

Module 4 ~ Viva la Difference!

Keyword Definitions



1. **algae** - n. a wide variety of tiny, often microscopic, plants (or plant-like organisms) that live both in water and on land.
2. **aquatic** – adj. Living or growing in, on, or near the water.
3. **attributes** – n. a property or characteristic.
4. **biological productivity** - n. the ability of a waterbody (or habitat) to support plants, fish and wildlife.
5. **bottom sediment** – n. inorganic or organic material that settles to the bottom of a body of water.
6. **classification system** - n. the systematic grouping of organisms into categories on the basis of evolutionary or structural relationships between them; taxonomy.
7. **ecosystem** - n. a community of living organisms (plants, animals, microorganisms, etc.) all of which interact among themselves and the environment where they live (on land, in the soil or in the water, etc.). They are often defined by the plants and animals living within the community (a marsh, a wetland or a coral reef, for example). Ecosystems do not always have distinct boundaries; they can be as small as a mud puddle or as large as a continent or even the earth itself.
8. **emersed plants** – n. are rooted in shallow water with much of the vegetative growth above the water. Example: cat-tails.
9. **(eu-) eutrophic** – adj. contains high concentrations of nutrients; the waterbody will either have lots of aquatic plants and clear water or it will have few aquatic plants and lots of algae (less clear water). Has the potential to support lots of fish and wildlife
10. **floating plants** – n. are not anchored in the sediment; they get their nutrients directly from the water. Example: duckweeds, bladderwort, coontail, water hyacinth.
11. **floating-leaved plants** - n. a plant that may or may not be anchored to the sediment, but has leaves that float on the surface of the water. Example: waterlilies, spatterdock, and the American lotus.
12. **food web** – n. a complex of interrelated food chains in an ecological community. Also called food cycle.
13. **human-induced** – v. caused or brought about by humans.
14. **(hyper-) hyper-eutrophic** – adj. contains very high concentrations of nutrients; supports large amounts of algae and/or plants, fish and wildlife; water is murky
15. **invasive plants** – n. a non-native plant species that is able to spread on its own, causing environmental or economic harm.
16. **land use changes** – changes in the human use of land; modifying or managing the natural environment into a built environment such as fields, pastures, and settlements.
17. **limnologist** – n. a scientist who studies the physical, chemical, meteorological, and biological conditions of inland waterbodies.
18. **macrophytes** – n. aquatic plants that are large enough to be apparent to the naked eye. They can be grouped into four basic categories. Some are rooted in the bottom sediments but protrude above the water's surface (emersed) while others float on the water's surface (floating and floating-leaved). Still others grow completely below the water's surface (submersed).
19. **(meso-) mesotrophic** – adj. contains moderate concentrations of nutrients and supports a moderate amount of algae and/or plants, fish and wildlife.
20. **microscopic** – adj. so small as to be visible only with a microscope, example: microscopic algae.

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21. **natural** – adj. existing in or caused by nature; not made or caused by humankind.
22. **non-native plants** – n. a plant species that is present in a region outside its original, historic range due to intentional or unintentional introduction; not necessarily invasive.
23. **nutrients** – n. chemicals that algae and aquatic plants (macrophytes) need for growth. Nitrogen and phosphorous are two of the most common nutrients found in Florida soils.
24. **(oligo-) oligotrophic** – adj. water that contains very low concentrations of nutrients. Biologically less productive; supporting small amounts of algae, few plants and fish. Water is clear.
25. **parameters** – n. measurable factors or features that can help in defining a particular system; limits or boundaries.
26. **periphytic algae** – n. tiny, often microscopic plants that live attached to underwater surfaces.
27. **planktonic algae** – n. tiny, often microscopic plants that float or drift in great numbers near or at the water's surface.
28. **Secchi disk** – n. a circular disk used to measure water transparency in oceans and lakes. The disc is mounted on a pole or line, and lowered slowly down in the water. The depth at which the pattern on the disk is no longer visible is taken as a measure of the transparency of the water (Secchi depth)
29. **storm water** – n. runoff from rain, irrigation and other urban and rural sources.
30. **submersed plants** – n. plants growing with their root, stems, and leaves completely under the surface of the water. Sometimes the leaves and/or flowers may grow above the surface. Example: eel grass.
31. **total chlorophyll (TC)** – n. the estimate of how many free floating algae are in a waterbody based on chlorophyll concentrations. Chlorophyll is the green coloring matter of leaves and plants.
32. **total phosphorous (TP)** – n. the total concentration of all forms of phosphorus found in the water sample. Phosphorus is a nutrient required by all plants, including algae.
33. **total nitrogen (TN)** – n. a measure of all forms of nitrogen (for example, nitrate, nitrite, ammonia-N, and organic forms) that are found in a water sample. Nitrogen is a nutrient necessary for the growth of all plants.
34. **transparency** – n. allowing light to pass through a material.
35. **trophic state** - n. category used to classify a lake or waterbody based on its biological productivity; usually determined using four water chemistry parameters: chlorophyll, total nitrogen, total phosphorus and water clarity.
36. **vegetation** – n. the plants of an area or region.
37. **water clarity** – n. a measure of how far you can see into the water; its visible depth; transparency.
38. **water color** – n. the measurement of the apparent or true color of a water sample; it can reveal physical, chemical and bacteriological conditions.
39. **zooplankton** – n. tiny, microscopic organisms consisting of small animals, mainly small crustaceans and fish larvae.