

Rookery Bay Reserve *Finding Solutions*



Prescribed Fire

Land management through prescribed fire is a beneficial method of maintaining suitable habitat for native wildlife. Advance research and monitoring of these management actions are important in assessing the success of fire management strategies. In the past, fire

suppression on RBNERR lands has greatly increased fuel levels, or the amount of dead or dried leaves and branches that could easily be ignited under proper conditions. Current policy encourages the reduction of fuels through prescribed fire, thinning or other means.

Integrating wildlife habitat information into fuels inventories and models provides an ecologically based framework to describe species diversity and abundance resulting from fire suppression and associated environmental changes.

Project Leaders
Rookery Bay
Resource
Stewardship Team

Project Dates
1996 to Present



Funding:

- DEP Conservation & Recreational Lands (CARL)
- NRCS – Wildlife Habitat Improvement Program



Monitoring

Fire management at RBNERR includes monitoring the relations of fuels management to habitat quality for resident wildlife species within different habitat areas. This work involves an integrated monitoring program that: 1) records quantity and quality of fuel loads in different vegetation types among burn units; 2) identifies type and amount of resident wildlife species using habitat; 3) measures habitat quality

by relating wildlife diversity and abundance to available fuel structure; 4) evaluates direct and indirect effects of fuels management on wildlife habitat; and, 5) predicts the short- and long-term effects of fuels management on habitat structure and associated quantity and quality of habitat for resident wildlife species. Using standardized surveying techniques, retrospective monitoring can compare

habitat structure and resident wildlife species in burned and unburned sites, providing an understanding of habitat use before and after a burn. Pre- and post burn monitoring of both experimental prescribed fires and wildfires allows a more direct measurement of the effect of fire on habitat structure and associated wildlife species.

Rookery Bay, located in southwest Florida, is recognized as one of the few remaining pristine, mangrove-forested estuaries in the U.S. As part of the National Estuarine Research Reserve System, it serves as an outdoor classroom and laboratory for students and scientists. For more information, visit www.rookerybay.org.

