

# Rookery Bay Reserve

## *Finding Solutions*



### Key Island Invasive Plants

Barrier islands support a wide variety of marine and terrestrial plant and animal species. Key Island is one of the state's largest remaining unbridged barrier islands. The Reserve is working to restore its aesthetic, biological and ecological values. In the early 1900's, nonnative plants, such as Australian pine

and Brazilian pepper, were introduced to Florida for landscaping and other needs. These invasive plants have colonized natural areas like Key Island, crowding out native plant communities. Native wildlife, including threatened species such as loggerhead sea turtles, lost essential habitat needed

for food, shelter and nesting grounds. Reserve staff mapped the nonnative and native communities on Key Island using satellite positioning technology, and planned the restoration. Restoration funds included more than \$1 million of federal, state and private funds.



#### *Resource Staff*

*Beverly Anderson  
Jill Schmid  
Michael Shirley*

### Restoration

In 1998, contractors were employed to cut down and burn 350 acres of Australian pine trees on Key Island. More than 3,000 native plants, comprising fifteen different species, were planted on the island. The native plants included: sea-oats (the dominant foredune stabilizer), seagrape, buttonwood, coco plum, beach elder, and dune sunflower. In 1999, approximately

5,000 native plants were reintroduced in the northern part of the island's scrub and hammock habitats. Restoration of the island's sand dunes has resulted in increased beach stabilization. Benefits to wildlife populations, such as least terns, gopher tortoises and loggerhead sea turtles, have also been documented. Within one year, sea turtle nesting on Key Island beaches

increased significantly. Monitoring of the invasive plant populations within the Reserve is an ongoing project.



#### **Funding:**

*National Marine Fisheries Service and Florida DEP, Bureau of Invasive Plant Management*

#### **Project Dates:**

*1996 - present*



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 telephone (239) 417-6310, write to RBNERR at 300 Tower Rd., Naples, FL 34113, or visit our website at [www.rookerybay.org](http://www.rookerybay.org).

