

Rare Plant Conservation Projects funded for 2016-17

(taken from annually submitted
*APPLICATION FOR FEDERAL ASSISTANCE-
WORK PLAN 2016-2017*,
submitted to United States Fish and Wildlife
Service from Florida Department of Agriculture
and Consumer Services, Florida Forest Service)

FLORIDA STATEWIDE ENDANGERED AND THREATENED PLANT CONSERVATION PROGRAM

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**FLORIDA STATEWIDE ENDANGERED AND THREATENED PLANT
CONSERVATION PROGRAM, ANNUAL WORK PLAN
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APPLICATION FOR FEDERAL ASSISTANCE
WORK PLAN 2016-17
OCTOBER 1, 2016 THROUGH DECEMBER 31, 2017

Florida Plant Conservation Program Administration, Management and Research

(Florida Forest Service - “State” Match as per AFA form 424). The objectives of this project are: to administer the Florida Plant Conservation Program through the timely completion and submission of both federal and state documents; administer plant conservation projects conducted by various organizations and provide access to reporting in an online database and list of report titles; test, populate, and conduct analyses using the database of funded projects related to plant recovery in Florida; and, conduct in situ monitoring of known rare plant populations and restoration of their habitat, if needed.

Federal	\$ 65,356
State Match	21,786
Total	\$ 87,142

Lake Wales Ridge Scrub Plant Monitoring and Management Plan Development

(Florida Forest Service - “State” Match as per AFA form 424). The objectives of this project are to: continue Level I monitoring programs for occurrences of listed scrub plants on public lands; develop and implement fire management plans and habitat restoration objectives in locations where these species occur or where there is potential of occurrence; determine population trends for these species using Level II monitoring; evaluate the effects of management activities on population size, reproduction, recruitment, and survival within selected populations of these species.

Federal	\$ 58,513
State Match	19,505
Total	\$ 78,018

Conservation Research of the Recovery of Florida Ziziphus (*Ziziphus celata*)

(Archbold Biological Station - “Other” Match as per AFA form 424). The objectives of this project are: conduct demographic monitoring and analysis of most wild, translocated and captive Florida ziziphus populations; characterize microhabitat on living Florida ziziphus individuals in a subset of wild and translocated populations.; carry out adaptive management as needed in wild and translocated Florida ziziphus populations; collaborate with molecular geneticists to document genetic diversity among wild, multi-clonal populations and assess parentage of future translocated material; assist in cultivating propagules of underrepresented genotypes through tissue culture and seed for future Florida ziziphus translocations; accomplish one Florida ziziphus translocation between 2015 and 2018; and, coordinate searches for undiscovered populations of Florida ziziphus;

Federal	\$ 20,000
Other Match	6,667
Total	\$ 26,700

APPLICATION FOR FEDERAL ASSISTANCE, WORK PLAN 2016-17
OCTOBER 1, 2016 THROUGH DECEMBER 31, 2017 (cont.)

Phase V *Warea amplexifolia* conservation efforts: population augmentation and research into pollinator dynamics, spatial seedling recruitment patterns, population genetics, and factors influencing *in situ* seed germination (Bok Tower Gardens - “Other” Match as per AFA form 424). The objectives of this project are: perform greenhouse experiments to learn factors that may influence *in situ* germination.; introduce/augment at least one new population of *Warea amplexifolia* in Orange, Lake, Polk or Marion Counties; augment the current *ex situ* collection of *W. amplexifolia* as needed to ensure genetically diverse germplasm preservation; perform annual demographic monitoring of introduced populations; collect Year 3 data on spatial seedling recruitment patterns; complete the study of pollinators and their foraging behavior; and, begin to analyze population genetics using optimum microsatellite loci developed in Phase IV for this species.

Federal	\$ 12,000
Other Match	10,100
Total	\$ 22,100

Removal of Invasive, Exotic Plants around *Torreya taxifolia* and *Silene polypetala* (private contractors to be determined - “Local” Match as per AFA form 424). The objectives of this project are: conduct two, 8 hour days applying herbicide to invasive plants using private contractors; and, coordinate volunteers on at least eight work days.

Federal	\$ 3,000
Local Match	1,000
Total	\$ 4,000

Digitizing At-Risk Plant Locations from FSU Robert K. Godfrey Herbarium Specimens (Florida State University - “State” Match as per AFA form 424). The objectives of this project are: to determine if At-Risk Plant herbarium specimen spatial data is detailed enough for someone to efficiently use to revisit the location recorded; and, to transform the herbarium specimen spatial data into a shapefile or a Microsoft Excel spreadsheet.

Federal	\$ 2,000
State Match	667
Total	\$ 2,667

APPLICATION FOR FEDERAL ASSISTANCE, WORK PLAN 2016-17
OCTOBER 1, 2016 THROUGH DECEMBER 31, 2017 (cont.)

Rangewide Survey of *Dicerandra cornutissima* on the Marjorie Harris Carr Cross Florida Greenway, the Florida Department of Transportation, Marion County Right-of-Way, and Private Property Populations (Florida State University - “State” Match as per AFA form 424). The objectives of this project are to: conduct a rangewide survey of the longspurred mint by revisiting all known extant and historical populations, expand searches for new plants/populations, and determine population size; document presence and extent of invasive plant species in vicinity of the mint; and after rangewide survey is completed, develop a monitoring plan for this species; select a subset of populations in varying habitat conditions (including invasive plant infestations) and develop a protocol for a simple, yet effective way of evaluating population size and habitat health that can be utilized in the future.

Federal	\$ 17,877
State Match	5,959
Total	\$ 23,836

Survey, Monitoring, and Recognition of *Conradina glabra* within Torreya State Park Phase I (Florida Park Service - “State” Match as per AFA form 424). The objectives of this project are: survey all appropriate natural communities within Torreya State Park for *Conradina glabra*, and provide distribution and abundance data to State Natural Heritage database and USFWS; develop and implement plots in the field to document seed germination and seedling growth. Seeds of *C. glabra* will be collected and grown adjacent to wild populations to be monitored at regular intervals over the course of a year; develop and implement a project to monitor relict populations of *C. glabra*.

Federal	\$ 10,000
State Match	10,000
Total	\$ 20,000

Seminole Wayside and Addition Lands – Pine Rockland Restoration (Miami-Dade County Parks, Recreation & Open Spaces, Natural Areas Management - “Local” Match as per AFA form 424). The objectives of this project are: to continue to develop and implement a management plan; inventory and monitor species and ecosystem health within park; and, restore and enhance habitats towards historic conditions and introduce new federally listed species.

Federal	\$ 3,078
Local Match	5,320
Total	\$ 8,398

FLORIDA STATEWIDE ENDANGERED AND THREATENED PLANT CONSERVATION PROGRAM, ANNUAL WORK PLAN TABLE OF PROPOSED 2016-2017 (SEGMENT E-9-25) PROJECTS, OCTOBER 1, 2016 THROUGH DECEMBER 31, 2017 FEDERAL (75% or less), MATCH (25+%), AND TOTAL COST AMOUNTS					
Proposed Projects, Organization	Federal Match	State Match	Local Match	Other Match	Total
Florida Plant Conservation Program Administration, Management and Research, Florida Forest Service.	\$65,356	\$21,786	\$0	\$0	\$87,142
Lake Wales Ridge Scrub Plant Monitoring and Management Plan Development, Florida Forest Service	\$58,513	\$19,505	\$0	\$0	\$78,018
Conservation Research of the Recovery of Florida Ziziphus (<i>Ziziphus celata</i>), Archbold Biological Station	\$20,000	\$0	\$0	\$6,667	\$26,667
Phase V <i>Warea amplexifolia</i> conservation efforts: population augmentation and research into pollinator dynamics, spatial seedling recruitment patterns, population genetics, and factors influencing in situ seed germination (Bok Tower Gardens)	\$12,000	\$0	\$0	\$10,100	\$22,100
Removal of Invasive, Exotic Plants around <i>Torreya taxifolia</i> and <i>Silene polypetala</i> , Florida Forest Service/private contractors.	\$3,000	\$0	\$1,000	\$0	\$4,000
Digitizing At-Risk Plant Locations from FSU Robert K. Godfrey Herbarium Specimens, Florida State University.	\$2,000	\$667	\$0	\$0	\$2,667
Rangewide Survey of <i>Dicerandra cornutissima</i> on the Marjorie Harris Carr Cross Florida Greenway, the Florida Department of Transportation, Marion County Right-of-Way, and Private Property Populations, Florida State University.	\$17,877	\$5,959	\$0	\$0	\$23,836
Survey, Monitoring, and Recognition of <i>Conradina glabra</i> within Torreya State Park Phase I, Florida Park Service.	\$10,000	\$10,000	\$0	\$0	\$20,000
Seminole Wayside and Addition Lands – Pine Rockland Restoration, Miami-Dade County Parks, Recreation & Open Spaces, Natural Areas Management.	\$3,078	\$0	\$5,320	\$0	\$8,398
Total Federal, State, Local, and Other Match, Total Funding 2016-17	\$191,824	\$57,917	\$6,320	\$16,767	\$272,828
Total Federal Match, Non-federal Match, Total Funding 2016-17	\$191,824	\$81,004			\$272,828