

## **Terms on Cay Creek Signs in the order they appear on signs:**

Diversity, Ecosystems, Ecotone, Edge, Habitat, Maritime, Hammock, Brackish, Waterway, Tributary, Watershed, Elevation, LiDAR, Topography, Rice Culture, Impoundments, Groundwater, Omnivore, Carnivore, Granivore, Nectarivore, Scavenger, Plumage, Host plant, Nectar plant, Mutually beneficial, Co-evolution, Migrating, Oviposit, Canopy, Midstory, Understory, Forbs, Herbaceous, Pupae, Remnant, Upland, Bogs, Naval stores, Catfaces, Herty pots, Human-applied, Adapted, Fire-resistant, Outcompeting, Freshwater, Saltwater, Salinity, Communities, Estuaries, Tidally influenced, Salt tolerant, Tides, Semi-diurnal, Spring tide, Neap tide, Syzygy, Georgia Bight, Continental Shelf, Sustenance, Guale Indians, Exotic species, Commercial resource, Geography, Conservation, Recreation, Tourism, Sustenance, Guale Indians, Exotic species, Commercial resource, Geography, Conservation, Recreation, Tourism, Insect, Arachnid, Predators, Prey, Decomposers, Pollinators, Juvenile, Exoskeleton, Nymphs, Flowering plants, Stamens, Ovaries, Fertilizing, Kleptoparasitism, Cocoons, Emergent, Dikes, Crustacean, Moisture-loving, Detritus, Wetland depression, Tidal pulses, Seep, Buttresses, Cypress knees, Spores, Seeds, Fiddleheads, Fronds, Vegetation, Cavities, Storm events, Cold-blooded, Reptiles, Bask, Metabolism, Enzymes, Digest, Toxic, Transition, Exotic-invasive, Venomous, Poisonous, Nocturnal, Suite, Nesting, Mammals, Amphibians, Lichen, Bark, Camouflage, Ear-like tufts, Canals, Meander, Tannin, Organic matter, Languid, Plant tissue, Pests, Rot-resistant, Rodent, Chemical process, Hammock, Dynamic, Refuge, Middens, Calciophyte, Reflection, Wading bird, Breeding season, Aigrettes, Extinction, Rookeries, Focal point, Graminoids, Shelter

## **Definitions of Terms in Alphabetical Order:**

**Adapted:** the process of adjusting to new conditions; organisms are adapting to the environment all of the time, both in the short-term and over long-term periods.

**Aigrettes:** decorative feathers (plumage) on Great Egrets that appear during mating season.

**Amphibians:** animals, such as frogs and salamanders, which are characterized by being cold-blooded, laying eggs in water, having permeable skin, and their tendency to undergo metamorphosis.

**Arachnid:** the variety of arthropods (in the class Arachnida) that have four pairs of segmented legs and a body that is subdivided into two regions. Common examples are spiders, tarantulas, scorpions, and ticks.

**Bark:** the outer protective covering of a tree that consists of dead (outer) cells and living (inner) cells.

**Bask:** the method of lying in sunny or warm places that cold-blooded species use to raise their body temperatures.

**Bog:** a freshwater swamp.

**Brackish:** a mix of salt and fresh water.

**Breeding season:** the time(s) of year that a species typically gives birth to young.

**Butterfly Host plant:** a plant species or particular group of plants that adult butterflies must lay their eggs on. The caterpillar that hatches from the egg then feeds on this single host plant until it is time to complete metamorphosis (transform) into a chrysalis (cocoon). A common example of a butterfly-host plant pairing in this region is the orange Gulf Fritillary and the Purple Passionflower.

**Buttresses:** widened bases of trees that grow in swamps and helps them to be stable in the saturated substrate.

**Calciophytes:** plants that thrive on calcium rich soil and make it available in the soil for other plants by absorbing it into their roots.

**Camouflage:** a mode of survival by which animals match the color and/or patterns of their surroundings so that they may not be as easily detected by predators.

**Canals:** ditches dug to conduct water.

**Canopy:** refers to forest structure- the uppermost layer of a forest.

**Catfaces:** a scar that remains in a tree from the process of extracting sap; resembles a cat's face.

**Carnivore:** an organism that only eats meat/flesh. Carnivores are typically at the top of the food-chain. Examples include lions, tigers, and sharks.

**Cavities:** hollow places in trees that may form where a branch has rotted or split. Cavities provide homes and shelter for many wildlife species.

**Chemical process:** a reaction causing a chemical change, often indicated by color change, emission of a gas, or heat production.

**Co-evolution:** the evolutionary process by which two groups of organisms inhabiting the same environment adapt tendencies that are mutually beneficial to both groups involved in the relationship

**Cocoons:** a case, made for the pupal life stage for insects like moth caterpillars, in which they live while making the transformation into the adult stage.

**Cold-blooded:** Almost all reptiles, amphibians, insects, arachnids, and fish are cold-blooded, which means that their body temperature takes on the temperature of their surroundings.

Mammals (like humans), on the other hand, are warm-blooded, meaning that their bodies heat themselves to maintain a constant temperature.

**Commercial resource:** a natural resource harvested extensively for commercial, or economical, profit. For example, the Georgia White Shrimp is a commercial resource that supplies a large area with its shrimping harvests.

**Communities:** ecologically speaking, a community is an assemblage of two or more populations of different species the same geographical area.

**Conservation:** a growing concern and need in the modern world, conservation refers to the preservation, protection, or restoration of the natural environment, natural ecosystems, vegetation, and wildlife.

**Continental Shelf:** the area of seabed around a large landmass, such as the United States, where the sea is relatively shallow compared to the depths of the open ocean. It is very wide and shallow off the coast of Georgia.

**Crustacean:** a group of arthropods like shrimp, lobster, or crab that have exoskeletons and segmented legs.

**Cypress knees:** adaptations of cypress trees, similar to mangrove roots, that are thought to help the tree have access to more oxygen.

**Decomposers:** an organism, usually a bacteria or fungus, that breaks down living cells of other organisms. They play a vital role of returning nutrients to the soil in an ecosystem.

**Detritus:** partially decomposed bodies of dead organisms that has been broken up into tiny bits.

**Digest:** to break down food into a simpler form that can be used by the body.

**Dikes:** an artificial slope or levee built to control water flow.

**Diversity:** having variety; diverse ecosystems have many different plant and animal species; the greater the “biodiversity” in an ecosystem, the healthier it is.

**Dynamic:** changing

**Ear-like tufts:** the decorative feathers on some owls (Great Horned Owl and Screech Owl) that resemble ears but are actually for display only. Their actual ears are located on either side of their head.

**Ecosystems:** a biological community of interacting species and their physical environment

**Ecotone:** the transition area between two adjacent ecosystems; ecotones have very unique biological communities because they incorporate species from both ecosystems.

**Edge:** in an ecological setting, edge refers to the outer boundary of an ecosystem that are typically more susceptible to disturbance by outside forces.

**Elevation:** refers to the topographic level, or height, of something, usually an area of land.

**Emergent:** coming out of the water.

**Enzymes:** molecules of different chemical composition that assist the body in performing various functions.

**Estuaries:** where tide meets the stream; the tidal mouth of a river as it arrives at the sea.

**Exoskeleton:** the protective or supporting structure covering the outside of the body of many animals, such as blue crabs and other crustaceans. Insects also have an exoskeleton, and this is what they shed when molting.

**Exotic species:** a human-introduced species that is not native to the ecosystem it was introduced to.

**Extinction:** refers to a species that no longer has any living individuals.

**Fertilizing:** the process of reproduction in plants when a pollen grain is received by the ovaries.

**Fiddleheads:** young fern fronds that are tightly curled to resemble the end of a fiddle.

**Fire-resistant:** plants that are adapted to surviving fire events.

**Flowering plants:** Also known as angiosperms, flowering plants produce flowers with ovaries that, when pollinated, develop into a fruit or seed.

**Focal point:** a spot where two lines of vision converge for superb visibility.

**Forbs:** herbaceous flowering plants other than grasses.

**Freshwater:** of or relating to water that is not salty. Freshwater has a salinity measurement less than 0.5 ppt (parts "salinity" per thousand). Drinking water is "freshwater."

**Fronds:** the leaves of a fern.

**Geography:** the shape and arrangement of natural places and physical features of the earth.

**Georgia Bight:** the geographical curve ("bight") that occurs in the state of Georgia, causing tidal waves to accumulate at the center of the bit. This deep indentation gives the Georgian coastline great tidal fluctuations of or more than 3 meters.

**Graminoids:** a group of plants that includes grasses, sedges, and rushes.

**Granivore:** an organism that eats only seeds and grains. Many song bird species are granivores, such as finches and wrens. Granivores can also exhibit omnivorous behavior, eating insects and grubs, on occasion as well.

**Groundwater:** a vital part of the water system; water held underground in the pore space of soils and crevices of rock. We tap this water source to nourish populated areas.

**Guale Indians:** the American Indian chiefdom that existed along the Georgian Coast on the Sea Islands. Guale society was decimated during the 17th century due to extensive epidemics of disease brought by European settlers in the area. The remnant Guale populations banded together to form the Yamasee, an ethnically mixed group of American Indians.

**Habitat:** the natural home or environment of a particular organism.

**Hammock:** an elevated area that forms a unique habitat separate from surrounding environment.

**Herbaceous:** leafy, herby plants; the opposite of "woody" plants.

**Herty pots:** a pot that was used to collect sap from pine trees in the early 1900s.

**Human-applied:** a management system used by humans to maintain the health of an ecosystem

**Impoundments:** a structure that stops, decreases, or controls the flow of water; can be natural (beaver dams) or man-made (dams, levees, and dikes)

**Insect:** refers to arthropods (organisms in the arthropod phylum) that have six legs and usually one or two pairs of wings.

**Juvenile:** an animal in its young stage of development. In some species (like humans) the juvenile looks like a miniature version of the adult. In other species (those that undergo metamorphosis) the juvenile looks drastically different than the adult.

**Kleptoparasitism:** a relationship in which one organism benefits from another by stealing its resources.

**Languid:** moving slowly.

**Lichen:** a composite organism that consists of a fungus and a photosynthetic organism (such as algae) that lives on surfaces such as trees and rocks.

**LiDAR:** a detection system that works on the principle of radar, but uses light from a laser. LiDAR stands for Light Detection and Ranging.

**Mammals:** animals that are characterized by being warm-blooded, giving birth to live babies, producing milk, and having hair on their bodies.

**Maritime:** living or found by the sea.

**Meander:** to wind to and fro; to travel on a winding path.

**Metabolism:** the process of converting food to energy.

**Middens:** piles created by discarded shells

**Midstory:** refers to forest structure- the middle layer of forest trees or shrubs.

**Migrate:** to travel from one location to another. Many animals that migrate do so regularly and at the same time every year, such as birds who fly to warmer climates during the cold winter months.

**Moisture-loving:** plants that grow well in moist to wet soils and have roots that can tolerate low oxygen environments.

**Mutually beneficial:** this refers to an action, state, or relationship that is advantageous to both organism species participating in the act. Many plant-insect relationships are mutually beneficial. For example, butterflies and thistle have a mutually beneficial relationship because the thistle provides nectar food for the butterfly and the butterfly pollinates the thistle- every time a butterfly feeds on a certain plant, it gets pollen on its legs and then feeds on another plant. This process mixes up the pollen of many different thistle plants, aiding in plant reproduction.

**Naval stores:** articles or materials used in the shipping industry.

**Neap tide:** a lower than average tide that occurs during the 1st and 3rd quarter moon phases.

**Nectar plant:** a plant that serves as a nectar food source for a variety of nectaring organisms, from insects to birds.

**Nectarivore:** an organism that mostly feeds on nectar. A common example is a hummingbird. Nectarivores will also exhibit omnivorous behavior on occasion, eating small flying insects for extra protein.

**Nocturnal:** an animal that is active at night.

**Nymphs:** the juvenile stage of an insect that undergoes metamorphosis.

**Omnivore:** an organism that can eat and digest both meat/flesh and plant products, such as vegetables, fruits, and seeds/nuts. Humans, pigs, and dogs are some common examples of omnivores.

**Organic matter:** any living or dead matter that is produced by an animal or plant, i.e. feces, leaf litter, bones.

**Outcompeting:** when one organism is more successful than another organism that is competing for the same resources.

**Ovaries:** the female reproductive organs of a flower that develop into a seed or fruit when fertilized.

**Ovipost:** the term used to describe when a butterfly lays its eggs on its host plant.

**Pests:** insects that attack and/or kill a plant.

**Plant tissue:** living parts of a plant.

**Plumage:** describes the feathery covering of birds.

**Poisonous:** something that is toxic by contact or digestion.

**Pollinators:** an animal, like an insect, bat, or bird, which transports pollen from one flower to another.

**Predators:** an organism that hunts for its food.

**Prey:** an animal that is hunted by a predator.

**Pupae:** the life cycle stage in between immature larva and mature adult; usually an inactive stage. A common example is the chrysalis stage (cocoon) of a butterfly's life cycle.

**Recreation:** activities that humans do for enjoyment.

**Reflection:** an image created by light bouncing off of the water's surface.

**Refuge:** a place of safety

**Remnant:** refers to ecosystem fragmentation- the remains of a patch of habitat after the area is disrupted by man-made disturbance.

**Reptiles:** Reptiles include turtles, alligators, snakes, and lizards. They have lungs and scales and lay leathery eggs on dry land.

**Rice Culture:** the cultivation of rice by planting on dry land, transferring the seedlings to a flooded field, and draining the field before harvesting

**Rodent:** a mammal, such as a beaver, rat, mouse, or squirrel, which has a pair of teeth (called incisors) that grow continuously, causing the animal to constantly gnaw wood.

**Rookeries:** nesting sites for birds (like herons and egrets) that nest together.

**Rot-resistant:** wood that is dense or has chemicals in its structure that make it less susceptible to decomposition.

**Salinity:** of or relating to the salt content of a liquid.

**Salt-tolerant:** animal and plant species that are able to survive in environments characterized by the presence of salt. An example would be salt cordgrass that thrives in brackish marsh environments.

**Saltwater:** of or relating to water that has a high salt content or water from the sea. Ocean water has an average salinity measurement of 35 ppt.

**Scavenger:** mostly carnivorous, scavengers eat the scraps leftover from other animals' feeding. Common scavenger examples are vultures who feed on the carcasses of animals that have died either naturally or by another predator. Some scavengers are mostly carnivorous while others, like raccoons and rats, are more omnivorous, feeding on all sorts of garbage scraps. Scavengers are an important part of the food chain as they aid in the turnover of dead material, or decomposition.

**Seeds:** the mode of reproduction for gymnosperms and angiosperms, containing the genetic information needed to make a new plant if put in the right conditions.

**Seep:** a spot where groundwater drains from the earth, forming the source for a stream, spring, or swamp.

**Semi-diurnal:** refers to the tides in Coastal Georgia that occur twice a day.

**Shelter:** a home or place of refuge from weather and predators that every animal needs to survive.

**Spores:** the mode of reproduction for ferns, different from a seed in that it is not made through sexual reproduction. The spore grows into a fern that is a clone of its parent.

**Spring tide:** the tide following a full or new moon.



**Stamens:** the male pollen bearing reproductive organs of a flower. They often consist of filaments (long stems) with anthers at the ends which hold the pollen.

**Storm events:** any instance of extreme weather that produces heavy rains or winds, such as a hurricane.

**Suite of plants:** a group of plants that is closely taxonomically related; a group of plants that grows in the same habitat.

**Sustenance:** refers to food and drink that provides nourishment.

**Syzygy:** astronomically speaking, the nearly straight-line configuration of three celestial bodies (the sun, moon, and earth)

**Tannin:** a compound produced by woody shrubs and trees that aid in protection against pests by giving the plant tissue a bitter taste.

**Tidal pulses:** surges in the water level of creeks that occur as a result of increased pressure during a rising tide.

**Tidally-influenced:** an ecosystem that is effected by the presence of tidal action on a regular basis.

**Tides:** the alternate rising and falling of the sea, typically twice a day, due to the attraction of the moon's gravitational pull.

**Topography:** the contour of the land and changes in elevation. May be depicted on a map to show features like mountains, hills, and rivers.

**Tourism:** the commercial organization and operation of vacations and visits to places of interest.

**Toxic:** something that is poisonous or harmful upon exposure, digestion, or injection.

**Transition:** a gradual change over a given area.

**Tributary:** a smaller river or stream that flows into a larger river or stream.

**Understory:** refers to forest structure- the lowest layer of trees, usually consisting of small trees and shrubs no taller than 4 ft.

**Upland:** an area of high land.

**Vegetation:** the green leafy part of a plant; all plants growing in an ecosystem.

**Venomous:** something that is toxic by injection, i.e. a snake.

**Wading bird:** a bird that stalks its prey by standing in shallow waters and spearing it from above.

**Watershed:** an area or region drained by a river, river system, or other body of water. Georgia has 14 major watersheds.

**Waterway:** a river, canal, or other water route, typically referring to travel by water.

**Wetland depression:** poorly drained low areas that collect water from precipitation or that seeps through the ground.