

Shell Key Preserve:

Updating the Management Plan



Wednesday, 25 April 2007

Tampa Bay Watch
Tierra Verde, FL

Meeting Agenda

- Introduction and Timetable – Mr. Will Davis
- Preserve History – Ms. Pam Leasure
- Species of Conservation Concern – Ms. Nancy Douglas
- Ecology and Natural History – Dr. Steve Harper
- Preserve Management – Ms. Pam Leasure
- Regulation and Enforcement – Sgt. Glenn Wilson
- Synthesis and Stakeholders' Suggestions – Dr. H. Bruce Rinker
- Public Comment

Introduction and Timetable

Mr. William M. Davis

Bureau Director

Department of Environmental Management

Clearwater, FL

Preserve History

Ms. Pam Leasure

Shell Key Preserve Land Manager

Department of Environmental Management

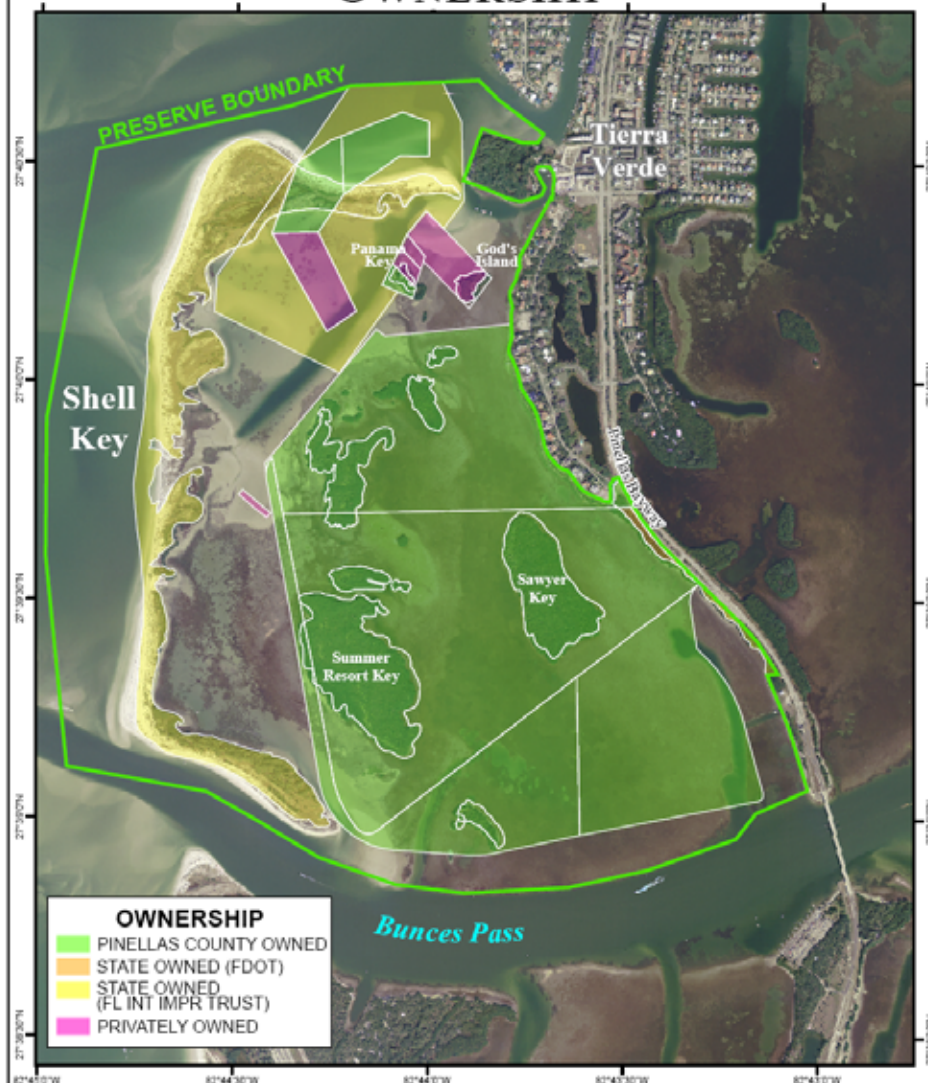
Environmental Lands Division

Tarpon Springs, FL

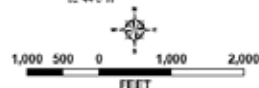
Shell Key Preserve Management Plan Update – Due October 2007



SHELL KEY PRESERVE OWNERSHIP



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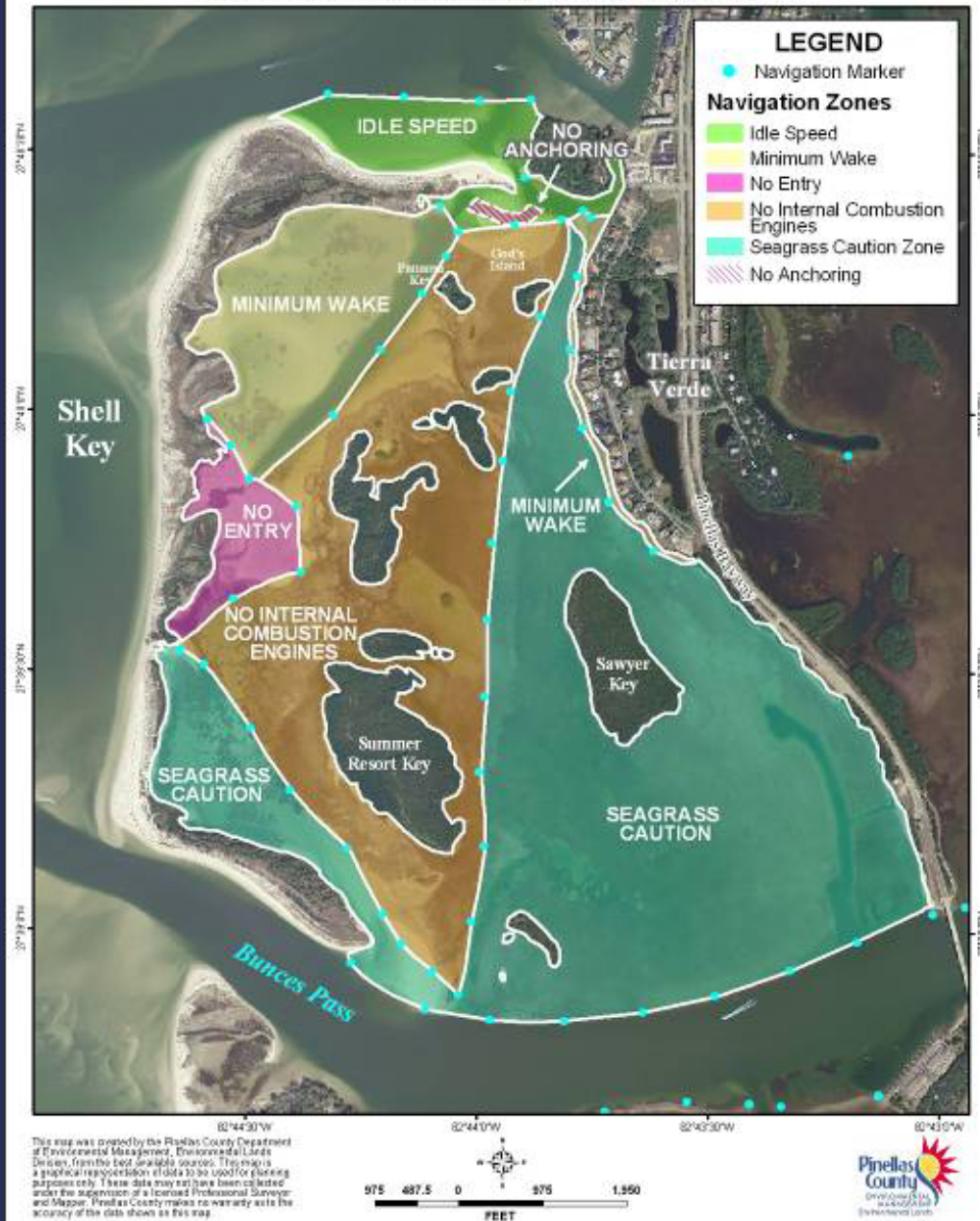
Lease Agreement for Shell Key Preserve

- Entered into agreement in December 2000.
- Agreement between the Board of Trustees of The Internal Improvement Trust Fund of the State of Florida and Pinellas County, Florida.
- Shell Key is managed “only for the conservation and protection of natural and historical resources and for resource based public outdoor activities and education which are compatible with the conservation and protection of these public lands.”
- A management plan must be submitted and approved by the Division of State Lands, Department of Environmental Protection, in accordance with 18-2.021 (4), Florida Administrative Code.

Lease Agreement Special Conditions

- Ensure management is compatible with protection and conservation of wintering and nesting shorebirds and set forth in subsection 259.032(11) Florida Statutes.
- Delineate core areas for the protection of shorebirds within the greater Shell Key area.
- Post critical bird habitat to prohibit trespassing. Posted boundaries should remain flexible to reflect changes in the island geography and topography.
- Enforce Pinellas County leash laws on Shell Key.
- Prohibit beach raking and mechanical cleaning during shorebird and marine turtle nesting seasons.

SHELL KEY PRESERVE WATER NAVIGATION ZONES



SHELL KEY PRESERVE PUBLIC USE DESIGNATIONS



Shell Key Preserve Advisory Committee

- Recreational boaters, Tierra Verde Community Association and other stakeholders
- Audubon Society
- Florida Department of Environmental Protection (FDEP)
- Florida Fish and Wildlife Conservation Commission (FWC)
- Pinellas County Sheriff's Office (PCSO)
- Pinellas County Department of Environmental Management (DEM)
- Pinellas County Department of Culture, Education and Leisure (CEL)
- Pinellas County Department of Real Estate
- Tampa Bay Estuary Program
- Tampa Bay Watch

Elements of Existing Plan

Resource Management



Existing Conditions



Six Resource Management Goals

Public Uses



Existing Conditions



Two Public Use Goals

Finalization of Existing Management Plan

1. Three stakeholder meetings to finalize draft plan
2. Period of public comment
3. Presentation to the Pinellas County Board of County Commissioners
4. Presentation to the Florida Department of Environmental Protection

Species of Conservation Concern

Ms. Nancy Douglas

Florida Fish and Wildlife Conservation Commission

Tallahassee, FL

Ecology and Natural History

Dr. Steve Harper

Research Director

Department of Environmental Management

Environmental Lands Division

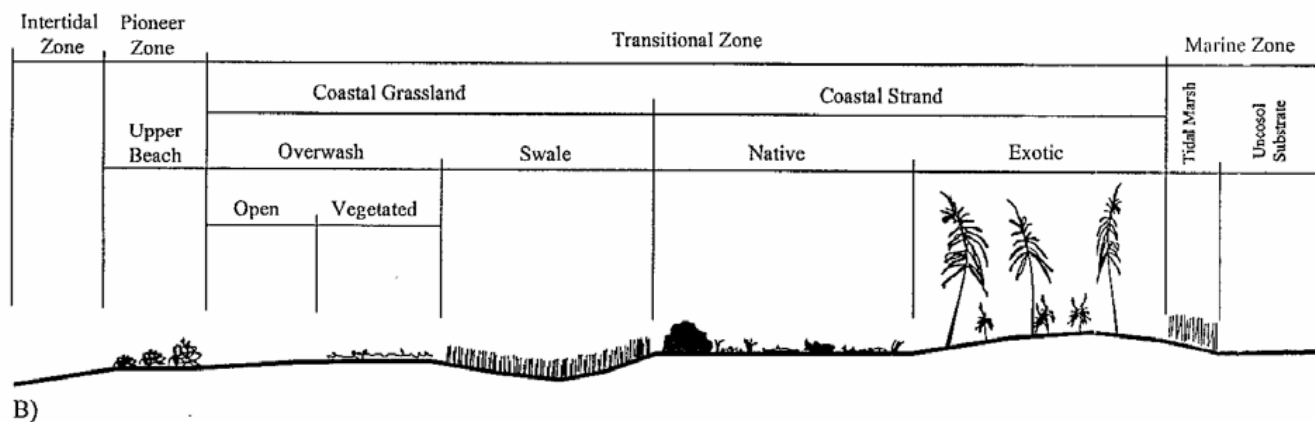
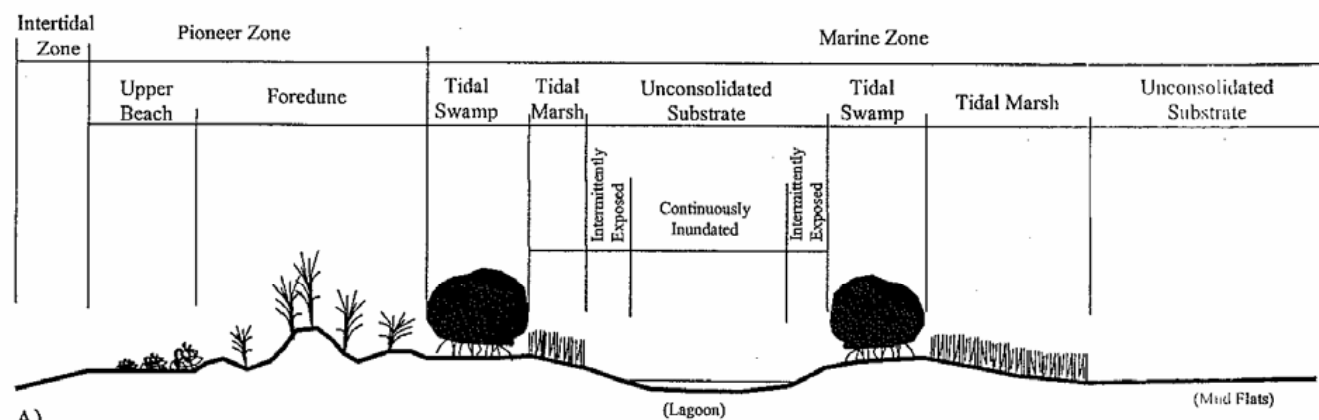
Tarpon Springs, FL

Major Research Efforts

- Delineate and map habitats
- Survey fall-winter bird utilization
- Monitor breeding shorebirds
- Other surveys



Habitat Mapping





2001



2005

PhotoPoint 8E



2001



2005

PhotoPoint 57E

Habitat Mapping

- Habitats are very dynamic
 - Shifting intertidal and island perimeter
 - Formation and extension of foredunes
 - Control of exotic species
 - Natural succession
 - Storm-driven disturbance
- Adaptive management is warranted

Fall-Winter Utilization







Photo courtesy of Stewart Boots



Fall-Winter Utilization

- Preserve used extensively
 - 82 species on average per year
 - Thousands of individual birds
 - Numerous banded birds
- High variability in counts
- Some species have declined

Beach Nesting Birds



Black Skimmer



Least Tern



Wilson's Plover

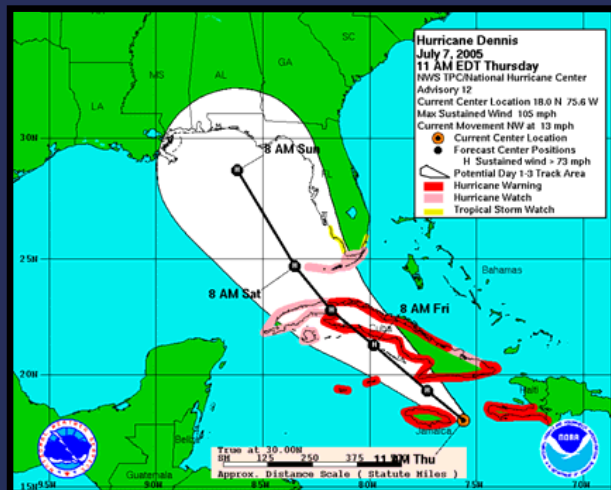


American Oystercatcher



Willet





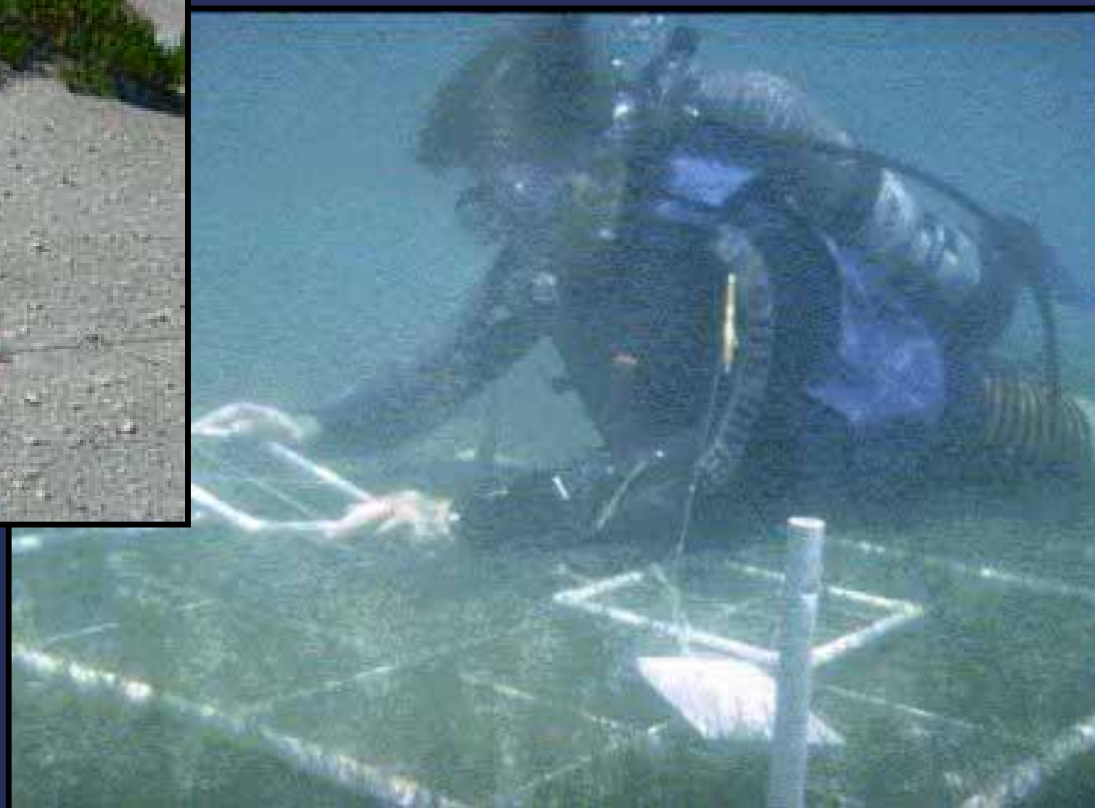




Beach Nesting Birds

- Regular nesting attempts
- Nest within and outside BPA
- High variability in success
- Multiple natural and anthropogenic causes of failure

Other Surveys



Other Surveys

- Important seagrass areas
- High diversity of fishes and marine life
- Occasional nesting by sea turtles
- Utilized by manatees and dolphin

Research Conclusions

- Environment is very dynamic in space and over time
- Regional and international significance for natural resource protection
- Public use affects natural resources
- Importance will continue to increase with future development

Preserve Management

Ms. Pam Leasure

Shell Key Preserve Land Manager

Department of Environmental Management

Environmental Lands Division

Tarpon Springs, FL

Shell Key Preserve 2000 - 2006

Managed “only for the conservation and protection of natural and historical resources and for resource based public outdoor activities and education which are compatible with the conservation and protection of these public lands.”



Elements of Existing Plan

Six Resource Management Goals

1. Protect sensitive natural resources of Shell Key Preserve.
2. Preserve wildlife resources of Shell Key Preserve.
3. Protect seagrass beds within Shell Key Preserve.
4. Continue to pursue appropriate land acquisitions to enhance Shell Key Preserve.
5. Provide public education about the natural resources of Shell Key Preserve and the importance of management actions.
6. Maintain and improve the effectiveness of the management plan for Shell Key Preserve.

Elements of Existing Plan

Two Public Use Goals

1. Support passive recreational uses that do not conflict with the natural resources objectives of the Shell Key Preserve Management Plan.
2. Balance public use of Shell Key Preserve with the conservation of its significant natural resources.

Management of Shell Key from 2000 through 2006

- Resource management efforts and status
- Management concerns



Signage

A minimum of 175 signs on the island of Shell Key

20
↓

124 →

7
↓



15
↘



WELCOME TO SHELL KEY PRESERVE

WHILE ON THE ISLAND:

- ALL PLANTS AND ANIMALS ARE PROTECTED
- PETS MUST BE UNDER CONTROL AT ALL TIMES
- DO NOT ENTER BIRD PRESERVATION AREA
- TAKE YOUR TRASH WITH YOU
- CAMPING IS PERMITTED IN DESIGNATED AREAS ONLY
- PERMITS REQUIRED FOR GROUPS OF 50 OR MORE

****NOTICE** APRIL 15TH - JUNE 15TH
ENTIRE ISLAND CLOSED TO PETS**

THE FOLLOWING ARE PROHIBITED

- OPEN ALCOHOLIC BEVERAGES
- FIREARMS AND FIREWORKS
- EXCESSIVE NOISE
- REMOVAL OF SIGNS
- NUDITY

Pinellas County Ordinance #02-6



PLEASE HELP MANAGE THIS ISLAND FOR
YOUR ENJOYMENT AND PROTECTION OF
ITS NATURAL RESOURCES
FOR QUESTIONS OR PERMITS
727-453-6900
TO REPORT RULE VIOLATIONS
727-582-6200

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NO PETS ALLOWED IN THIS AREA

THE FOLLOWING ARE PROHIBITED

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Exotics removal and replanting natives

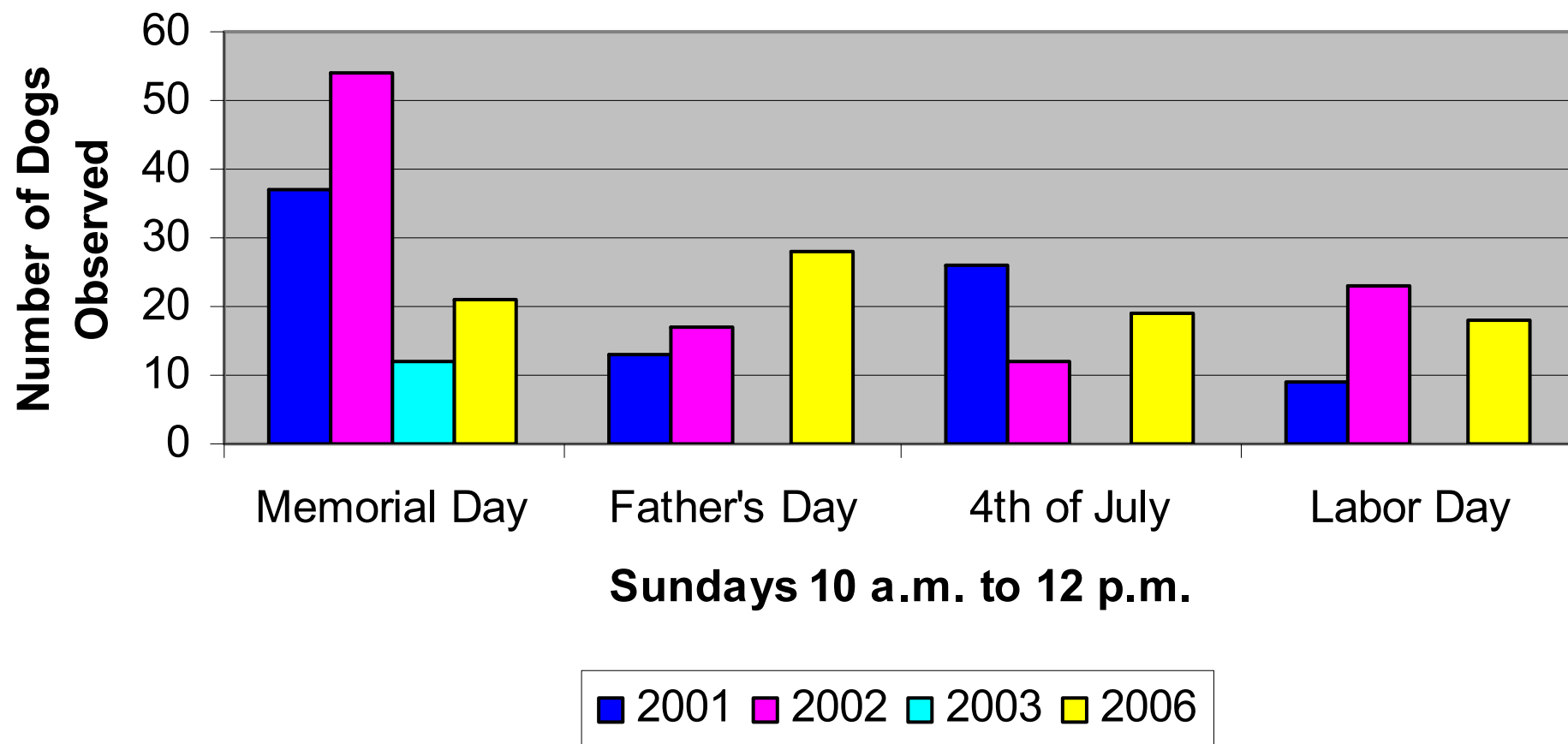
- Cleared 10 acres of Australian pine trees
- USFWS
Grants and CIP funding
- Manageable





Dog Observations on Holiday Weekends

Number Of Dogs



Public Use Goal 2, Action 2-“the possession or consumption of alcoholic beverages is prohibited on the island of Shell Key.”

www.carolinamike.com



www.carolinamike.com

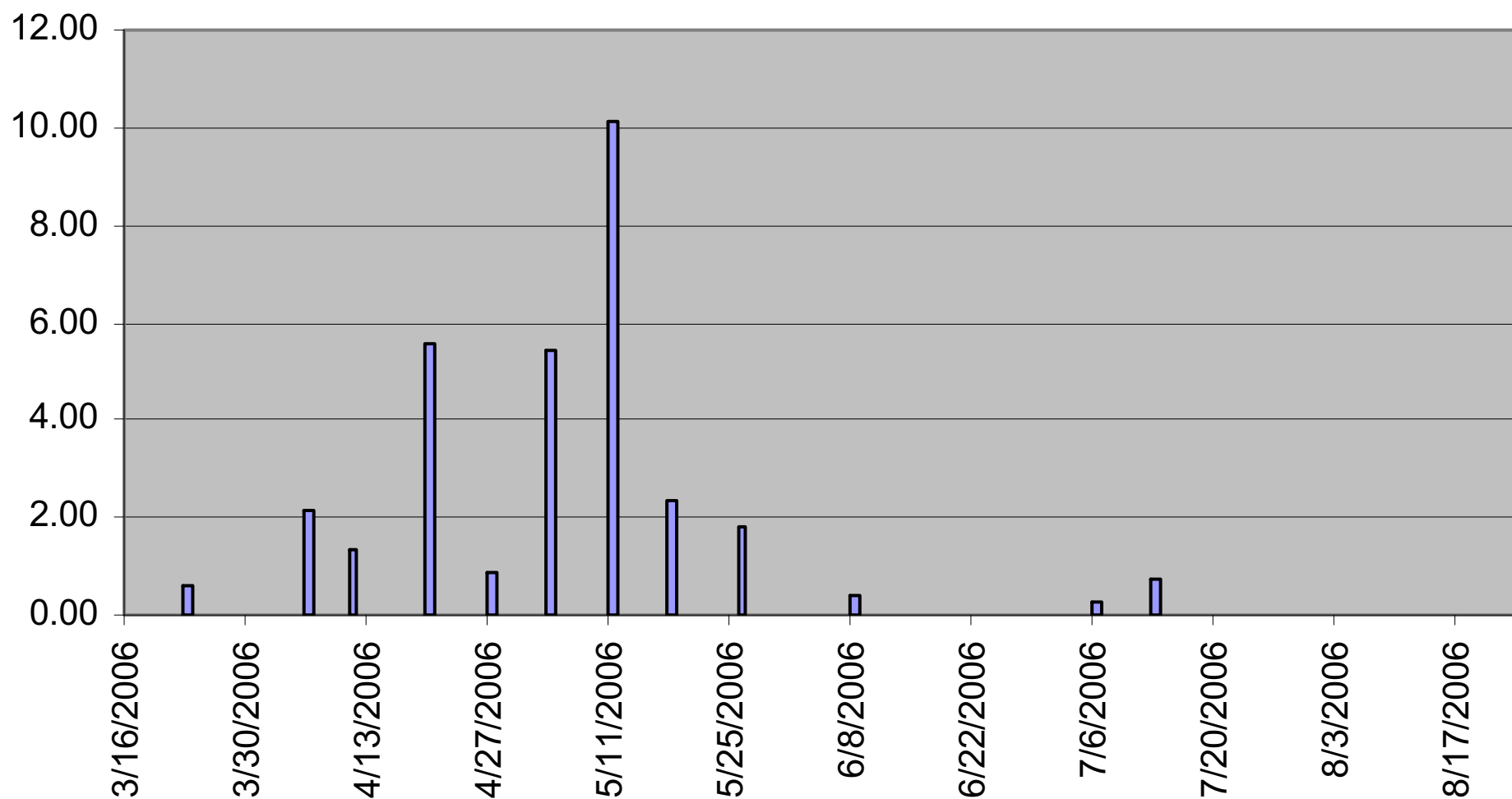
Carolina Mikes -
Sangria Sunset at Shell Key

Pesky Predators





Fish Crows Counted Per Hour



Human Waste

- Creates health and safety issues.
- Creates aesthetics problems.





Nails



Fireworks

Beach Clean-ups

Shell Key Shuttle

Volunteers

ELD Staff

Ft. DeSoto Park Staff

DEM Staff



Public Education



More Public Education

Interpretive signs

Onsite education

Educate shuttle employees

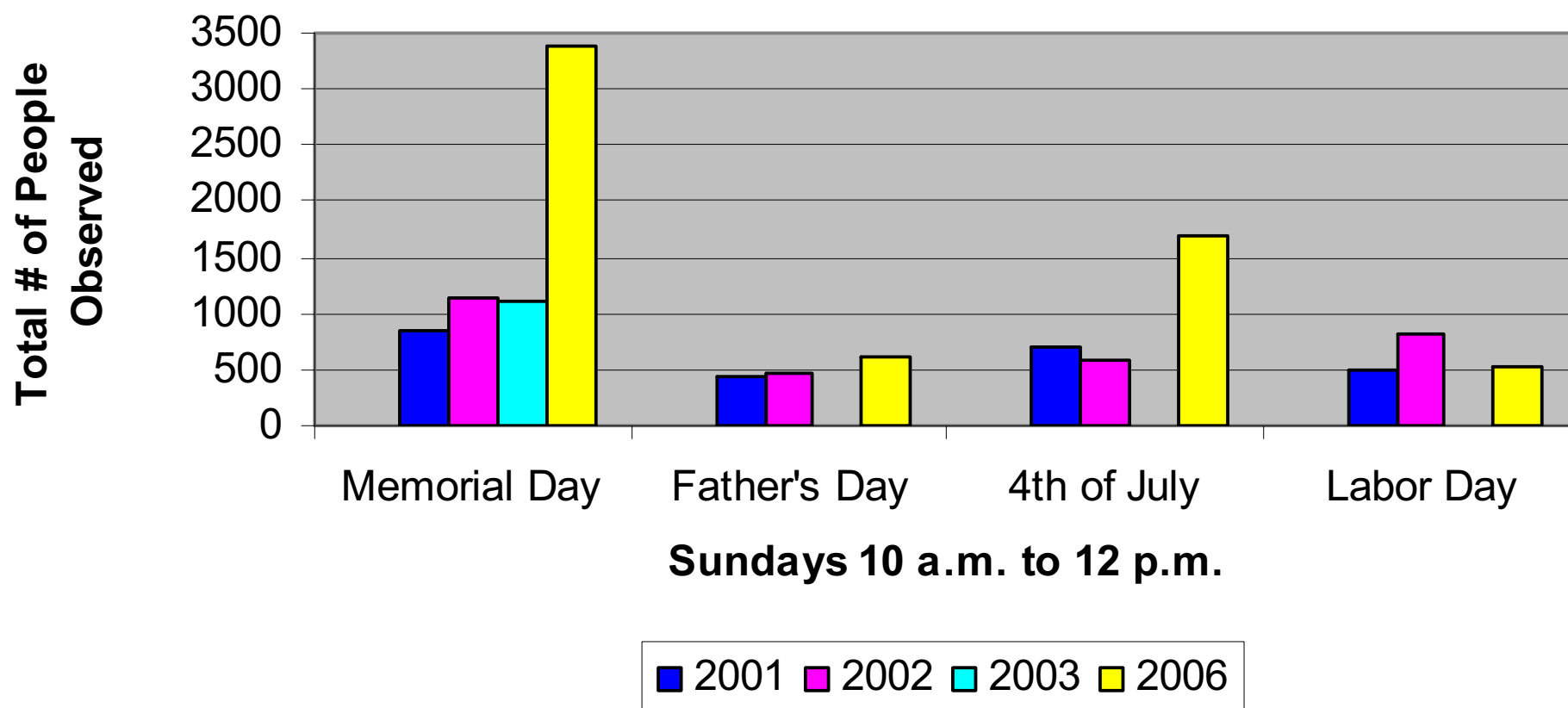


Carrying Capacity of Island for Visitors

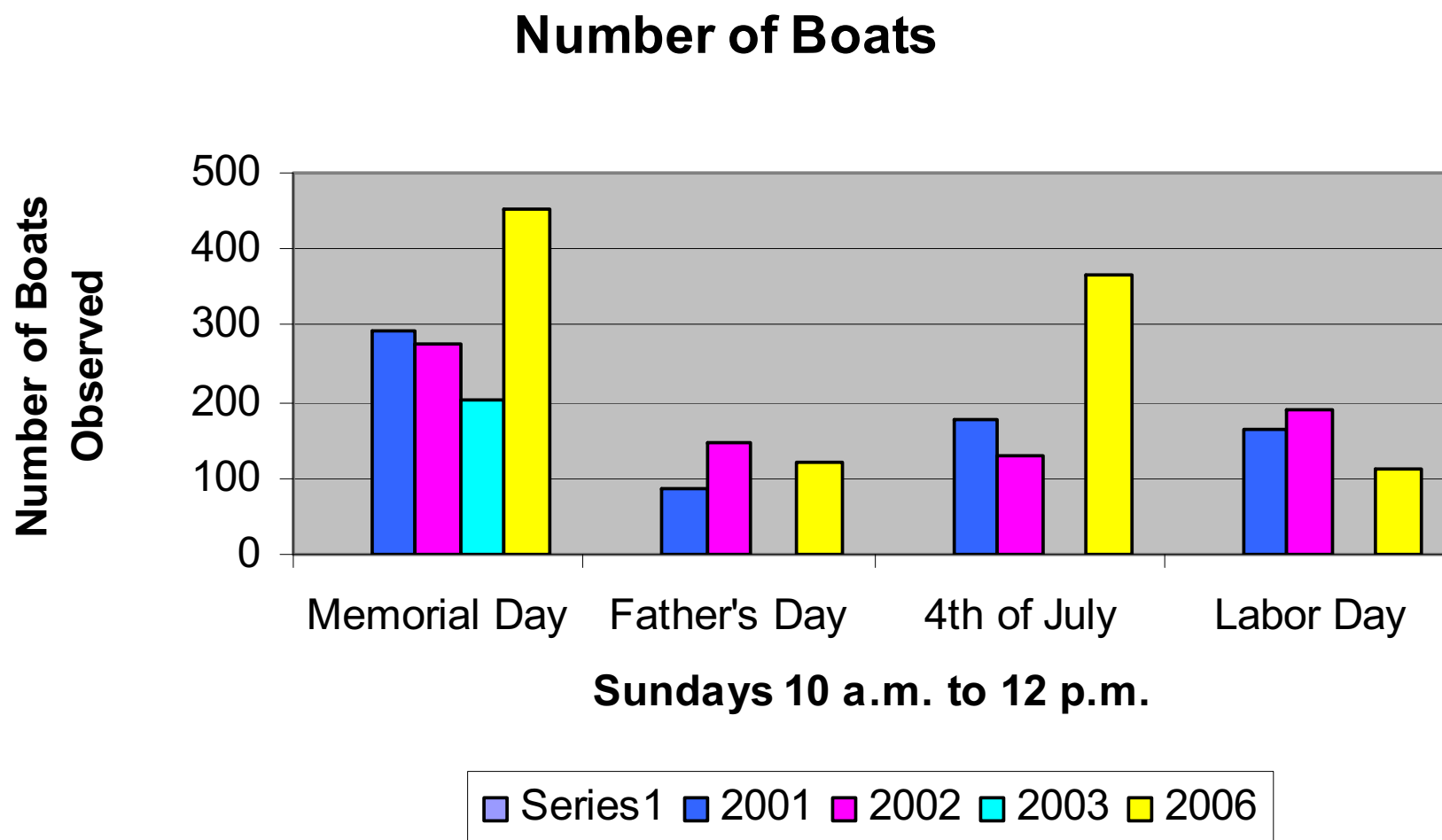


Visitor Counts on Holiday Weekends

Number of Visitors



Number of Boats Observed on Holiday Weekends



Pinellas County Sheriff's Deputies

6 – Deputies each day on summer weekends



Shell Key – northeast tip after 2004 storm season



Shell Key Yesterday



Shell Key Tomorrow



Regulation and Enforcement

Sgt. Glenn Wilson

Environmental Lands Unit

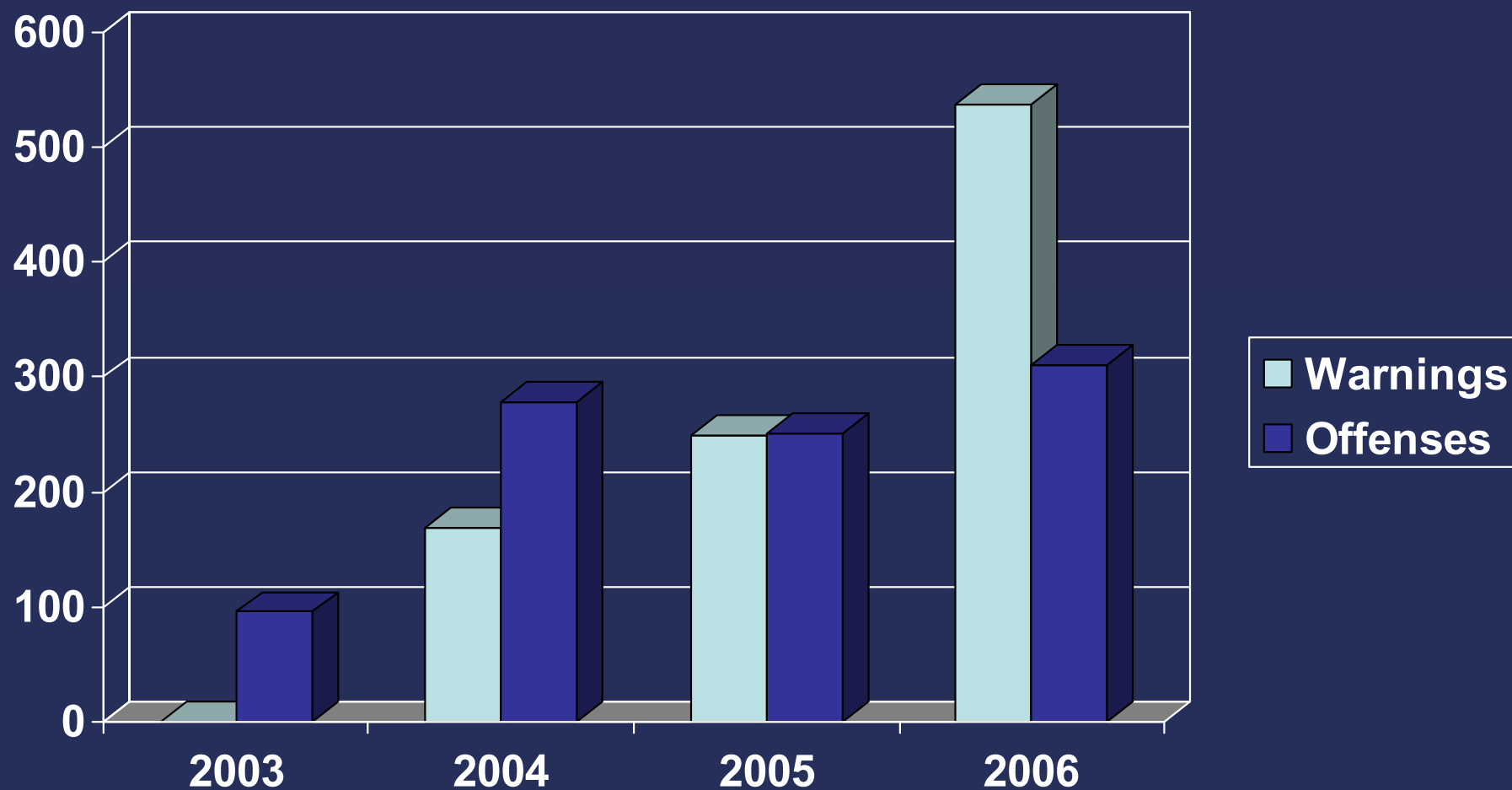
Pinellas County Sheriff's Office

Largo, FL

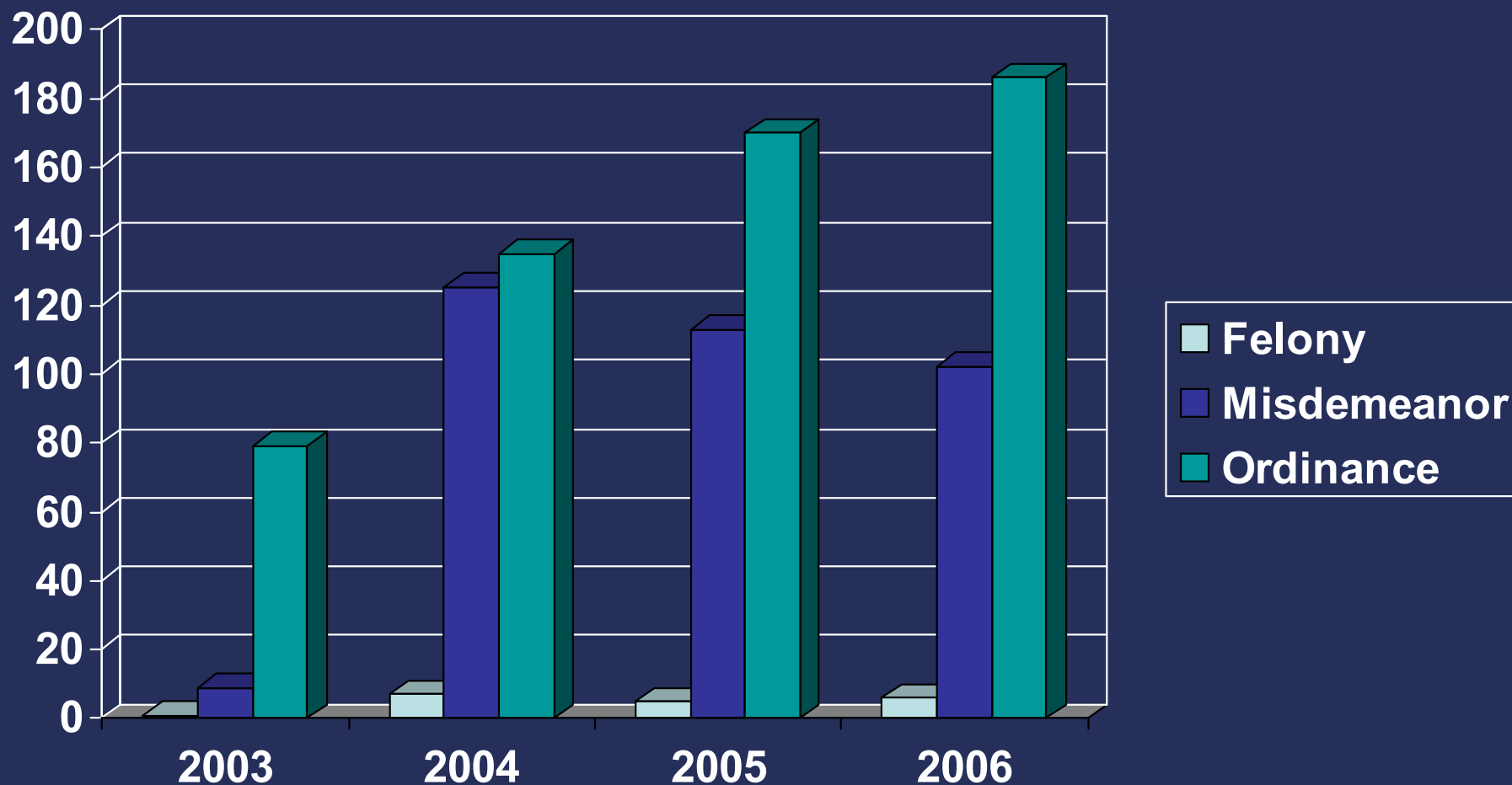
LIMA Team = 10 Dedicated Officers



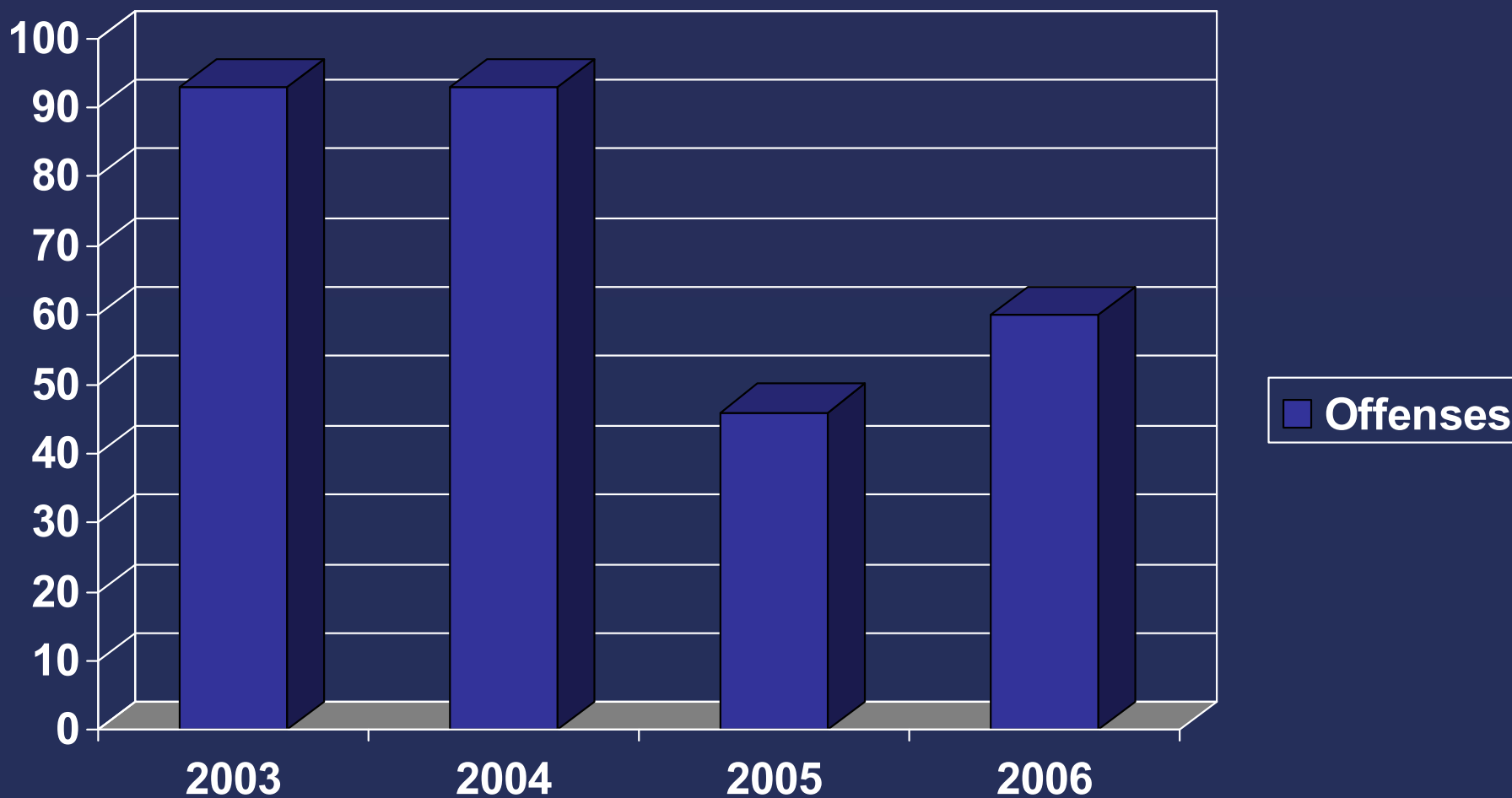
Shell Key Preserve



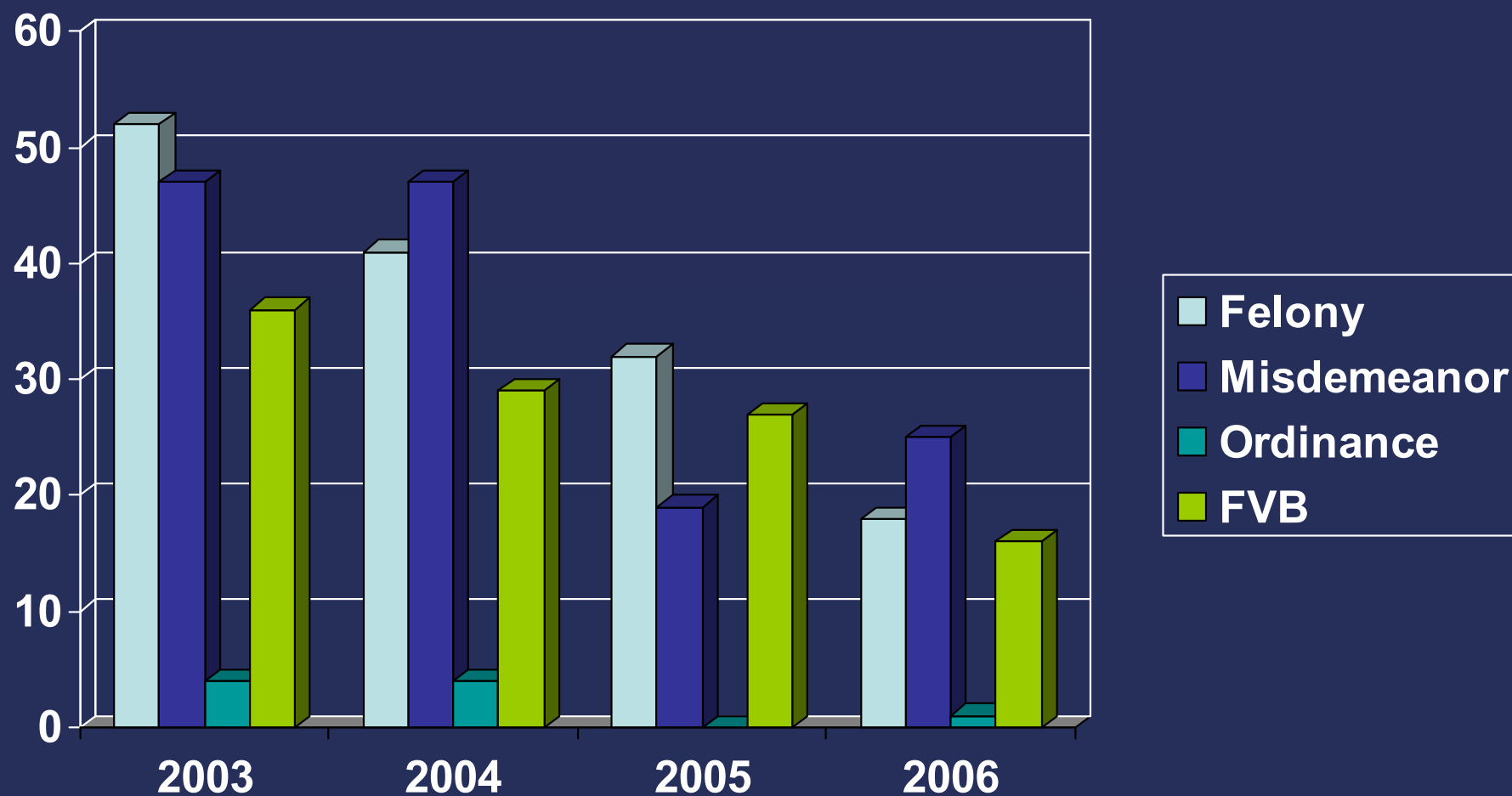
Shell Key Preserve



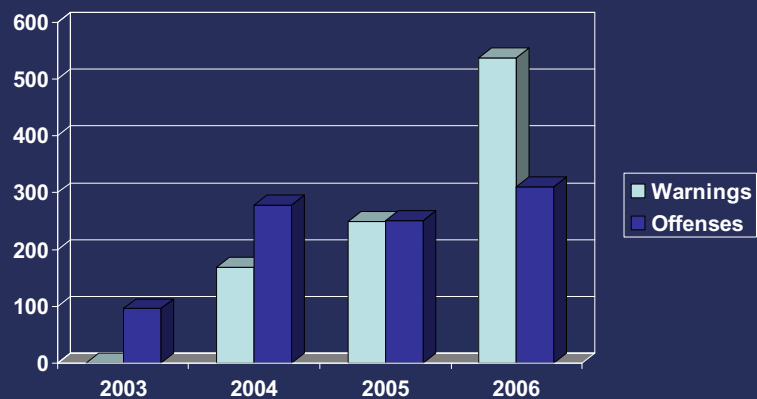
Ft. DeSoto County Park



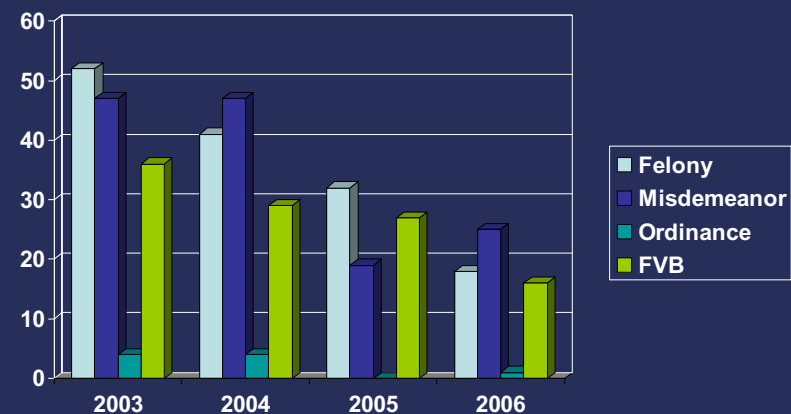
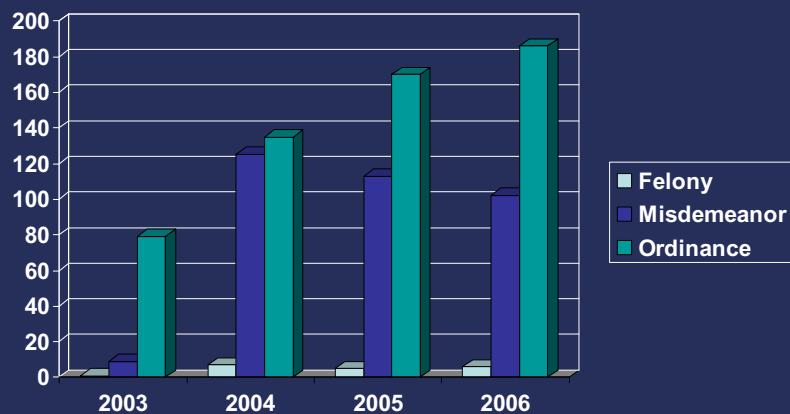
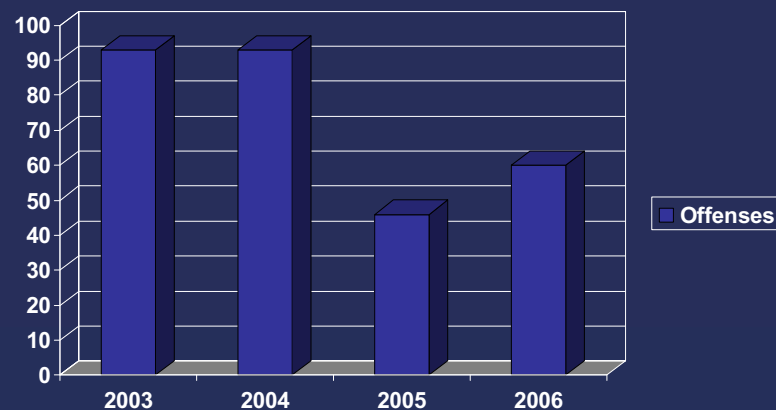
Ft. DeSoto County Park



SKP



FDSCP



Synthesis and Stakeholders' Suggestions

Dr. H. Bruce Rinker

Division Director

Department of Environmental Management

Environmental Lands Division

Tarpon Springs, FL



Three Stakeholders' Meetings:

- 20 February 2007 (WIPCNHC)
- 20 March 2007 (Tampa Bay Watch)
- 26 April 2007 (Tampa Bay Watch)



- Shell Key Preserve includes the island and all its waterways.
- Shell Key Preserve is an integral part of a local coastal system, but with global connections for some species of conservation concern.
- Shell Key Preserve is a microcosm of the global conservation picture as exemplified by multiple human-caused forces historically influencing the Preserve.



Management Considerations:

- Primary focus: long-term resource management
- Secondary focus: sustainable passive recreation



Other Management Considerations:

- Compliance with Ordinance 2-6 and other governing documents
- Increasing urban pressures
- Closing options for an increasingly vulnerable island system
- Human health and safety
- Public resource for multiple users (including families) to enjoy nature

Suggestions from Stakeholders' Meetings:



1. Pets and other domestic animals, including dogs, should not be allowed within the Preserve boundaries in accordance with Preserve Ordinance 2-6.

Suggestions from Stakeholders' Meetings:



2. Possession and consumption of alcoholic beverages should not be allowed in the Preserve in accordance with Preserve Ordinance 2-6.

Suggestions from Stakeholders' Meetings:



3. Nonnative species of flora and fauna should be removed aggressively from the Preserve in accordance with the BOCC-approved Shell Key Preserve Management Plan and in accordance with standard conservation procedures.

Suggestions from Stakeholders' Meetings:



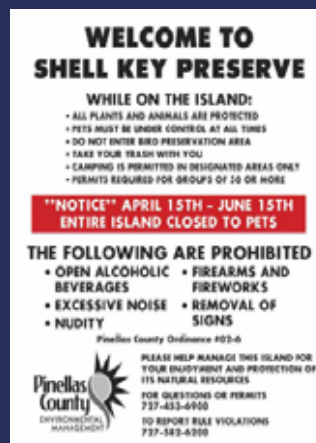
4. Raccoons should be removed from the Preserve in accordance with the BOCC-approved Shell Key Preserve Management Plan and in accordance with standard conservation procedures.

Suggestions from Stakeholders' Meetings:



5. New or improved means of law enforcement should be pursued to implement existing County regulations.

Suggestions from Stakeholders' Meetings:



6. All signage should be changed in accordance with regulatory requirements, including possible off-shore markers.

Suggestions from Stakeholders' Meetings:



7. The annual carrying capacity of the Preserve should be studied, especially the human impact during Memorial Day, Fathers' Day, Independence Day, and Labor Day.

Suggestions from Stakeholders' Meetings:



8. The overall camping experience at the Preserve should be improved in accordance with current guidelines for sustainability and for public health and safety, or eliminated entirely from the Preserve.

Suggestions from Stakeholders' Meetings:



9. Emergent lands within the Preserve should be managed actively with primary emphasis on natural resource protection, including habitats for species of conservation concern (e.g., red knots).

Suggestions from Stakeholders' Meetings:



10. Staff and volunteers of the County's Environmental Lands Division should improve the quantity and quality of education programs at the Preserve, especially with regard to stewardship issues such as trash, camping practices, bird identification and appreciation, and coastal ecology.

Suggestions from Stakeholders' Meetings:



11. Water quality testing should be conducted regularly in the Preserve, especially for nitrogen and fecal coliform.

Suggestions from Stakeholders' Meetings:



12. Internal combustion engines should be studied for possible negative impacts on Preserve flora and fauna.

Suggestions from Stakeholders' Meetings:



13. Feeding birds and other wildlife in the Preserve should be prohibited at all times.

Suggestions from Stakeholders' Meetings:



14. Sea turtles in the Preserve should be monitored and protected at all times.

Suggestions from Stakeholders' Meetings:



15. As the management authority, the County's Environmental Lands Division should create a scientific advisory committee to review and comment on proposed research and land management projects within the boundaries of its properties, beginning with Shell Key Preserve.

Suggestions from Stakeholders' Meetings:



16. Efforts to monitor and survey birds utilizing the Preserve should be continued.

2000-2007: A Pilot Program for Compromise

2007-2012: The Next Phase of Resource Management



Public Comment

For More Information:



Department of Environmental Management

Environmental Lands Division

3620 Fletch Haven Drive

Tarpon Springs, FL 34688

727-453-6900

www.pinellascounty.org/environment

