

29TH RD. NATURE PARK INVASIVE VINE CONTROL PROJECT

WORKING GROUP:

Withlacoochee Region Invasive Plant Working Group

CONTACT INFORMATION:

Geoffrey Parks
City of Gainesville
Nature Operations Division
Station 24, P. O. Box 490
Gainesville, Florida 32602
Phone (352) 393-8437
Cell (352) 316-4992
Fax (352) 334-3299
Email parksg@ci.gainesville.fl.us

METHOD OF CONTROL:

Contractual—Strike Team.

PROJECT GOALS:

The goal of this project is to control populations of Air Potato found within 29th Road Nature Park, managed by the City of Gainesville.

PROJECT ACREAGE:

Total area to be treated under this project is 4 acres.

PROJECT PRIORITY

This is a priority 1 project, because it is a retreatment of a category-1 vine.

SCOPE OF WORK

PROJECT LOCATION:

29th Road Nature Park is located at 1502 NW 29th Rd. in Section 30, Township 9 South, Range 20 East in Gainesville, Alachua County, Florida (Figure 1). The park, accessible from NW 29th Rd. and from NW 13th Street (US 441) is 10 acres in size. This property is zoned conservation and is managed by the City of Gainesville's Department of Parks, Recreation, and Cultural Affairs' (PRCA) Nature Operations Division (NOD), with the goals of protecting and restoring the natural communities, protecting creek floodplains, and providing natural-resource-based recreation.

PROJECT DESCRIPTION:

The project site is predominantly upland hardwood forest and bottomland forest, dominated by swamp chestnut oak, Florida elm, sugarberry, and live oak, pignut hickory, and sweetgum, with a diversity of other canopy, midstory, and groundcover species. There are also a few areas of floodplain forest, in which swamp tupelo and bluestem palm are common. The park is bisected by Hogtown Creek, which flows from north to south through the park.

The property was acquired by the City of Gainesville with a grant from the Florida Communities Trust during the early 1990s. Since that time, invasive plants on the property have been treated several times by City staff, most recently in 2010. In addition to treatments onsite, City staff also received approval from the owner of a vacant parcel to the north to treat air potato on that property, and that area was treated in 2007.

This area is part of the Hogtown Creek Greenway, a network of conservation properties along Hogtown Creek encompassing over 1200 acres of public conservation land, managed by the City of Gainesville, Alachua County, and the University of Florida. 29th Road Nature Park was until recently the most upstream property in the Greenway.

Of the 10 acre park, approximately 4 acres in two general areas are infested with Air Potato (Figure 2). Because of limited regrowth time since the most recent treatments, the vine density is not known. However, in general, densities are expected to be in the 1-20% range where populations persist.

WORK SPECIFICATIONS:

The contractor will furnish all labor, equipment, and supplies (including herbicides and adjuvants), and perform all operations for controlling target species within the entire project area shown in Figure 2, according to the specifications below:

- Air potato plants are to be treated with a foliar spray of 2% roundup pro or equivalent.
- Any target plants over or adjacent to standing or flowing water will be treated with a foliar treatment with a glyphosate product labeled for aquatic use.
- Contractor will foliar treat any other category 1 vines (including but not limited to Japanese honeysuckle or Japanese climbing fern) found on the project site.

- All herbicide applications are to be done with low-pressure, hand-held or backpack equipment.
- Treated plants will be left onsite.
- Contractor shall make all reasonable efforts to avoid overspray or drift that would damage native species onsite.

OTHER REQUIREMENTS AND PROVISIONS:

Because the park is separated by the creek, there are two access points that will be used to reach the infested areas of the park. Access to the infested area on the east side of the creek is from NW 14th St, reached from NW 31st avenue off of NW 13th St. (US 441). The air potato on the west side of the creek is reached from NW 29th Rd., off of US 441. Parking for both areas will be alongside the road.

Water is not available onsite.

City staff will identify and mark areas where listed plant species are known to occur, and will treat and/or remove invasive plants in these areas prior to contractor treatments.

PROJECT TIME FRAME:

Treatment should be done between August and October 2011.

FUNDING INFORMATION:

Budget forms, including estimated contractor costs and in-kind and matching funds, are attached.

PROPOSAL INFORMATION

CONSERVATION LAND QUALIFICATION: 29th Road Nature Park is zoned conservation and listed in FNAI's database of conservation lands. The mission of the Nature Operations Division (NOD), the division of the City of Gainesville's Department of Parks, Recreation, and Cultural Affairs (PRCA) which manages the park, is "to manage, protect, and restore where feasible, native natural communities and diversity in all nature parks and City owned environmentally sensitive lands and to provide opportunities for passive recreation where compatible with above listed goals." The City's Comprehensive Plan calls for the conservation of environmentally significant natural communities, protection of listed plant and animal species, and the removal of invasive exotic species. The property is part of the Hogtown Creek Greenway, an FCT-funded project with a management plan that specifically calls for protecting the property's natural resources, including controlling invasive species.

ABILITY TO MAINTAIN SITE AFTER INITIAL TREATMENT:

The city of Gainesville's Nature Operations Division has 3 staff members trained and active in invasive plant management, and conducts herbicide treatment on natural areas throughout the City. Funding for these treatments comes from the Nature Operations

Division's operating budget. In addition, the Nature Operations Division actively recruits and coordinates volunteers for invasive plant removal projects, including a specific focus on air potato. As part of the city's Great Air Potato Roundup, volunteers have removed air potato bulbils from this project site annually, and the city will continue to send volunteers to this site in future years as long as air potato persists.

RESTORATION PLAN FOR NATIVE PLANTS:

Although the property is heavily impacted by invasive plants, there is still a diverse assemblage of native species. Natural regeneration of canopy, midstory, and groundcover species will occur on its own from onsite seed sources. However, the city will monitor the site post-treatment and if augmentation of native vegetation is needed, a plan for enhancement planting will be made. Previously-treated areas within the project site and in similar sites elsewhere have revegetated on their own without need for additional plantings.

LISTED SPECIES OR NATURAL COMMUNITIES

Angularfruit milkvine (*Gonolobus suberosus*; Threatened-DOACS) and southern lady fern (*Athyrium filix-femina*; threatened-DOACS) occurs on the property, and can be found within and adjacent to areas infested by Air Potato. Also, hardwood forest of the quality found at 29th Road, although not specifically listed or tracked, is relatively uncommon in Florida.

PUBLIC EDUCATION PROGRAM

Each year since 2000, the City of Gainesville has coordinated the Great Air Potato Roundup, which is a volunteer/educational event designed to raise awareness of Air Potato and other invasive plants. The 12th Annual Great Air Potato Roundup was held in January of 2011 and had the participation of over 1000 volunteers. In the twelve years that the event has been held, as many as 10,000 people have participated in the event and learned about the impacts of invasive plants on our natural areas. Each volunteer in the Roundup receives an overview of invasive plants of local concern and why invasive plants are a threat to natural areas. Volunteers then devote two hours to removing Air Potato and other invasives from various sites throughout the community. This park is one of the approximately 25 air potato roundup sites used annually. Thus, in addition to overall community education regarding invasive plants, the Air Potato roundup directly benefits this park. Further broadening the educational reach of this program beyond the approximately 1000 participants each year, the radio and newspaper coverage that the event generates allows the message to reach many citizens who are unable to participate.

PRCA also has a fully-staffed environmental programming section, consisting of 3 full time and 4 part-time staff responsible for developing and implementing environmental programs and special events for all ages. Several of these programs include non-native invasive species as a specific focus.

In addition to programs and special events, the City makes information about invasive plants available to park visitors via a number of other sources. Brochures relating to

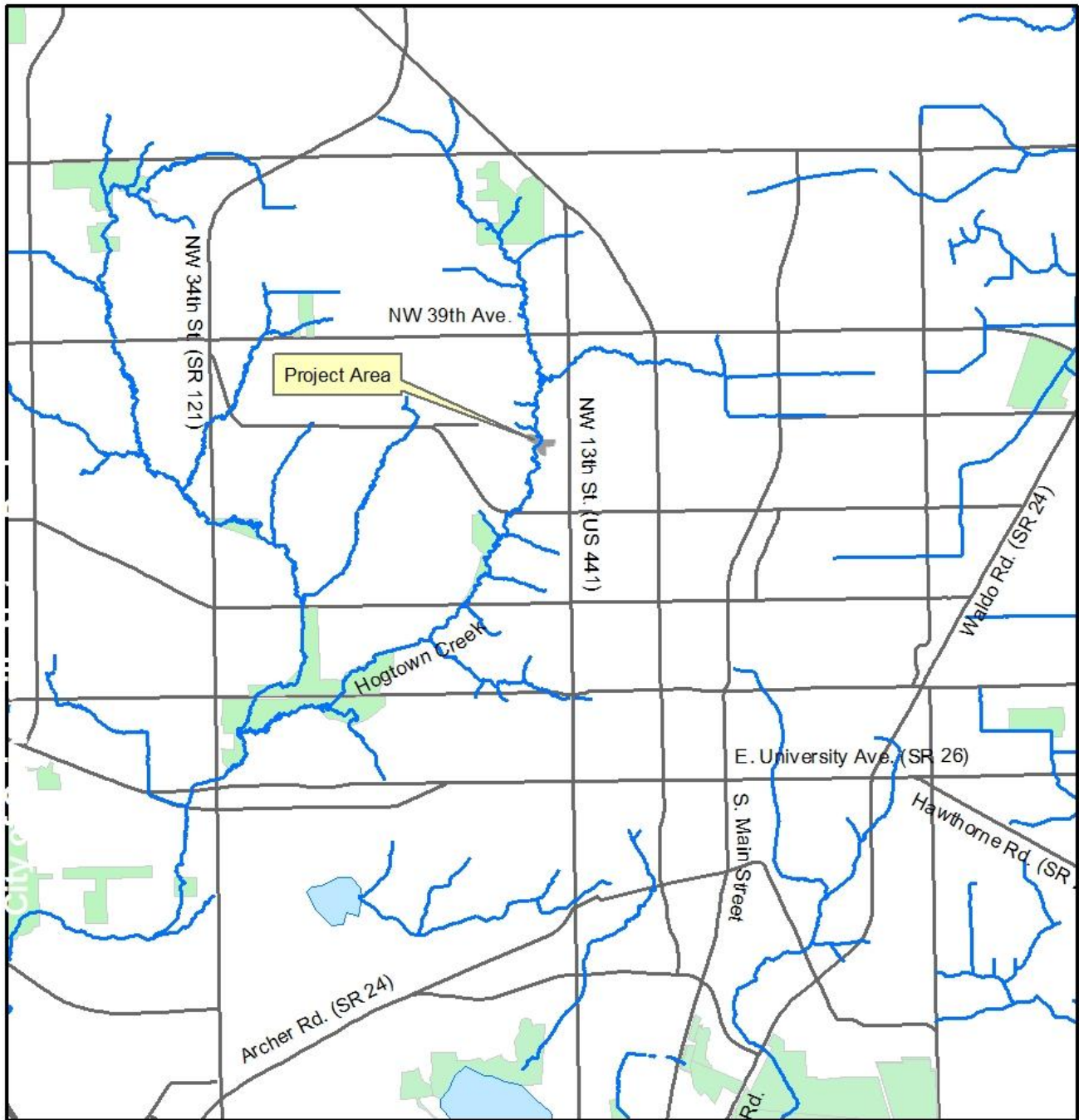
invasive plants are made available at brochure racks throughout the park system. Interpretive signs that focus specifically on invasive plants are installed in two of the city's nature parks. Through these and other efforts the City of Gainesville has been highly successful at raising public awareness of invasive plants.

REGIONAL CRITERIA ISSUES

1. The City of Gainesville will provide in-kind services that directly contribute to this project. In-kind services include staff time following up on treatments of air potato on the property. Additional in-kind contributions include volunteer hours devoted to removing invasive plants from the project site during the 13th Annual Great Air Potato Roundup; a portion of the staff hours devoted to planning, coordinating, and promoting the roundup; and staff time and herbicides used to remove invasive plants around listed species on the project site. NOD is responsible for managing 23 nature parks in an urban setting that is heavily infested by a broad array of invasive plants, and virtually every acre managed by the city is infested or threatened by non-native species. The in-kind services listed here represent the maximum amount our small staff can realistically devote to this property without abandoning efforts in other properties, many of which are also former BIPM/IPMS project sites. Note also that the City is required to submit multiple grant applications to treat nearby natural areas that if treated together would be comparable in cost, distance between treatment sites, and size to many projects submitted by other agencies. Because of the requirement that projects in each of our managed areas be submitted as separate applications, our in-kind contributions must therefore be split up accordingly.
2. Air potato is a FLEPPC category 1 vine, widely recognized as one of the most problematic invaders of Florida's natural areas.
3. This project will benefit *Gonolobus suberosus* (Threatened—DOACS), which is found throughout the project site, including in the immediate vicinity of Air Potato patches. In addition, the project will improve the health of upland forest communities that have a significant diversity of native plants and wildlife.
4. 29th Road Nature Park has a high revegetation potential due to the diverse native vegetation persisting onsite. Canopy and most midstory trees will not be affected by the planned treatments; herbaceous species that may be incidentally affected by herbicide treatments or that have been suppressed by air potato will recover due to substantial areas of high-quality vegetation interspersed with Air Potato infestations. Similar areas—both onsite and in other parks--where we have treated Air Potato using these methods have readily revegetated with a diverse suite of native species without need for additional plantings.
5. The City of Gainesville is a leader in the southeast in engaging the community in learning about and removing invasive plants, through the Air Potato Roundup, other educational programs, and outreach materials. These efforts are described in detail under "Public Education Program", above.
6. Air potato, although not new to the region, rapidly expands wherever it gains a foothold, and there are extensive natural areas downstream from the project. Because 29th Road is upstream from most properties in the Hogtown Creek

Greenway, treating air potato in this park can prevent the park from becoming a conduit for air potato to move into as-yet uninfested natural areas.

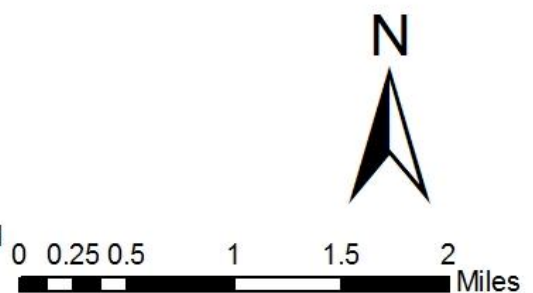
7. While budget and staffing reductions have greatly reduced the City of Gainesville's staff time available to treat invasive plants, City staff has adjusted by placing high priority on new strategies to increase our effectiveness with the resources we have. These strategies include identifying and treating new infestations to prevent degradation of existing high quality areas; and using GIS to identify and treat invasive plant infestations that directly threaten listed plant populations. Support from FWC for this project will have a multiplying effect by enabling our staff to prevent infestation and degradation of many more acres on other conservation properties, many of which are also former BIPM/IMPS project sites.
8. The City of Gainesville will treat air potato patches on this property annually. Further foliar glyphosate treatments using in-house staff will be necessary in the short-term, and will be funded by the NOD's operating budget. For smaller patches, and larger patches over the longer term, follow up will include digging remaining tubers in order to eliminate populations when possible. Any patches that regrow enough to produce bulbils will be the focus of volunteer work during future Air Potato Roundups. It is not expected that FWC will be the main source of funding for retreatment in the future. This property has not been treated with BIPM/IPMS contracts in the past. City staff's treatments and bulbil removal in the last several years have greatly reduced the density and extent of air potato on the property.
9. The City of Gainesville is a partner in the Alachua County Cooperative Invasive Species Management Area (CISMA), which has recently been merged into the North Central Florida CISMA. NOD staff will continue to be involved in future meetings and other CISMA activities.

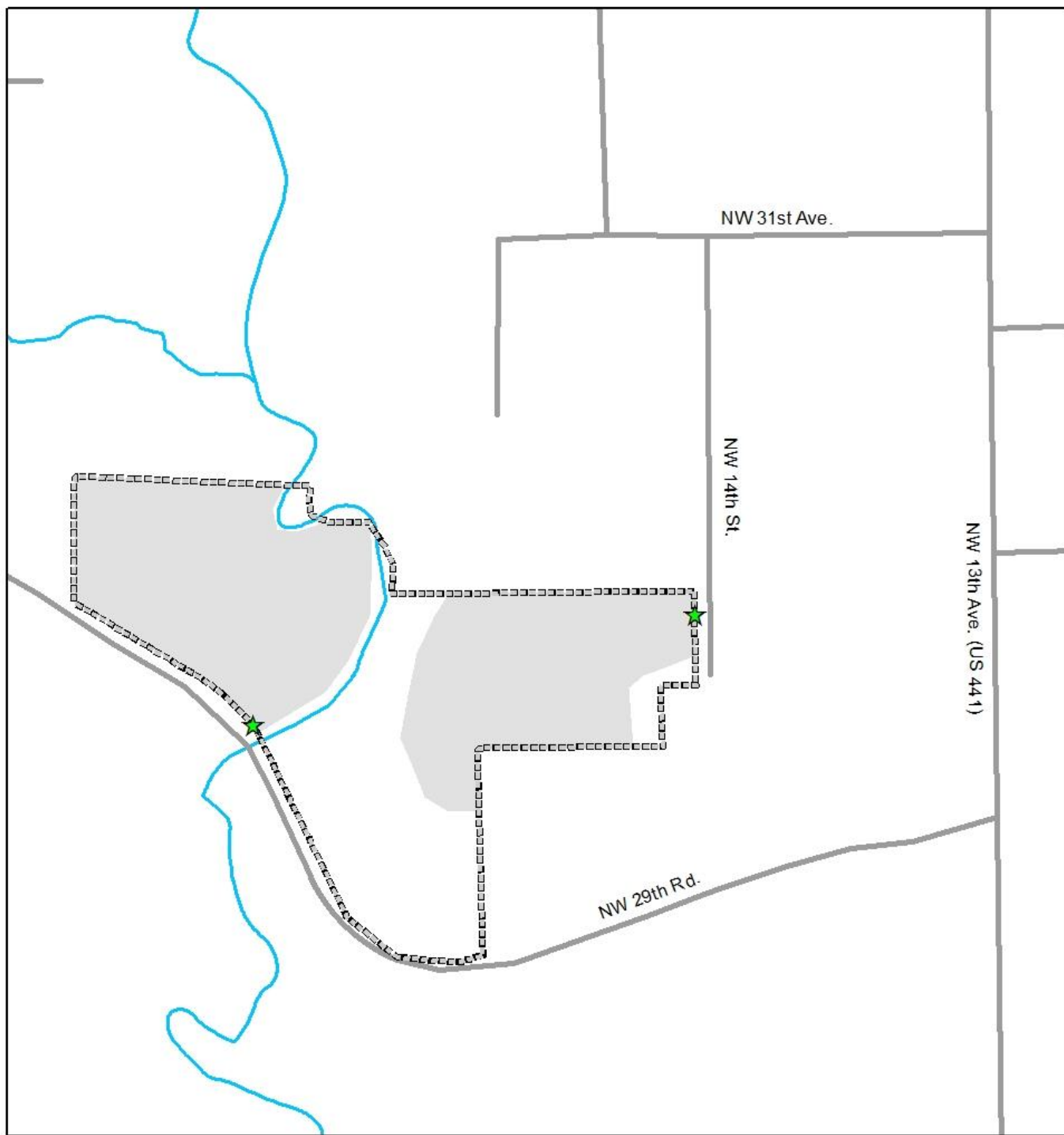


29th Road Nature Park

Figure 1-General Location Map

- 29th Road Nature Park
- Major Streets
- Creeks
- Lakes
- Park Entrance
- Other conservation land





29th Rd. Nature Park

Figure 2

-  Park Boundary
-  Treatment Areas
-  Access Points
-  Streets
-  Creeks



0 0.025 0.05 0.1 Miles