

Follow the Water

The Journey from Mesic to Hydric

In the Native Demonstration Garden, water winds its way downhill through a system of vegetated swales and rain gardens. Constructing a wetland system can be an attractive way to control the volume and improve the quality of stormwater runoff from developed areas. Follow the water's path from mesic upland habitat to hydric lowland habitat, and observe how the plants transition from upland to lowland species to reflect the movement from drier soil to wetter soil.

Mesic: Upland soils that are somewhat moist year-round. The moisture level varies depending on rainfall, and water filters through the soil slowly.

Hydric: Lowland soils in which soil drains very slowly, so the water table is at or above the soil surface all year. Plants are usually or often flooded.

Mesic

Hydric



Upland Buffer:

American Holly
Sparkleberry
Longleaf Pine
Live Oak
Chinquapin
Blueflag Iris

Forested Wetland:

Yaupon Holly
Sweetbay Magnolia
Fetterbush Lyonia
Swamp Dogwood
Royal Fern

Shrub Wetland:

Sweetshrub
Elderberry
Swamp Azalea
Dahoon Holly
Possumhaw

Wet Meadow:

Buttonbush
Coastal Leucothoe
Switchgrass
Swamp Flatsedge
Swamp Rosemallow

Shallow Marsh:

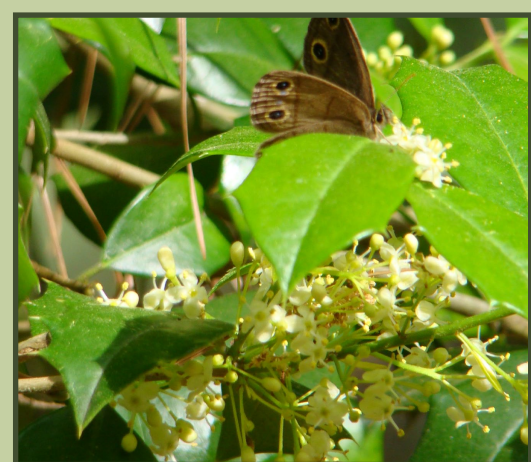
Lizard's Tail
Cardinal Flower
Sweetscent
Giant Foxtail
Pickerelweed
Seashore Mallow

Deep Marsh:

Common Rush
Rice Cutgrass
Waterlily
Big Cordgrass

You are here, at an ecotone

Ecotones are transitional areas between habitats where different communities meet and integrate. Ecotones are typically more diverse than the habitats on either side.



American Holly



Chinquapin



Fetterbush Lyonia



Swamp Azalea

What is that rock?



Ebony Spleenwort growing on hardpan

Hardpan:

A dense layer of soil below the topsoil layer, anywhere from 6 to 25 inches below ground. Hardpan can result from human practices, such as compaction from plowing or heavy traffic, or can be created by natural processes like glacial action or heavy rain. It is mostly impervious to water and restricts root growth, therefore strongly disliked by farmers and gardeners. Over time, the soft rock melts and morphs in response to environmental factors like water. Used in a landscaped space, hardpan becomes host to bryophytes such as mosses and liverworts, and the designed element becomes a living sculpture in the landscape.



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