

NERR or Far:

The Reserves Are Where You Are

GLOSSARY



Advocacy - acts of an individual or organization with the aim to influence decisions within particular institutions.

Aerate- to supply air.

Anaerobic- having no free oxygen.

Aquaculture - the controlled “farming” of aquatic organisms.

Ballast water- water taken up and stored in tanks and cargo holds of ships to help balance the ship and make it more stable during voyages. They take up or empty this water out in ports based on the amount of cargo they are receiving or offloading at that stop.

Barometric pressure- the pressure within Earth’s atmosphere

Barrier island- a ridge of sand that sits parallel to a coast. A lagoon or bay separates the island from the mainland.

Bay- a coastal body of water that directly connects to a larger body of water, typically an ocean.

Beach renourishment- sand is moved from areas offshore to resupply eroded beach areas.

Biodiversity - the variety of life in a certain habitat or ecosystem.

Biological oxygen demand (BOD) - the amount of dissolved oxygen demanded by aerobic bacteria to break down organic material in the water.

Biosphere regions - special places that are set aside by national governments to preserve biodiversity, culture, and economic value. There is both a U.S. Biosphere Network and a UNESCO (United Nations Educational, Scientific and Cultural Organization) World Network of Biosphere Regions.

Birding- a hobby in which you observe birds in their natural habitat.

Black skimmers- medium-sized seabirds with long wings and a unique bill that is longer on the bottom half than the upper half.

Brackish - slightly salty.

Buffer zone- an area that lessens the impact of something.

Bulkhead- a vertical wall parallel to the shoreline often used in areas highly vulnerable to storm surge and powerful waves to hold soil in place. This is considered a coastal structure, not a living shoreline.

Calcareous - containing calcium carbonate.

Calusa - Native American people who lived on the coast of southwest Florida. The group is believed to have gone extinct around the end of the 18th century.

“Canary in the coal mine”- a phrase that refers to something that serves as an early warning of danger. It comes from the old practice of using a canary in the mines to tell if the air was safe for people to breathe. If it became sick or died, they knew the mine was unsafe.

Carbon dioxide (CO₂) - a transparent gas in Earth’s atmosphere. It absorbs infrared radiation, which means it acts as a greenhouse gas.

Carbon sink - anything natural or unnatural that collects and stores some carbon containing compounds for an indefinite period of time.

Catch and release- releasing a fish caught for recreation back into the water where it was captured.

Chlorophyll- plant pigment that absorbs light energy and helps with photosynthesis. It gives plant life a green color. Chlorophyll-a is the predominant type.

Citizen science - collecting and analyzing environmental data for a collaborative scientific project as a member of the general public.

Coastal decision-maker - anyone who has influence and makes decisions that can impact the future of estuarine and coastal communities.

Controlled burn - a management tool that helps prevent destructive wildfires by ridding the forest floor of flammable debris like dead leaves in a more controlled, monitored setting. These burns can also destroy invasive plant species, return nutrients to the soil through the ashes of vegetation, help certain cones germinate, clear space to give young trees more sunlight for growth and reduce insect populations.

Cornerstone - (figurative language) an important feature on which something depends upon. When building a structure of stone, the cornerstone is the first stone that is set, and all other stones are placed in reference to it.

Correlated- one thing depends on the other or affects it. Two things are connected in some way.

CTP - an acronym that stands for the coastal training program. The CTP works to promote scientific understanding amongst a variety of different decision-making audiences in coastal communities.

Cultural resources - Anything that serves as an indicator or reminder of past human activity and culture. Examples include anything from archaeological artifacts to buildings or structures, a particular landscape, or an object that has importance to a specific community for religious reasons, traditional reasons, etc.

CZMA - an acronym that stands for the Coastal Zone Management Act. It was passed by Congress in 1972 and was designed "to preserve, protect, develop, enhance and restore the nation's coastal resources". It created three new national programs, one of them being the NERRS.

Data sondes- computerized devices that take water quality readings.

Database- a structured dataset that a computer holds.

Detritivores- these organisms obtain nutrition by feeding on detritus.

Detritus- organic matter made up of dead plant and animal material.

Discrete- distinct or separate.

Disseminate - to spread widely.

Distribution- the way a population is spaced across a given area, typically driven by the availability of resources.

Doubling time- the time it takes for a population of organisms to double in size.

Ebb - movement away from land/ when a tide recedes.

eBird- a program that helps you identify bird species and log your bird sightings. This is a useful tool because it also gives scientists an understanding of how birds are using a variety of habitats and how that use may be changing over time.

eDNA- nuclear or mitochondrial DNA that an organism releases into the environment.

Estuarine - a word used to describe an environment where freshwater meets saltwater, most often an area where a river meets the sea (an estuary). When fresh water and sea water combine, the water becomes brackish, or slightly salty.

Estuary - an area where a freshwater river or stream meets the ocean.

Female courtship- this refers to a behavior carried out by males of a species in the hopes that it will result in mating and reproduction.

Fiddler crab- a type of crab that can be seen commonly in slightly salty or brackish intertidal mudflats in salt marshes, as well as various other types of brackish or saltwater wetlands. They're called fiddler crabs because the male crabs have one claw much larger than the other that they hold somewhat like a violin.

Fluoresce- emit light.

Forage- to search a wide area for food or other resources.

Gastropod - a mollusk in the class Gastropoda, a big class that is made up of slugs, snails and whelks.

Germinate- when seeds begin to grow and put out shoots after being dormant

Ghost forest- a forest of gray, decaying trees created as a result of saltwater intrusion from increased storms and sea level rise.

GIS - an acronym that stands for geographic information system. It is a system that helps you create, manage, analyze, and map a wide variety of data.

Gray shorelines- shorelines that are less natural, designed using “harder” techniques.

Great Florida Birding and Wildlife Trail - a 2000-mile-long trail that promotes birdwatching, environmental education and ecotourism.

Green shorelines- shorelines designed using more natural, “softer” techniques.

Gullah-Geechee - descendants of enslaved West African people who worked on coastal plantations from North Carolina to northern Florida. The Geechee people still maintain many unique West African traditions and elements of their language and culture.

Hammocks - groups of trees that form an ecological “island”. They typically grow in elevated areas and are surrounded by a contrasting environment like a wetland.

Harmful algal bloom- when toxin-producing algae grow out of control in a body of water. Commonly abbreviated HAB.

Hatchling- a newly hatched bird.

Hog Hammock - a historic community on Sapelo Island in Georgia that is believed to be one of the last intact island-based Geechee communities in America.

Hydrogen sulfide (H₂S) - a colorless gas with the odor of rotten eggs. Some bacteria use it to create energy through chemosynthesis, others like sulfate-reducing bacteria produce it.

Hydrophone- a type of microphone that detects sound waves underwater.

Hypoxia - a state where oxygen levels are low.

Impervious- not allowing fluids to move through it.

iNaturalist- a program where people can not only record and identify birds, but they can also record reptiles, amphibians, plants, bugs, all sorts of life

Incubation- warming eggs to an ideal temperature in order to hatch them.

Initiative - a new plan or action to solve a problem or achieve a desired result.

Intensive agriculture- a type of farming that involves putting in high levels of labor and supplies relative to land area.

Intern- to complete/ do work as a part of an internship. An internship is an opportunity to gain work experience as a student or trainee.

Intertidal zone - the space between the reach of high and low tide.

Invasive species - Any type of organism that is not native to a particular environment and can cause harm to this area. Their introduction can be accidental or purposeful, and unchecked they can outcompete native organisms for resources amongst other things.

Keystone species- any organism, whether it be an animal, bacteria or fungi, or a plant that serves as the glue holding the habitat together. If it were to disappear or be removed, the biodiversity and structure of that habitat could completely change.

Learned behavior- a behavior that an animal learns by watching another animal or by being directly taught (it is not innate/present at birth).

“Leave no trace”- this phrase means that whenever you're out in nature, all you should be leaving is your footprints! Take trash with you, put out fires that you start if you're camping, and don't take any natural objects that you find with you, snag a photo instead.

Living shorelines- a management technique used to connect the land and water to stabilize shorelines, reduce erosion, and provide valuable habitat that enhances coastal resilience. They utilize natural elements like plants, rocks and sand to stabilize estuarine environments, sometimes in combination with existing harder shoreline structures.

Maintenance- the process of preserving the state of something.

Mangroves- a hardy type of tropical tree or shrub with intricate root systems that live in the coastal intertidal zone. The group tolerates brackish to salty coastal waters.

Maritime forest- a type of shoreline estuary along coastal barrier islands. These forests are typically surrounded by a layer of dunes on one side and salt marsh on the other, but don't completely escape the impacts of ocean winds and salt spray.

Microbial load- living microorganisms that have contaminated an object.

Migratory species- species that move throughout the year from one habitat to another in order to meet food, temperature, or other needs.

Misconception - an incorrect or mistaken view or opinion.

National Audubon Society- a non-profit environmental organization in the U.S. focused on conserving bird species and their habitats.

NERRA - an acronym that stands for the National Estuarine Research Reserve Association. NERRA was created to advance the work and mission of the reserves and to raise the profile of the NERRS.

NERRS - an acronym that stands for National Estuarine Research Reserve System. It is a system of 30 coastal sites, spanning 1.4 million acres in 24 states and Puerto Rico, created to protect and study estuarine ecosystems.

NOAA - an acronym that stands for the National Oceanic and Atmospheric Administration. This U.S. government agency is responsible for monitoring our climate and environment and making sure that we are working to preserve them.

Oyster reef - an estuarine habitat where oysters cluster on hard submerged surfaces and then fuse together as they grow, forming hard, rock-like reefs that can provide habitat for other organisms.

Peat - a very thick, spongy material that is made of a decomposing plant matter that can be hypoxic.

Petrochemicals- chemicals from petroleum and natural gas.

pH- a measure of how acidic or basic a solution is.

Pollinators- organisms that help plant fertilization by moving pollen from one flower to another. Some examples are butterflies, moths, wasps, hummingbirds, bees, etc.

Productive - having high rates of biomass (biological material, living organisms) generation.

Proliferate- to increase rapidly.

Resilience- the ability to recover quickly or bounce back from disturbances like human impacts, extreme weather events, etc.

Salinity - a measure of the amount of saltiness.

Salt marshes - a type of coastal wetland that is flooded and drained by saltwater that comes from tides. The soil within salt marshes is made up of deep mud and peat, and the dominant marsh grass in the southeast is *Spartina*.

Saltwater intrusion - the movement / encroachment of saltwater into freshwater.

Scrapes- a type of bird nest for species that like open habitats without a lot of trees. It is a simple depression made by the bird in the ground where they can lay their eggs.

Seawall- a protective structure made typically of concrete that extends from the shore to prevent beach erosion.

Sexual dimorphism- a difference in appearance between males and females of the same species, whether it's color, shape, size, or a unique structure

Shell mounds- prehistoric mounds consisting mainly of edible shells that serve as evidence for human occupancy.

Shorebird- a bird that is found on beaches or inland mudflats. Some examples include American Oystercatchers, plovers, and sandpipers.

Sills- a hybrid type of living shoreline where a structure made of rock, concrete or oyster shell lies parallel against an existing vegetated shoreline. This technique reduces wave energy and prevents erosion in areas that don't commonly receive high wave energy.

Slough - a type of wetland with slow-moving or even stagnant water during certain seasons.

Spartina alterniflora- the scientific name for a dominant species of marsh grass in the southeast. Its common name is smooth cordgrass.

Speciose- rich in species.

Steward- someone entrusted with caring for and being responsible for something that doesn't necessarily belong to them.

Stewardship - careful and responsible management of something that has been entrusted in your care.

Storm surge- the unusual rise of sea level during a storm caused primarily by a storm's winds pushing water onshore.

Stormwater ponds- ponds that collect runoff in residential areas.

Strand feeding- a learned behavior in which dolphins herd and trap fish by forcing them up onto mud banks, shorelines, or sandbars. It's called "strand" feeding because of the way dolphins beach themselves momentarily, pushing prey ashore before sliding back into the water.

SWMP - an acronym for the System-Wide Monitoring Program. It is a national NERR program and network that helps us understand how water quality and weather conditions change over time, and how these changes impact the environment.

Tides - when the sea rises and falls due to the attraction of the sun and moon.

Trust - a document that allows you to transfer ownership of your assets (in this case, property) to another third party.

Vegetation-only shoreline- a type of green shoreline that would be useful in low wave energy environments to provide a buffer to upland areas. This type is considered a non-structural method and a type of living shoreline.

Vibrio vulnificus- a climate - sensitive bacteria that lives in marine environments that you can get from eating affected seafood, most commonly raw or undercooked oysters

Volatility- tendency to change rapidly and/or unpredictably.

Wrack- marine debris made up of coastal vegetation.

Yields- what is produced.

