

Genetic studies to improve our knowledge of rare plant species and the vegetation structure of important ecosystems at the Avon Park Air Force Range (APAFR)

APAFR harbors many globally rare plant species, but the limits, status, and occurrence of interspecific hybridization is poorly known for many of these species rare plants. Furthermore, APAFR harbors important remnants of the Florida dry prairie ecosystem, which is critical for the conservation of the federally endangered Florida grasshopper sparrow, but relatively little is known about the structure and population dynamics of many of the dominant plants in this ecosystem.



Calopogon multiflorus



Quercus minima



Clinopodium dentatum



Conradina eximia



Lupinus westianus



Gaylussacia sp nov



Xyris panacea



Xyris sp nov



Serenoa repens



Clitoria fragrans

The overall goals of this study are to use genetic approaches to understand more about rare plant species of the APAFR, the population structure of dominant plants of the dry prairie ecosystems at the APAFR, and to use this information to guide management, conservation, and restoration efforts. We focus on a diverse range of rare or ecologically important Florida plants, depicted on the poster. We use genetic approaches to understand genetic diversity, genetic structure, and the relationships with close relatives. The results of the analyses will provide information to devise strategies to manage and conserve these important species at APAFR.



Liatris quadriflora