



University of Florida Conservation Area Land Management Plan
Lake Alice South Wetland

Introduction

Lake Alice South Wetland is a 10.6-acre Conservation Area adjacent to IFAS Facilities and Laboratories, south of Mowry Road on the southwest quadrant of campus. This Conservation Area is primarily a forested wetland surrounded by a small upland buffer of mowed pasture.

This area was recommended for preservation in the Stormwater Management Master Plan (1987), due to its hydrological sensitivity and its proximity to Lake Alice. The 2000-2010 Campus Master Plan identified this area as Wetland Preservation Area 8. Future alternative uses of the Conservation Area are limited by the amount of wetlands.

Natural Areas Inventory

Water Resources

According to watershed analysis work completed by Causseaux and Ellington, Lake Alice South Wetland Conservation Area is in the Lake Alice Watershed. This area receives stormwater from the surrounding IFAS pastures and from Archer Road. Water leaving the Conservation Area exits via an intermittent drainage stream that drains into the marshes at the southern end of the Lake Alice Conservation Area, which is located immediately north across Mowry Road. The road between these two Conservation Areas floods when Lake Alice is above flood stage. Future stormwater improvements may be necessary on site, with one option being to replace the culvert under Mowry Road, which appears to be undersized. Any stormwater improvements should be coordinated with the Department of Transportation, which is responsible for some of the water entering the conservation area.



Lake Alice South - Slough

Natural Communities

Lake Alice South Wetland is comprised of two primary natural community types. The center of the Conservation Area is composed of a shrub wetland that appears to transition from a shrub to forested. During drought years hardwoods encroach into the interior. Moving up slope, a small area of bottomland forest rings the shrub wetland areas. Bottomland areas then transition into an upland forest comprised primarily of a mesic / upland-mixed hardwood forest. At present, an inventory on mammals, herps, and birds has not been completed for this area.

Plant Species

Dominant trees characteristic of this bottomland hardwood hammock include *Acer negundo* (Boxelder), *Acer rubrum* (Red Maple), *Celtis laevigata* (Hackberry) and *Liquidambar styraciflua* (Sweetgum). Also present are *Carpinus caroliniana* (American hornbeam), *Itea virginica* (Virginia Willow), *Prunus caroliniana* (Carolina Laurelcherry), *Sabal Palmetto* (Cabbage Palm), *Magnolia virginiana* (Sweetbay), and *Ulmus alata* (Winged Elm). The understory contains small saplings of the canopy species along with *Ardisia crenata* (Scratchthroat), *Colocasia esculenta* (Wild Taro), *Hydrocotyle umbellata* (Manyflower Marshpennywort) *Ludwigia peruviana* (Peruvian Primrosewillow), *Myrica cerifera* (Wax Myrtle), *Ranunculus* sp. (Buttercup), *Rubus argutus* (Sawtooth Blackberry), *Saururus cernuus* (Lizard's Tail), *Smilax* (Greenbriar) species, *Thelypteris* sp. (Shieldfern), *Toxicodendron radicans* (Poison Ivy) and *Woodwardia areolata* (Netted Chain Fern)

Invasive Non-Native Plant Species

While there are a variety of non-native species in this forest, none dominates the vegetation where it is found. The following species I have been identified on site: *Ardisia crenata* (Scratchthroat), *Begonia cucullata* (Wax Begonia), *Colocasia esculenta* (Wild Taro), *Eriobotrya japonica* (Loquat, occasional), *Ligustrum lucidum* (Glossy privet), *Ligustrum sinense* (Chinese privet), *Lonicera japonica* (Japanese honeysuckle), *Macfadyena unguis-cati* (Catclaw Vine) and *Urena lobata* (Caesarweed) are common. *Lantana camara* (Lantana) and *Broussonetia papyrifera* (Paper Mulberry) are present in drier locations (upland, at the edge of the forest).

Animal Species

The following animal species have been documented on site: American Crow, American Goldfinch, American Robin, Bald Eagle, Baltimore Oriole, Black and White Warbler, Belted Kingfisher, Blue-Gray gnatcatcher, Brown-headed cowbird, Blue-headed Vireo, Blue Jay, Brown Thrasher, Boat-tailed Grackle, Carolina Chickadee, Carolina Wren, Downy Woodpecker, Eastern Bluebird, Eastern Phoebe, Eastern Tufted Titmouse, Great Crested Flycatcher, Gray Catbird, Hermit Thrush, House Finch, House Wren, Killdeer, Mourning Dove, Northern Cardinal, Northern Flicker, Northern Mockingbird, Northern Parula, Osprey, Palm Warbler, Pine Warbler, Pileated Woodpecker, Red-bellied Woodpecker, Ruby-crowned Kinglet, Red Headed Woodpecker, Red-Sanhill Crane, Shouldered Hawk, Red-winged Blackbird, Sharp-shinned Hawk, Yellow-bellied Sapsucker, Yellow-rumped Warbler, Anolis carolinensis, Brown anole, Gray Squirrel, Black rat (1), Raccoon, and Feral Cat.



Lake Alice South – Sandhill Cranes

Soils Inventory

The following soil information for on-site soils was gathered from the Soil Survey of Alachua County (1985).

Blichton Sand (5-8% slope)

This sloping poorly drained soil is on the rolling uplands. The areas are irregular in shape and elongated and range from about 5 to 45 acres. Typically, the surface layer is dark gray sand about 5 inches thick. It is about 2 percent nodules of ironstone and fragments of phosphatic limestone. The subsurface layer is sand to a depth of 31 inches.

Bivans Sand (2-5% slope)

This gently sloping, poorly drained soil is on relatively broad flats and at the base of the rolling uplands. The areas are irregular in shape and range from about 10 to 55 acres. Typically the surface layer is dark gray sand about 6 inches thick. The subsurface layer is gray sand 9 inches thick. This Bivans soil has a perched water table that is in the surface and subsurface layers and the upper part of soil for 1 to 4 months during most years.

Kanapaha Sand (0-5% slope)

This soil consists of nearly level to sloping, poorly drained soils that formed in thick beds of sandy and loamy marine deposits. The water table is at a depth of less than 10 inches for 1 to 3 months and at a depth of 10 to 40 inches for 3 to 4 months during most years. Natural fertility is low to medium. Organic matter content of the surface layer ranges from moderately low to moderate. The natural vegetation is chiefly slash and loblolly pine, water, live and laurel oak, sweetgum and holly. The understory is mostly waxmyrtle, low paspalum, pineland threeawn, longleaf uniola, hairy panicum, fringeleaf paspalum, huckleberry and some bluestems.

Surrency Sand

This nearly level, very poorly drained soil is in ponds and depression areas in the broad flatwoods and in areas of wet prairie on uplands. Typically, the surface layer is black sand about 15 inches thick. The

subsurface layer is light gray sand to a depth of 28 inches. This Surrency soil has a water table that is within 10 inches of the surface for about 6 months or more during most years.

Cultural and Passive Recreational Resources

Lake Alice South Wetland does not have any public access or associated amenities and with its lack of upland areas, except for active pastures, and distance from the main campus, probably does warrant these types of efforts in the future.

Southern portions of this site overlap with the potential archeological sites map. Although no known sites have been identified, future improvements to the site will take into account the location of known areas and follow guidelines by the Department of Historical Resources before sighting.

Future Improvements

Most of this Conservation Area should be considered as a Nature Preserve, with little public use improvements. However the eastern upland boundaries are better suited under the Nature Park designation, due to the future expectations of building expansion east of the site. Due to this increased development adjacent to the site, the upland portion offers an opportunity for human interaction on the edge of the forested wetland. Amenities and changes in this Nature Park portion of the site could include a greenway trail and an ecologically sensitive stormwater pond in and adjacent to the Conservation Area. More imminent improvements that are recommend include removing two small dilapidated storage sheds (building 0955 and 0956) that are within the 100-year floodplain and the Conservation Area. Additionally, the working group recommended that the elimination of some internal fencing would be appropriate once the pastures on the eastern site of the Conservation Area are abandoned.

Maps on the following pages:

1. Aerial Photo
2. Water Resources
3. Natural Communities
4. Soils