University of Florida Conservation Area Land Management Plan

Reitz Ravine Woods

Introduction

Reitz Ravine Woods Conservation Area is approximately 2.9 acres in size and is buffered by 2.4 acres of Urban Park land use to the west. These woods lie southwest of the Reitz Union, south of the Mechanical Engineering Building and just north of Museum Road. A mixed hardwood forest that grades down to a narrow stream valley, flowing southwesterly, is the feature that characterizes this area. The steep slopes of the ravine limit development potential of these woods as a future building site. The 2000- 2010 Campus Master Plan identified this conservation area as Preservation Area 15.

Natural Areas Inventory

Water Resources

Reitz Ravines Woods contains a permanent stream that run southwesterly towards Hume Pond and ultimately into Lake Alice. The banks of the creek are deeply incised by years of down-cutting from run-off of impervious surfaces and stormwater that drains directly into the ravine and creates much of it base flow. Like most other creek systems on campus, the Ravine's creek is a mix of both stormwater runoff and natural surfical aquifer seepage.

This creek shows some evidence of side bank erosion as evidenced elsewhere on campus. As with most of the watersheds on campus, the solution to these problems will be primarily found in picking up stormwater before it enters the stream with small retention / detention basins throughout campus in both existing green space and in future building sites. Specific to this site, measures should be taken to treat water before it leaves adjacent parking lots with retention / detention put in place of current hardscaped swales. Additionally, some riprap or alternative stabilization counter-measure may be needed in order to reduce in-stream erosion.

Unnamed creek

Natural Communities

Reitz Ravines Woods is comprised of a mix of upland mesic / upland-mixed hardwood forest that grades into a bottomland hardwood along the creek that runs through the property. Due to the

topographic grades, and limited porosity of underlying clays, within this conservation area, some seepage likely occurs coming from neighboring upland areas. Thus, some small areas may be better described as seepage slope rather than as bottomland forest.

Plant Species
The upland hardwood canopy in this area is comprised of pignut hickory, winged elm, sweet gum, loblolly pine, laurel oak, chestnut oak, water oak, cabbage palm, slash pine and maple. The lowland stream valley wetland areas of the Woods include red maple, sweetgum, loblolly pine, cabbage palm, southern magnolia, swamp tupelo, dahoon holly, wax myrtle, swamp dogwood, Florida elm, stiffcornel dogwood, and American hornbeam. A ravine runs through the center of area and a population of witch-hazel, (Hamamelis virginia L.) is present under the canopy. Witch-hazel is not listed as an endangered or threatened species, but is considered by botanists to be rare and unusual

Invasive – Non-Native Plant Species
University staff have documented the following list of non-native invasive plants on site that should be managed once a funding source is identified: Air-potato vine, Cat-claw vine, American evergreen, small-leaf spiderwort, Glossy privet, loquat, and English ivy.

Animal Species
This area is relatively small in size, which limits the amount of habitat for terrestrial species. Only common mammals like raccoons, gray squirrels and armadillos have been documented on site. Other animals typically found in these hardwood dominated 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, gray fox, red-tailed hawk, turkey, yellow-billed cuckoo, screech-owl, great-horned owl, ruby-throated hummingbird, acadian flycatcher, pileated woodpecker, hermit thrush, cedar waxwing, yellow-throated warbler, opossum, gray squirrel, flying squirrel and white-tailed deer. An inventory on mammals, herps, and birds is not planned for the Conservation Area.

Bridge over Ravine's Creek

Soils Inventory
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).

Blichton Urban Land Complex (0-5% slope)
This gently sloping, poorly drained soil is on gently rolling uplands. Slopes are slightly convex. The areas are mostly irregular in shape and elongated and range from 10 to 40 acres. Typically, the surface layer is dark brown sand about 6 inches thick.

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
Reitz Ravine Woods is primarily used as a short cut for people heading to and from the Commuter Parking Lot adjacent to North-South Drive and Hume Hall. Pedestrian and bike access is available via small spur trails from Museum Road and the Reitz Union. Amenities in the form of benches and picnic tables are present within the site. There are no known archeological or cultural sites within the boundaries of this conservation area.

Future Improvements

While small portions of Reitz Ravine Woods have physical restrictions where access should be limited, the majority of this Conservation Area should be considered a Nature Park where public use and open access is emphasized. Future improvements to the area should include the closing of some paved footpaths that transverse too close to the steep banks of the creek (possibly fencing off). Additionally, habitat enhancements like wildlife friendly plantings and nesting structures for birds and bats should be considered, along with markers for the identification of specimen trees. Since this Conservation Area is in the vicinity of many academic departments and contains a diverse community structure, there would appear to be opportunities to improve its use as an outdoor teaching area. Finally, as discussed previously, there may be the need to address some upstream erosion issues near the Reitz Union with riprap or an alternative stabilization counter-measure.

Actions Since 2005

Since 2005 the primary actives taken have been the placement of a conservation sign, some efforts at controlling invasive exotic vegetation and the rebuilding of the stormwater outfall infrastructure on the north end of ravine. In 2007, a contractor was hired to rebuild all of the stormwater outfall pipes on the northwest corner of the ravine. This project required the removal of some large trees and many shrubs. Restoration of the area, once reconstruction was concluded, involved the planting of numerous native trees, shrubs and groundcovers. Once additional funding is identified, the next project that should be taken within this area is the re-treatment of invasive exotic vegetation and the planting of more native vegetation.

Maps on the following pages:

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