

Glossary

Adaptation

a physical, chemical, or behavioral change made by a species or an individual organism which improves its relationship to its environment

Assessment

the action of determining the amount or value of something

Atmospheric deposition

nonpoint source pollution that travels through the air and is deposited on land and water

Bag limit

the number of fish of a certain species from a certain body of water that an angler can keep on a single day

Barbels

slender, whisker-like taste receptors found on certain fish, such as catfish, bullheads, and sturgeon; used to find food

Benthic Zone

the bottom of a lake

Bioaccumulation

the build-up of substances, such as pesticides or other toxins, in an organism

Biomass

the total mass of live plants and animals in a given area

Chordate

animal that belongs to the phylum Chordata (has a notochord for at least part of its life cycle)

Conservation Congress

the citizen group that suggests regulation changes to the Natural Resources Board

Consumer

an organism that cannot produce its own food and must eat other organisms to survive

Degraded

lowered to a less desirable or less diverse level

Dichotomous key

a system of classification used to identify organisms by moving from broad differences to specific distinctions

Dissolved oxygen

molecules of oxygen mixed into water

Distal

located away from the central point or origin

Distribution

the range, or geographic locations, of an organism

Dorsal

located on the back of an animal

Dynamic

continually changing

Ecology

the study of the interrelationship between environments and organisms

Ecotone

a transition area between two different ecological communities

Ecosystem

closed communities of interdependent plants, animals, and non-living factors

Effluent

waste material released into the environment

Emergent

near-shore plants rooted in shallow water with most vegetative growth above water

Epilimnion

the top layer of lake water, often warmest in the summer and frozen in winter

Erosion

the process of soil and other natural materials being worn away

Eutrophic

characterized by having a high level of nutrients; often used to describe a lake or pond with low oxygen and thick plant growth

Eutrophication

the process of adding nutrients to a waterbody

Exotic species

species that live in environments where they are not native

Extirpate

a species that has disappeared from part of its native environment, but is not extinct

Fingerling

a young fish

Floating leaf

plants rooted in the lake bottom; their leaves and flowers float on the water surface

Fragmentation

the process of dividing landscapes or watersheds into parcels that are isolated

Fry

newly-hatched fish

Harvest

to gather, catch, hunt, or kill for human use, sport, or recreation

Hatchery

a place where eggs are hatched, either human-made or natural

Headwaters

the origin, or beginning, of a stream or river

Hypolimnion

The bottom layer of lake or pond water

Inferior

located nearer the lower extremity of a body

Invasive species

an exotic species that tends to spread, causing environmental or economic harm

Land cover

the visible features on a landscape

Land use

the cultural and economic activities that take place on a landscape

Lateral

located on or near the side of the body

Lateral line

a canal along the side of a fish containing pores with sensory organs that detect vibrations

Limiting factor

a factor in the environment that limits the growth, abundance, or distribution of organisms in an ecosystem

Limnetic zone

the open-water zone away from shore where light is abundant

Littoral zone

the shallow area of a lake or pond where plants are able to grow

Marsh

a wetland that is rich in plant life, especially grasses and cattails; excellent fish spawning habitat

Medial

located near the middle (mid-line) of the body

Mesotrophic

characterized by having a moderate amount of nutrients

Moratorium

the suspension of an activity for a period of time

Morphology

the shape or structure of an organism

Mouth

the end of a stream or river, where it empties into another waterbody

Native species

a species that lives in its natural environment

Natural Resources Board

a group of citizens selected by the governor which makes policy decisions for the Wisconsin DNR

Natural selection

the process that results in the survival and reproductive success of individuals or groups best adapted to their environment

Neurotoxin

a poison which affects the brain or nervous system

Niche

the specific role an organism or a population plays within an ecosystem

Nonpoint source pollution

contamination that comes from many sources across a landscape; often carried into waterbodies by runoff

Notochord

a flexible, primitive backbone that provides support in chordate embryos. As vertebrates (the highest class of chordates) develop, the notochord is replaced by spinal vertebrae.

Oligotrophic

characterized by having few nutrients

Persistent organic pollutant

a contaminant that does not break down easily or quickly in the environment

Physiology

the study of the functions of living organisms

Phytoplankton

microscopic floating plants

Poikilotherm

an organism that cannot regulate its own body temperature; the temperature of the organism matches that of the surrounding environment

Point source pollution

a particular, identifiable source of contamination

Primary producer

an organism which creates its own food through photosynthesis

Profundal

deep dark lake zone below the limnetic zone

Proximal

located near the center of the body

Public Trust Doctrine

a body of common law that protects navigable waters for the common good

Redd

the nest or spawning ground of a fish

Regulation

a rule dealing with details or procedures

Restore

to repair damage (in this case, to an ecosystem)

Rheotactic

orienting upstream

Rule of 10

a law of nature that says that approximately 10 percent of available energy passes from one trophic level to the next and the rest is lost as heat

Runoff

precipitation not absorbed by the soil; often carries nonpoint source pollution with it into a waterbody

Spawn

to produce and deposit eggs (generally refers to fish, amphibians, and mollusks)

Stakeholder

a person who has an interest in a decision, but is not responsible for making that decision; for example, a private landholder may be a stakeholder in a decision the county makes about the stream running through her property

Stewardship

the careful and responsible management of something

Stock

the act of putting quantities of fish in a lake, stream, or other waterbody for recreational or scientific purposes

Stratify

to become layered; lakes are stratified by temperature

Stressor

an action or agent that puts stress on an organism

Submerged

rooted plants that grow entirely underwater, although some leaves may float above water. They grow from near shore to the deepest part of the littoral zone.

Substrate

the layer of material, such as clay or gravel, found on the bottom of a waterbody

Superior

located higher on a body, nearer the upper extremity

Sustainable practices

the use and management of a resource that meets the needs of the present generation without compromising the ability of future generations to meet their own needs

Swim bladder

the swim bladder (also gas bladder or air bladder) is an internal gas-filled organ allows a fish to control its buoyancy and depth in the water.

Taxonomic groups

a group of closely related plants or animals

Terrestrial

land-based, not aquatic; as in a terrestrial organism or habitat

Thermocline

a layer of water in a lake in which the temperature change is most abrupt; found below the epilimnion

Thermoregulate

to maintain a constant body temperature; humans thermoregulate, fish do not

Tragedy of the Commons

unsustainable rates of use or abuse of a resource held in common

Tributary

a stream or river that flows into a larger stream or waterbody

Trophic level

feeding position in the food pyramid; primary producers are the lowest trophic level

Ventral

located opposite the back, on the front or belly

Vertebrates

animals with backbones

Watershed

a region or area that all drains to the same body of water

Wetland

an area that is a transition between an aquatic and a terrestrial environment; saturated for at least one period of time each year

Zoning

division of a city (or other region) into sections reserved for certain purposes (homes or businesses)