

## ABSTRACT

Restoration and management of ecologically important sites depend on an understanding of reference conditions and the ability of people to return the site to those historic conditions. Historical ecology research sifts through the data about a site to be able to offer restoration options to land managers. This project demonstrates transitions in natural communities of a protected area in East Central Florida: Split Oak Forest. Natural communities are defined based on the General Land Office (GLO) survey maps and notes and applied to historical black and white aerial photos, modern digital orthophotos, and high resolution satellite imagery.

Because of the channelization of the Kissimmee River and the subsequent draining of the Everglades from 1883 onward, Split Oak, like other areas whose surroundings have been drained, cannot be returned to the conditions at the time of the GLO survey. Thus, a detailed time series of eight snapshots over 171 years will be valuable to land managers and restoration ecologists working in sites that share the hydrologically-modified Northern Everglades watershed with Split Oak.

Natural community descriptions gleaned from the surveyors maps and notes and their application to current land cover are a potential backbone to future historical ecology in the southeast. Seasonally re-hydrating drained wetlands is a priority in this watershed, and is supported by cost-share funding from the State of Florida. This research affirms that most grassy wetlands on the site have transitioned to upland communities. Most of the remaining marshes have been invaded by woody plants and swamps extended their boundaries. Sandhill was used for orange (*Citrus x sinensis*) culture and, along with scrub and flat pine, transitioned to hammock.