

Ocean Acidification glossary

Acclimate - To accustom or become accustomed to a new environment or situation.

Acid: A substance that increases the H⁺ concentration when added to an aqueous solution.

Algae: Any living thing found in an aquatic environment that obtains energy from sunlight through photosynthesis.

Algal Bloom: A rapid increase in an algae population in an aquatic system, leading to an accumulation of algae.

Anthropogenic: Caused by human activity.

Apex Predator: A species at the top of the food web

Aqueous Solution: A solution in which a substance is dissolved into water.

Aragonite - An orthorhombic (system of crystallization characterized by three unequal axes at right angles to each other) mineral form of crystalline calcium carbonate, dimorphous with calcite

Base: A substance that increases the OH⁻ concentration when added to an aqueous solution.

Biosphere – The living organisms and their environment

Calcite - A common crystalline form of natural calcium carbonate, CaCO₃, that is the basic constituent of limestone, marble, and chalk. Also called calcspar

Calcifying Organisms (Calcifiers): Marine organisms with skeletons made of calcium carbonate.

Coral: A living marine organism that forms colonies of polyps; provides habitat for many marine creatures.

Coral Bleaching: The process of corals expelling their **zooxanthellae** due to high temperatures or other environmental stressors; causes coral to appear white and eventually die.

Coral Reef: An underwater ridge consisting of coral, the algae, plants and animals that grows on it, and various minerals.

Decomposer: An organism that consumes dead or decaying matter.

Endangered: At high risk of becoming extinct.

Equilibrium: A stable situation in which two forces are in balance.

Harmful Algal Bloom (HAB): An algal bloom that has negative impacts.

Inorganic - Involving neither organic life nor the products of organic life

Ion: A charged particle.

Macroalgae: Large, multicellular marine plants.

Microalgae: Single-celled photosynthetic marine organisms that cannot be seen without a microscope.

Ocean acidification – The process by which carbon dioxide dissolves in seawater, giving rise to a decrease in pH and other changes in ocean carbonate chemistry

Organic - Of, relating to, or derived from living organisms

pH: A measure of how acidic or basic a substance is. ($\text{pH} = -\log[\text{H}^+]$)

pH Scale: A measure of the number of H^+ ions in a solution.

Photosynthesis - The process in green plants and certain other organisms by which carbohydrates are synthesized from carbon dioxide and water using light as an energy source. Most forms of photosynthesis release oxygen as a byproduct.

Phytoplankton: Photosynthetic, autotrophic (self-feeding) plankton (algae, protists, and cyanobacteria).

Plankton: Marine organisms whose movements are dictated mostly by the currents.

Polymorph – Chemistry: A specific crystalline form of a compound that can crystallize in different forms.

Polyps: The individual organisms that comprise coral colonies.

Reef: A line or ridge of coral, rocks, sand, or other structure that rises to or near the surface of the ocean.

Zooplankton: Animal-like plankton.

Zooxanthellae: A type of algae that grows within the cells of coral making up coral reefs; provides energy to coral through photosynthesis and is responsible for coral's color.