

Audubon Newhall Preserve



The Audubon Newhall Preserve was established in 1965 as the Island Wildlife Preserve, when Caroline “Beany” Newhall, recognized the need to conserve woodlands on this rapidly developing island. She persuaded Charles Fraser of the Sea Pines Company to deed 50 acres of land for a nature preserve. Over the years, Beany devoted endless hours to saving plants from the paths of developers and transplanting them into this protected environment. In 1976, she deeded the Preserve to Hilton Head Audubon, together with an endowment fund, to ensure its ongoing maintenance. In 1993, the pond was restored, and this recreated an integral focal point for the Preserve. Thanks to the foresight and generosity of its founder, Beany Newhall, this woodland will forever remain a sanctuary for all to enjoy.

In 2016, Hurricane Matthew severely damaged the Preserve. In the aftermath, an army of volunteers, the local Rotary, Sea Pines CSA, and the SC State Forestry Commission, all pitched in to restore the Preserve. More than 300 downed trees were removed from the perimeter firebreak and nearly 400 trees were planted to restore the forest. Trail signage was restored and replaced. Memorial benches were donated or replaced. Milled asphalt has been donated by Sea Pines CSA to improve the parking lot and widen the roadway from Palmetto Bay Road. Most recently, pollinator gardens have been prepared at the back of Audubon Pond. In short, the Audubon Newhall Preserve has “bounced back” better than ever!

Welcome to Audubon Newhall Preserve

We hope that you will find this sanctuary to be a source of enjoyment, inspiration and education. By pointing out some of the special ecosystems that exist in this preserve, as well as some of the features you will see along the trails, this booklet can serve as your nature guide.

If you are just getting acquainted with the preserve, we suggest that you walk along the Newhall Trail from the parking area to the plaque honoring the Preserve's founder, take a look at the wetland area (or pocosin) to your right, and then walk counter-clockwise around the pond. All of the trees and plants that are referred to have been labeled by Hilton Head Audubon volunteers. Please be aware there are alligators near the ponds and you are cautioned to maintain a safe distance. Be sure to stay on the marked trails at all times. Because of our deep concern about the danger of fire,

SMOKING IS NOT PERMITTED ANYWHERE
IN THE PRESERVE.

Pine/Saw Palmetto Flatwoods Area 1

The Newhall Trail from the parking lot to the pond takes you through a woodland community known as pine/saw palmetto flatwoods. Beaufort and Jasper counties are the northern-most limit of this rare South Carolina plant community. A number of ridges and shallow depressions, the remains of ancient sand dunes, ripple the ground here that allows four species of pine to co-exist. Long-leaf pine is found on the ridges; slash and pond pine in the depressions. Below their open, needled canopy is a sparse sub-canopy of oak and horse sugar. Saw palmetto dominates the shrub layers, and wax myrtle, fetterbush, inkberry and blueberry flourish in the filtered sun and poorly drained low areas. Common herbaceous plants are button snakeroot, blazing star, golden aster, deer-tongue, beard-tongue, goldenrod, false-indigo and St. Peter's wort.

Historically, most of Hilton Head Island once resembled this scene. Flatwoods, however, used to be more open, Savannah-like communities and were maintained by periodic fire. Many flatwoods species require open areas and may decline or disappear if trees become too dense. Where fires are suppressed, as in the case where the preserve is surrounded by development, there is a dominance of shrubs and, unfortunately, a gradual disappearing of the flowering herbaceous plants.

As you walk along the trail, watch for the following plants and trees that are specifically characteristic of pine/saw palmetto flatwoods.

Saw Palmetto (*Serenoa repens*) This plant dominates

the shrub layer, forming thickets in the sandy soil beneath the pines. The leafstalks supporting the fan-like fronts are armed with sharp, recurved spines, which resemble the teeth of a saw. Native Americans used the seeds as a sedative to improve digestion, or to treat respiratory infections. They collected the terminal



Saw palmetto

The cream-colored flowers, appearing in June, produce a delicious honey, and the blue fruits are relished by birds, raccoons and squirrels. The spiny stalks protect small mammals, reptiles and birds. The saw palmetto is a shrub that grows to about 6' high and should not be confused with the state tree of South Carolina, the cabbage palm (*Sabal palmetto*).

Fetterbush (*Lyonia lucida*) Early explorers and hunters had such difficulty penetrating the tangled shrub growth that lines the trail and spreads throughout the Preserve. They named this plant species fetterbush.



Fetterbush

A broad-leaved evergreen member of the heath family, the fetterbush can be recognized by its leathery, toothless leaves. In April and May, its branches are festooned with lovely white-to-pink urn-shaped blossoms. The plant grows 6-10' high and prefers shade and moist soil. A dense stand of fetterbush, that you can see on the trail to the pond, indicates that a wetland is nearby.

growth bud at the base of the stalk to eat as a vegetable — the gourmet's delectable heart of palm. Today saw palmetto is widely used as an alternative medicine in the treatment of enlarged prostate glands.

Bracken Fern (*Pteridium aquilinum*) Forming knee-deep thickets of summer greenery is the abundant bracken fern, identified by the triangular leaflets on its ridges, branching stalk. Bracken fern makes its home in poor soil environments, such as burnt woods, sandy ridges and old fields (hence its nickname “pasture brake”). The plant thrives in acidic pine needles and in drier ground than that occupied by the other ferns that are found in the wetlands of the preserve. In winter, the dead, straw-colored fronds help to restore



Bracken fern

nitrogen humus to the forest floor. In the spring, deer graze on the tender leaflets. Native Americans and early settlers enjoyed eating the fresh, unfurling fronds called fiddleheads. The cinnamon fern, named for the fertile leaf that emerges from the

center of the plant, can be found along the trail.

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The Wetlands: Pocosin, Pond, Pine Flatwoods Areas 2, 3, 4

Wetlands provide spawning and nursery areas for aquatic insects and fish and a specialized habitat for plant and animal wildlife. They purify water and store floodwaters. More than half of the nation’s original wetlands have been destroyed, and only 30 million acres remain of the once vast swampland forests of the southeast. The destruction of this natural resource has led to irreparably damaged water quality and fisheries and to declining populations of migratory birds and other wildlife. The Audubon Newhall Preserve contains three distinct kinds of wetlands in close proximity to each other, each with its own individual plants and characteristics, thus providing an excellent opportunity for the study of differing wetland ecosystems. As you examine these areas,



Maidencane

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remember that the ecologists who specialize in wetlands identification take into account the varieties of plant life, type of soil and water table to determine the presence of a wetland.

The Pocosin (*Area 2*) To the right of the main trail as it approaches the pond lies the Pocosin. This is a small wetland that, prior to modern commercial development, was a characteristic feature of southern barrier islands. Pocosin is a Native American word for bog. Thousands of years ago, such damp depressions were formed as low troughs found between sand dunes. During rainy months, the bogs collect rainwater and the standing water provides breeding grounds for aquatic insects and frogs, while intruding upland grasses and shrubs are flooded out. During dry periods, water levels fall,



Sphagnum moss

percolating into the organic soils, and all animal life becomes concentrated in the shrinking wet spaces. On the floor of the Pocosin can be found maiden cane, sawgrass and mats of golden-green sphagnum moss, a ground plant that stores 20 times its own weight in moisture and is the main source of peat

moss. The trees that colonize the center of the bog are persimmon. Their fruits are enjoyed by birds, raccoons and humans. Virginia chain fern (identified by its purple stem) and broom sedge populate the moist edges.

The Pond (*Area 3*) In order to create a habitat for a richer, more diverse plant and wildlife population, a



Virginia chainfern

depression in the center of the Preserve was excavated in 1965 to create a pond. In 1993, the pond had become choked with invasive grasses, but was renovated into the open water you see today. It was excavated to a depth of 14’ to prevent the overgrowth of aquatic vegetation and the sand bottom and banks were lined with 12” of organic soil to minimize drainage during periods of drought. Five

shelves were constructed around the edge and planted with a variety of native aquatic plants, which support life at the bottom of the food chain and provide cover for wildlife. An aeration system was added to provide oxygen and improve water circulation. Relying entirely on nature, new life has come to the pond. As various insects lay their eggs on the surface, dragonflies and frogs come to feast on the larvae. Birds have brought fish eggs on their feet, stocking the pond with bream and the tiny mosquito fish. Yellow-bellied slider turtles sun on the banks or cool off in the water.

More than 50 species of plants have been identified in and around the edges of the pond. As you try to spot them, watch for the zig-zag trails of swimming whirligig beetles, water boatmen and dragonflies that patrol the airways above. If you study the earth around the pond, you may discover tracks left by raccoons and deer, perhaps even a bobcat, all of whom visit the pond to drink, hunt or forage at night.



Yellow-bellied Slider Turtle



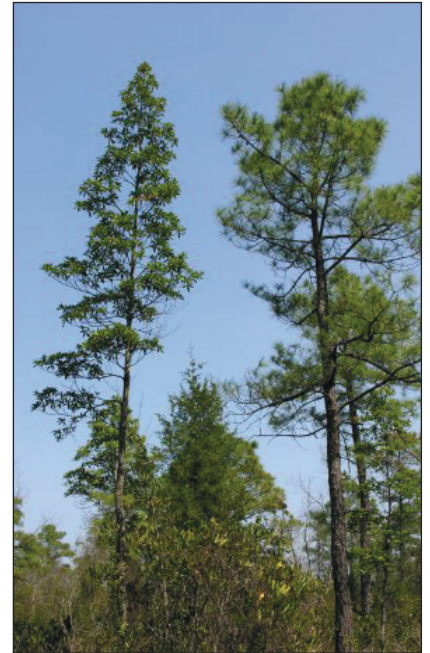
Whirligig Beetle



The Pine Flatwoods

Area 4

The third type of wetland in the preserve is located south of the trail that rings the pond. It differs greatly from the wetter Pocosin and pond in that pine trees are its dominating feature. Water often covers the ground in this low-level basin during the rainy months and is never very far beneath the surface. The presence of Virginia chain fern and of pond pines again lets us know that this is a wet area.



Pond pine

Notice that the saw palmetto, so prevalent in the pine/saw palmetto flatwoods is not present here — another sign that this is a wetland. Some 8,000 years ago, this broad oblong depression was probably located between two sand dunes. Its open forest floor, covered with pine needles and surrounded by the delicate tracery of ferns and columns of pine trees rising to form a green canopy overhead, makes this pine flatwoods one of the loveliest places in the Preserve.

The Pond Trail

Area 5

On the trail around the pond, you will find a magnificent stand of native hardwood trees, some planted by the preserve's founder, some already in existence, but all indigenous to the area. Look for the impressive southern magnolia and a variety of hollies: yaupon, American, Savannah, and a little farther along the trail, dahoon holly. Don't miss the state endangered rusty lyonia crowded up against the magnolia. Also in this area are the southern red cedar and a red maple (particularly beautiful in early spring).



Rusty lyonia

At the end of the pond is the delicately branched bald cypress, which sheds its

needles and looks deceptively dead in winter. Still farther along the trail, you will come to a water oak decorated with mistletoe on its branches. Sweet gum trees, such as the lovely, large one with its star-shaped leaves and prickly, round seed capsules, were often used by American Indians who would clean their teeth by chewing on its green twigs. Several sassafras trees, remarkable for having leaves in three shapes on the same tree, and the sweet gum tree tower over a bed of deer-tongue, a plant once used to add a vanilla flavor to smoking tobacco.



Dahoon holly

Toward the end of the trail around the pond, look for the Cherokee rose, whose creamy springtime blossoms covers the fence, and climbing trees are a lovely sight. Although a native of China, this rose was first identified botanically in the U.S. and has become naturalized throughout the southeast.



Deer-tongue

These hardwoods, including the live oak near the bald cypress at the end of the pond, are excellent examples of some of the trees that, in the absence of fire, will eventually take over the Pine Flatwoods that now make up much of the Preserve.

The Three Other Trails

Areas 6, 7, 8

Take time to explore the three additional trails that have been cleared in the Preserve: South Woods, North Woods and Branch-Wood Trails. Here you will discover fine stands of fern including the stately royal fern, cinnamon fern, Virginia chain fern and the smaller netted chain fern, several varieties of mosses and a few different wildflowers. In the spring, the North Woods Trail glows from the yellow flowers of the horse sugar

trees and the Branch-Wood Trail is resplendent with pink and white fetterbush.

We hope that your appreciation of these trails will be enhanced by what you have learned about this Lowcountry ecosystem and that you will discover the peace and tranquility that can be found by taking a quiet walk in the preserve. We have no doubt that you will share the feeling expressed on the plaque that was dedicated in 1994 to Beany Newhall:

She walked softly, but the imprint she left upon the Island will benefit all for generations to come. We are eternally grateful for her endowment of this Preserve.

Gulf Fritillary



Palamedes Swallow-tail Butterfly

Visit our website for membership information, trips and our conservation efforts.
www.hiltonheadaudubon.org

Tax-deductible contributions to support the maintenance of the Audubon Newhall Preserve are greatly appreciated. You may donate online at:

www.hiltonheadaudubon.org

or send in a check to:

Hilton Head Audubon, P.O. Box 6185,
 Hilton Head Island, SC 29938

Contributions may be left in the money post located at the entrance of the Newhall Trail near the parking lot.

Listed below are some of the birds that can be found at the preserve.

Birds of Audubon Newhall Preserve

Waterfowl

- Black-bellied Whistling-Duck
- Wood Duck
- Hooded Merganser

Grebes

- Pied-billed Grebe

Pigeons and Doves

- Mourning Dove

Cuckoos

- Yellow-billed Cuckoo

Nightjars

- Chuck-will's-widow

Swifts

- Chimney Swift

Hummingbirds

- Ruby-throated Hummingbird

Storks

- Wood Stork

Cormorants and Anhingas

- Anhinga
- Double-crested Cormorant

Hérons and Ibises

- Great Blue Heron
- Great Egret
- Snowy Egret
- Little Blue Heron
- Tricolored Heron
- Green Heron
- Black-crowned Night-Heron
- Yellow-crowned Night-Heron
- White Ibis

Vultures and Hawks

- Black Vulture
- Turkey Vulture
- Osprey
- Red-shouldered Hawk
- Red-tailed Hawk

Owls

- Great Horned Owl
- Barred Owl

Kingfishers

- Belted Kingfisher

Woodpeckers

- Yellow-bellied Sapsucker
- Red-headed Woodpecker
- Red-bellied Woodpecker
- Downy Woodpecker
- Pileated Woodpecker
- Northern Flicker

Falcons and Caracaras

- American Kestrel
- Merlin

Flycatchers, Pewees and Kingbirds

- Eastern Wood-Pewee
- Acadian Flycatcher
- Eastern Phoebe
- Great Crested Flycatcher
- Eastern Kingbird

Vireos

- White-eyed Vireo
- Blue-headed Vireo
- Red-eyed Vireo

Jays, Magpies, Crow and Ravens

- Blue Jay
- American Crow
- Fish Crow

Tits, Chickadees and Titmice

- Carolina Chickadee
- Tufted Titmouse

Martins and Swallows

- Tree Swallow
- Barn Swallow

Kinglets

- Golden-crowned Kinglet
- Ruby-crowned Kinglet

Nuthatches

- White-breasted Nuthatch
- Brown-headed Nuthatch

Gnatcatchers

- Blue-gray Gnatcatcher

Wrens

- House Wren
- Carolina Wren

Catbirds, Mockingbirds and Thrashers

- Gray Catbird
- Brown Thrasher
- Northern Mockingbird

Thrushes

- Eastern Bluebird
- Veery
- Hermit Thrush
- Wood Thrush
- American Robin

Waxwings

- Cedar Waxwing

Finches and Euphonias

- House Finch
- American Goldfinch New World

Sparrows

- Chipping Sparrow
- White-throated Sparrow
- Song Sparrow
- Eastern Towhee

Blackbirds

- Baltimore Oriole
- Red-winged Blackbird
- Common Grackle

Wood-Warblers

- Ovenbird
- Worm-eating Warbler
- Black-and-white Warbler
- Prothonotary Warbler
- Orange-crowned Warbler
- Common Yellowthroat
- American Redstart
- Northern Parula
- Blackpoll Warbler
- Black-throated Blue Warbler
- Palm Warbler
- Pine Warbler
- Yellow-rumped Warbler
- Yellow-throated Warbler
- Prairie Warbler
- Black-throated Green Warbler

Cardinals and Grosbeaks

- Summer Tanager
- Northern Cardinal
- Blue Grosbeak
- Indigo Bunting
- Painted Bunting



Painted Bunting by Carol Tunnicliffe

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