



University of Florida Conservation Area Land Management Plan
Green Pond and Newins-Ziegler Sink

Introduction

Green Pond and Newins-Ziegler Sink Conservation Areas make up an approximately 1.9-acre natural area located just north of Museum Road and on both sides of Center Drive. Green Pond is also known as the Reitz Union Pond because of its adjacency to the Reitz Union, while Newins-Ziegler Sink is named after the forestry building located immediately adjacent. These areas are defined by the sinkholes present on both sites and by the small hardwood forests that buffer both Newins-Ziegler Sink and the creek that flows out of Green Pond. The primary use of these Conservation Areas has been by the Botany and Forestry Departments for plant identification, due to their close proximity to the departments. Additionally, the sites are used as pedestrian short cuts. The 2000-2010 Campus Master Plan identified these areas as Preservation Areas 16 (Green Pond) and 17 (Newins-Ziegler).

Natural Area Inventory

Water Resources

Green Pond and Newins-Ziegler Sink Conservation Areas are both integrated into the campus stormwater systems. Green Pond is a sinkhole that functions as a permanent pool / wet detention area for stormwater collected from around the Reitz Union and McCarty Hall. Water from the pond above a certain elevation discharges into a channelized creek that flows into another depression in the pond's adjacent woods and ultimately ends up in Lake Alice.

Newins-Ziegler Sink conveys stormwater under center drive, into Green Pond's discharge stream. However this sink does not have a permanent pool, but the base is persistently wet from both stormwater routed into it and from surficial aquifer seepage.

These conservation areas are in the Lake Alice watershed, where stormwater is an issue of concern. Since these conservation areas are upstream of Lake Alice, there may be some merit in considering future modifications to enhance storage capabilities in all three sink areas (the third being the depression in the wooded area just south of Green Pond).



Green Pond Creek

Newins-Ziegler Sink

Natural Communities

The forested patches associated with these conservation areas are somewhat difficult to lump into a general ecological community in that they grade from an upland mesic-mixed hardwood forest to a

bottomland hardwood forest over a very small area. However, generally these areas would be described as a mesic-mixed hardwood forest. Mesic forests are characterized as well-developed, closed-canopy forests of upland hardwoods on rolling hills. These forests often have limestone or phosphatic rock near the surface and occasionally as outcrops. Soils are generally sandy-clays or clayey sands with substantial organic and often calcareous components. In larger, less strenuous conditions, mesic forests typically support significant wildlife and plant diversity, which result from the nutrient rich nature of hardwood forests and flowering and fruiting plants.

Plant Species

The canopy in these areas is comprised of pignut hickory, swamp chestnut oak, winged elm, sweet gum, loblolly pine, laurel oak, cabbage palm, slash pine and maple.

Invasive Non-Native Plant Species

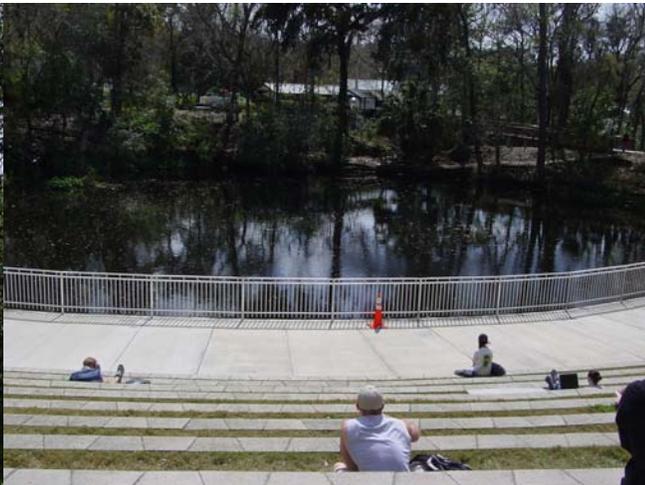
Current management of the site will need to address the control of cats-claw vine and glossy privet from the forested portions of Green Pond.

Animal Species

Green Pond and Newins-Ziegler Sink are relatively small in size, which limits the amount of habitat for terrestrial species. Animals typically found in mesic hardwood systems, but which have not been documented on the property, include: slimy salamander, Cope's gray treefrog, bronze frog, box turtle, eastern glass lizard, green anole, broadhead skink, ground skink, red-bellied snake, gray rat snake, rough green snake, coral snake, woodcock, barred owl, pileated woodpecker, shrews, eastern mole, wood rat, cotton mouse, and gray fox.



Newins-Ziegler sink



Green Pond

Soils

In general, mesic upland mixed / hardwood forests occur on rolling hills that often have limestone or phosphatic rock near the surface and occasionally as outcrops. Soils are generally sandy-clays or clayey sands with substantial organic and often calcareous components. The topography and clayey soils increase surface water runoff, although this is counterbalanced by the moisture retention properties of clays and by the often thick layer of leaf mulch which helps conserve soil moisture and create decidedly mesic conditions (FNAI).

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

Millhopper Urban Land Complex (0-5% slope)

This nearly level to gently sloping, moderately well drained soil is in small and large irregularly shaped areas on uplands and slightly rolling knolls in the broad flatwoods. Typically, the surface layer is dark grayish brown sand about 9 inches thick. The subsurface layer is sand or fine sand about 49 inches thick.

Cultural and Recreational Resources

The Reitz Union student center lies just north of Green Pond and was recently re-landscaped into an amphitheater overlooking the water. An elevated boardwalk was placed through the wooded area just south of the pond. These amenities offer ample opportunities for visitors to enjoy the pond and Conservation Area. The Newins-Ziegler sink area is small and consists of the sink area and a 25 foot buffer, with no amenities provided. There are no known archeological or historic sites within these conservation areas.

Future Improvements

As stated previously, these Conservation Areas are important teaching areas to both the Botany and Forestry Departments, due to their close proximity to the departments. Therefore, future land management should focus on enhancing the diversity of plants within both areas and controlling invasive non-native plants. Additionally, recommended buffer enhancements around Newins-Ziegler Sink include less mowing, new tree planting and some erosion control measures.

Actions Since 2005

Since 2005 the primary activities taken have been the placement of conservation signs for each area and placement of a veteran memorial in Green Pond by Student Government. Once funding is identified, the next project that should be taken within these areas is the treatment of invasive exotic vegetation.

Maps on the following pages:

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