CHAPTER 8 VOCABULARY - Aquatic Biodiversity

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aquatic Pertaining to water. Compare terrestrial.

aquatic life zone

Marine and freshwater portions of the biosphere. Examples include freshwater life zones (such as lakes and streams) and ocean or marine life zones (such as estuaries, coastlines,

coral reefs, and the open ocean).

benthos Bottom-dwelling organisms. Compare decomposer, nekton, plankton.

coastal wetland Land along a coastline, extending inland from an estuary that is covered with salt water all or part of the year. Examples include marshes, bays, lagoons, tidal flats, and mangrove swamps.

Compare inland wetland.

coastal zone Warm, nutrient-rich, shallow part of the ocean that extends from the high-tide mark on land

to the edge of a shelflike extension of continental land masses known as the continental

shelf. Compare open sea.

coral reef Formation produced by massive colonies containing billions of tiny coral animals, called

> polyps, that secrete a stony substance (calcium carbonate) around themselves for protection. When the corals die, their empty outer skeletons form layers and cause the reef to grow. Coral reefs are found in the coastal zones of warm tropical and subtropical oceans.

cultural eutrophication

Overnourishment of aquatic ecosystems with plant nutrients (mostly nitrates and phosphates) because of human activities such as agriculture, urbanization, and discharges from industrial plants and sewage treatment plants. See *eutrophication*.

decomposer Organism that digests parts of dead organisms, and cast-off fragments and wastes of living

organisms by breaking down the complex organic molecules in those materials into simpler inorganic compounds and then absorbing the soluble nutrients. Producers return most of these chemicals to the soil and water for reuse. Decomposers consist of various bacteria and

fungi. Compare consumer, detritivore, producer.

drainage basin See watershed.

estuary Partially enclosed coastal area at the mouth of a river where its freshwater, carrying fertile silt

and runoff from the land, mixes with salty seawater.

euphotic zone Upper layer of a body of water through which sunlight can penetrate and support

photosynthesis.

eutrophic lake Lake with a large or excessive supply of plant nutrients, mostly nitrates and phosphates.

Compare mesotrophic lake, oligotrophic lake.

forest Biome with enough average annual precipitation to support the growth of tree species and

smaller forms of vegetation. Compare desert, grassland.

zones

freshwater life Aquatic systems where water with a dissolved salt concentration of less than 1% by volume accumulates on or flows through the surfaces of terrestrial biomes. Examples include standing (lentic) bodies of freshwater such as lakes, ponds, and inland wetlands and flowing

(lotic) systems such as streams and rivers. Compare biome.

hypereutrophic Result of excessive inputs of nutrients in a lake. See *cultural eutrophication*.

inland wetland Land away from the coast, such as a swamp, marsh, or bog, that is covered all or part of the

time with freshwater. Compare coastal wetland.

intertidal zone The area of shoreline between low and high tides.

lake Large natural body of standing freshwater formed when water from precipitation, land

> runoff, or groundwater flow fills a depression in the earth created by glaciation, earth movement, volcanic activity, or a giant meteorite. See eutrophic lake, mesotrophic lake,

oligotrophic lake.

mangrove swamps

Swamps found on the coastlines in warm tropical climates. They are dominated by mangrove trees, any of about 55 species of trees and shrubs that can live partly submerged in the salty

environment of coastal swamps.

marine life zone

See saltwater life zone.

mesotrophic lake

Lake with a moderate supply of plant nutrients. Compare eutrophic lake, oligotrophic lake.

nekton Strongly swimming organisms found in aquatic systems. Compare benthos, plankton.

oligotrophic lake

Lake with a low supply of plant nutrients. Compare eutrophic lake, mesotrophic lake.

Part of an ocean that lies beyond the continental shelf. Compare coastal zone. open sea

plankton Small plant organisms (phytoplankton) and animal organisms (zooplankton) that float in

aquatic ecosystems.

runoff Freshwater from precipitation and melting ice that flows on the earth's surface into nearby

streams, lakes, wetlands, and reservoirs. See reliable runoff, surface runoff, surface water.

Compare *groundwater*.

saltwater intrusion

Movement of saltwater or brackish (slightly salty) water into freshwater aquifers in coastal and inland areas as groundwater is withdrawn faster than it is recharged by precipitation.

saltwater life zones

Aquatic life zones associated with oceans: oceans and their accompanying bays, estuaries, coastal wetlands, shorelines, coral reefs, and mangrove forests.

stream Flowing body of surface water. Examples are creeks and rivers.

surface water Precipitation that does not infiltrate the ground or return to the atmosphere by evaporation

or transpiration. See runoff. Compare groundwater.

turbidity Cloudiness in a volume of water; a measure of water clarity in lakes, streams, and other

bodies of water.

watershed Land area that delivers water, sediment, and dissolved substances via small streams to a

major stream (river).

wetland Land that is covered all or part of the time with salt water or freshwater, excluding streams,

lakes, and the open ocean. See coastal wetland, inland wetland.

zooplankton Animal plankton; small floating herbivores that feed on plant plankton (phytoplankton).

Compare phytoplankton.