peat, gyttja. (NWWG 1988).

Seepage: Groundwater discharge having less flow than a spring.

Shrub: Perennial plants usually with more than one low-branching woody stem and < 10 m tall.

Silty: Predominant textural classes are silt and silt loam (Steen and Roberts 1988).

Site association: A group of related ecosystems physically and biologically similar enough that they have or would have similar vegetation at climax (Meidinger and Pojar 1991).

Slightly acidic: Having a soil pH value of 5.5 to 6.5.

Stand: A plant community that is relatively uniform in composition, structure and habitat conditions.

Subassociation: Subunits of an association that are relatively similar to other subassociations within an association but distinguished by the predominance of one to several differentiating species

Subhydric: Soil moisture regime where water is removed slowly enough to keep water table at or near the surface for most of the year; permanent seepage 0 to 30 cm below surface.

Subhygric: Water removed slowly enough to keep soil wet for a significant part of the growing season; some temporary seepage and possibly mottling below 20 cm.

Submergents: Plants which normally lie entirely beneath water. Some species can have flowering parts which break water surface.

Succession: Replacement of one community by another; often progresses to a stable terminal community called the climax.

Treed: Having >10% canopy cover of tree species > 2 m tall.

Tussock: A thick tuft of sedge or other vegetation forming a small mound of solid ground in a wetland (NWWG 1988).

Uncommon: Occurs infrequently in the region (Steen and Roberts 1988).

Very acidic: Having a soil pH value less than 4.5. Low concentration of available base cations.

Very moist: Rooting-zone groundwater present during the growing season (water supply exceeds demand). Groundwater table > 30 cm deep (Pojar et al 1987).

Very wet: Groundwater table at or above the ground surface throughout most of the growing season

Water table: The upper surface of the zone of saturation within the soil profile.

Wet: Rooting-zone groundwater present during the growing season (water supply exceeds demand). Groundwater table > 0 cm but < 30 cm deep (Pojar et al 1987).

Wetland complex: Consists of two or more palustrine basins occurring in close proximity; often but not always hydrologically linked.

Wetland: Sites dominated by hydrophytic vegetation where soils are water-saturated for a sufficient length of time such that excess water and resulting low soil oxygen levels are principal determinants of vegetation and soil development.