

Pinellas County
Department of Environmental Management
Environmental Lands Division

January 2008





BOARD OF COUNTY COMMISSIONERS

Robert B. Stewart - Chairman

Calvin D. Harris - Vice Chairman

Ronnie E. Duncan

Susan Latvala

John Morroni

Kenneth T. Welch

Karen Williams Seel

Interim County Administrator

Fred E. Marquis

Assistant County Administrator

Elizabeth A. Warren

Bureau Director of the Department of Environmental Management

William M. Davis

Environmental Lands Division Director

H. Bruce Rinker Ph.D.

ACKNOWLEDGMENTS

Editor

Catherine S. Flegel Ph.D.

Layout & Design

D. W. "Skip" Holmes

Technical Assistance

William M. Davis

Laura Potter

H. Bruce Rinker Ph.D.

Maps

Marcia Colby

Photographs

Division Staff and Volunteers

We Travel Together...

Adlai Stevenson, the great American political orator, once said of the world in which we live, “We travel together, passengers on a fragile spaceship, dependent on its vulnerable reserves of air and soil; all committed for our safety to its security and peace, preserved from annihilation only by the care, the work, and I will say, the love we give our fragile craft.”

Our fragile spaceship, the Earth, is home to 30 million different kinds of living things on the planet. Numerous conservation-minded organizations have divided the surface of the planet into “biological hotspots,” areas of extraordinary biodiversity weighed down by extraordinary human pressures. Our parcel of Florida – some 15,000 acres of sensitive lands in Pinellas County – is located in the northern boundary of one of those hotspots, the Caribbean Hotspot, stretching from north-central Florida, down the peninsula, and into the Caribbean. It’s a special place that contains rare flora and fauna and exceptional landscapes in an incomparable climate. Thanks to the citizens and the Board of County Commissioners for Pinellas County, these spectacular acres are available for the visiting public to enjoy.

Ecology is defined as the science of interrelationships among living things and their environment. The word is derived from the Greek root, oikos, meaning house. The house, or spaceship, demands our cooperation in perpetuity. This is called ecological stewardship that we accomplish through land management, research, and education.

All of us staff members and volunteers for Pinellas County’s Environmental Lands Division invite you to explore our public lands: cypress domes, beaches, upland scrub forests, swamps, and all their “creatures great and small.” Come share with us some of the natural treasures of Florida’s west coast!

A handwritten signature in black ink, appearing to read "H. Bruce Rinker". The signature is fluid and cursive, with a large initial "H" and "R".

H. Bruce Rinker, Ph.D.
Division Director

Why were we created?

During the late 1960s and early 1970s, the residents of Pinellas County recognized the need to protect and restore the County's rich natural heritage. This concern followed a period of continued development, often done at the sacrifice of the natural environment. Pinellas County government responded with an initiative that brought together volunteers from governments, environmental groups, architects, planners and private citizens to identify and prioritize environmental lands within the County for protection, potential acquisition and management. In 1972, the *Red Flag Charrette* (RFC- "*Charrette*" is French for intensified effort) was published. Two years later, Pinellas County established the Department of Environmental Management. The RFC developed a comprehensive study that addressed the current state of the County's environment, wildlife and habitat, transportation and development, including future land use. Recommendations from the RFC identifying land that should be purchased and maintained as preserve lands helped guide land purchases for the next three decades.

Since 1972, the Board of County Commissioners, with voter approval, acquired large tracts of native Florida habitat. Citizen support remains strong for the conservation of environmental lands. Over the past 30 years, they voted to tax themselves five different times to provide funding for land acquisition and management. This commitment began with the *Parkland Acquisition Fund* in 1972, which was approved through a referendum with 67 percent voter approval. Under this program, 438 acres of passive parkland were acquired. In 1980 acquisition efforts continued with the *1st Endangered Lands Fund*. Sixty-two percent of the voters passed this two-year, one-quarter millage tax that acquired over 2,216 acres of land. In 1986, 76 percent of the voters approved the *2nd Endangered Lands Fund* for another two years and 536 acres were acquired. Following the adoption of the Pinellas County Comprehensive Plan in 1989, citizens approved a one-cent infrastructure sales tax to be assessed for ten years. This sales tax, called the *Penny for Pinellas*, resulted in the purchase of more than 2,013 acres. The public approved an additional ten-year tax by voting for the *Penny for Pinellas Extension* in 1997. The funds also have been used to manage and develop these lands in accordance with approved plans.

Following the vision of the RFC, Pinellas County created the Environmental Lands Division within the Department of Environmental Management. This Division manages the diverse environmental lands within the County, often partnering with the State of Florida, Southwest Florida Water Management District, and other local governments to achieve similar goals. Through their combined efforts, the RFC's legacy of sound environmental stewardship continues.



Mobbly Bayou Wilderness Preserve.

Joe's Creek Management Area.



Shell Key Preserve.



Brooker Creek Preserve.

What do we manage?

Our Mission ...

...is to provide sound stewardship to the County's wild lands and opportunities for the appreciation of their intrinsic value.

We achieve our mission by promoting environmental education, implementing sound land management and habitat restoration practices, supporting ecological research and monitoring, providing passive recreational opportunities, and of course, conserving natural Florida habitats. These wild lands, collectively known as preserves or management areas, represent approximately 7.5% of the County.

Pinellas County Preserves and Management Areas are designated wild areas that are managed for the conservation, protection, and enhancement of natural and cultural resources while allowing for sustainable passive public recreational uses that are compatible with approved management plans and applicable ordinances and laws.

Good land stewardship requires management plans that outline and guide the direction, focus and future for each tract of land. Effective management plans require detailed analysis and evaluation of current conditions, and a prescription of how to achieve desired conditions. A successful management plan is one that has the support of the local community and governing entity. In Pinellas County, managed lands become a preserve when its management plan is reviewed and approved by the Pinellas County Board of County Commissioners (BOCC).



*Brooker Creek Preserve (8,298 acres)
at the urban interface.*

*Mobbly Bayou Wilderness Preserve
(391 acres).*



*Weedon Island Preserve (3,696 acres)
looking southeast toward the fishing pier,
paddling launch and observation tower.*



*Shell Key Preserve (2,191 acres) on the
Gulf of Mexico, looking north.*

Where are our environmental lands?

Our lands are located from the northeastern to the southwestern corners of Pinellas County. Captured within these lands are all the representative natural Florida habitats within this region. Protection is provided for all environmental lands, ranging from just under 8 to over 8,000 acres, regardless of size.

Currently, we manage four preserves:

Brooker Creek Preserve

Weedon Island Preserve

Shell Key Preserve

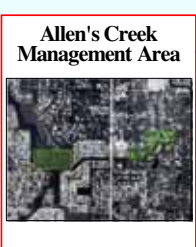
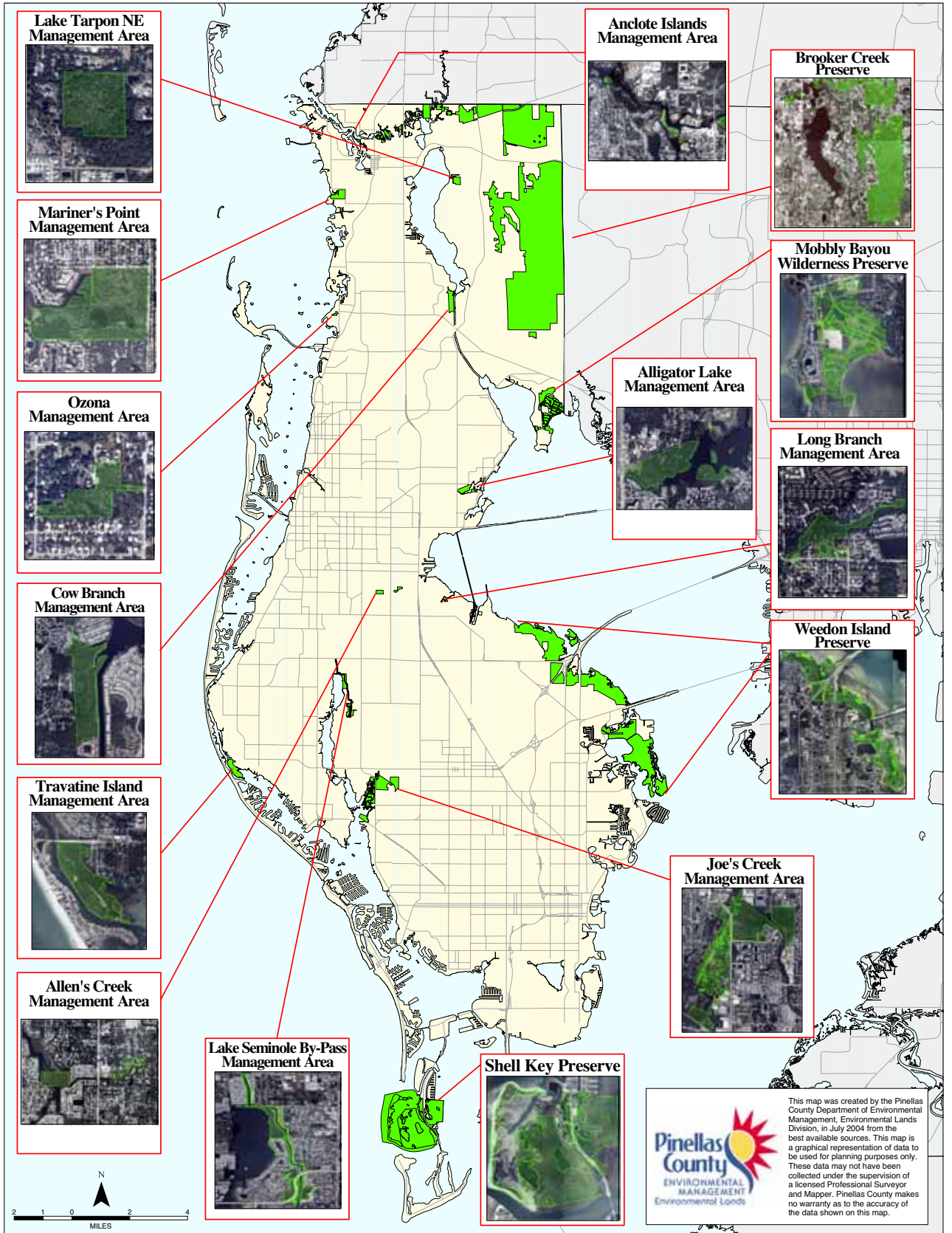
Mobbly Bayou Wilderness Preserve

Preserves are characterized by being fairly large tracts of land that include passive recreation, such as hiking, fishing and kayaking, as an integral component.

Management Areas, however, are generally smaller tracts of environmentally sensitive lands with limited to nonexistent opportunities for passive recreation. Currently, we oversee eleven Management Areas.

PINELLAS COUNTY ENVIRONMENTAL LANDS

JULY 2004



Pinellas County
 ENVIRONMENTAL MANAGEMENT
 Environmental Lands

This map was created by the Pinellas County Department of Environmental Management, Environmental Lands Division, in July 2004 from the best available sources. This map is a graphical representation of data to be used for planning purposes only. These data may not have been collected under the supervision of a licensed Professional Surveyor and Mapper. Pinellas County makes no warranty as to the accuracy of the data shown on this map.

Who are our partners?

Acquiring and managing environmental lands can be an expensive proposition, so we often form management partnerships with other organizations and “pool” our efforts. Property acquisitions of different ownership are combined to create contiguous natural areas. Currently, over half of our Preserves are owned by Pinellas County. The remaining property owners include the State of Florida, the Southwest Florida Water Management District, Progress Energy and the City of Oldsmar. Almost all Management Areas are owned by Pinellas County.

Preserves and the distribution of ownership.

Preserve	Acres	Ownership				
		Pinellas County	SWFWMD ^a	State of Florida	Progress Energy	City of Oldsmar
Brooker Creek Preserve	8,298	78.4%	19.5%	—	2.1%	—
Mobbly Bayou Wilderness Preserve	391	47.1%	—	4.6%	—	48.3%
Shell Key Preserve	2,191	51.6%	—	48.4%	—	—
Weedon Island Preserve ^b	3,696	3.1%	—	87.9%	9.0%	—
Totals	14,576	54.4%	11.1%	29.7%	3.5%	1.3%

^a Management agreement with Southwest Florida Water Management District (SWFWMD)

^b Includes Gateway Tract and 400' buffer of submerged lands around the Preserve boundary

Management Areas and the distribution of ownership.

Management Area	Acres	Ownership	
		Pinellas County	State of Florida
Allen's Creek	33	100.0%	—
Alligator Lake	61	100.0%	—
Anclote Islands	15	100.0%	—
Cow Branch	86	100.0%	—
Joe's Creek	369	96.7%	3.3%
Lake Seminole By-Pass	97	100.0%	—
Lake Tarpon NE	39	100.0%	—
Long Branch	16	100.0%	—
Mariner's Point	76	100.0%	—
Ozona	8	100.0%	—
Travatine Island	95	100.0%	—
Totals	895	98.7%	1.3%

How was Brooker Creek Preserve acquired?

Brooker Creek Preserve, at 8,298 acres, was one of the projects envisioned by the *Red Flag Charrette* in 1972. The existence of this Preserve is possible because of support from the Board of County Commissioners, the citizens of Pinellas County who taxed themselves five times during the last 30 years, generous donations, and cooperative management agreements with other County departments and State agencies.

The story of how Brooker Creek Preserve was created is interesting. It begins with what was known as the Old East Lake Wellfield, which is located in a relatively undeveloped area of Pinellas County during the early 1970s. This small core, along with Progress Energy's transmission corridor, represent 6% of what we now call Brooker Creek Preserve.

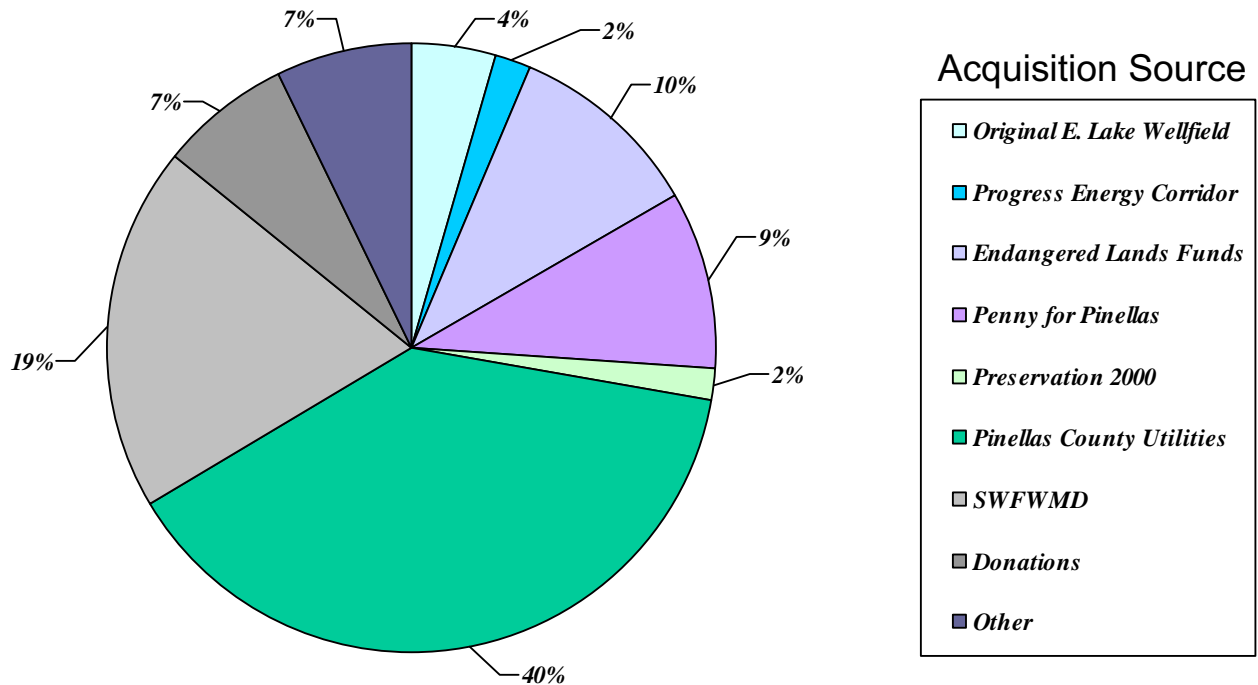
Over the past three decades, tax dollars generated from citizen support allowed Pinellas County to purchase about 19% of the Preserve. Approximately 10% was acquired through the *1st and 2nd Endangered Lands Funds*, with an additional 9% added through funds generated from the *Penny for Pinellas and the Penny for Pinellas Extension*.

More recently, the Florida Legislature approved *Preservation 2000*, a program designed to preserve unspoiled natural lands throughout the State. Funded for ten years through the sale of bonds, matching funds from this program have allowed for the purchase of 2% of Brooker Creek Preserve.

Other County departments and agencies also worked to make Brooker Creek Preserve possible. Since 1972, the Pinellas County Utilities Department has been methodically purchasing large contiguous parcels in the East Lake area of the County. Although protection of the recharge area of the County's regional potable water supply wellfield was the primary purpose for acquisition, the additional priority of natural resource protection was soon adopted. Currently, these lands represent 40% of Brooker Creek Preserve.

The Southwest Florida Water Management District (SWFWMD) also contributed through its land acquisition programs that focus on wetland preservation. Through cooperative agreements, Pinellas County manages over 1,600 acres of SWFWMD lands, which represent 19% of the Preserve.

Brooker Creek Preserve Acquisitions 8,298 Acres



The generosity of citizens to environmental projects is evident at Brooker Creek Preserve. Donations from eight different entities account for 7% of Brooker Creek Preserve. Since its conception by the *Red Flag Charrette*, citizens have invested over \$40.8 million in land acquisition for Brooker Creek Preserve. This remarkable commitment will have long-lasting effects as Pinellas County continues to set aside and conserve natural systems.

How do we manage the land?

Pinellas County environmental lands are managed to promote the health and quality of habitats and wildlife native to the County with special emphasis on maintaining natural biological diversity and locally rare and historically indigenous species. Many of our properties have been altered by past human activities ranging from agriculture to urban land use practices. An active approach to management is needed to restore these lands to an ecologically healthy condition. Tools used by land managers include: prescribed fire, restoration, exotic invasive species control, mitigation, ecological monitoring, and research as described on the following page.

Prescribed fire is an essential part of Florida's ecology and many natural communities have evolved to depend on periodic fire events. Prescribed burns are not only used to reduce flammable fuel loads resulting from the build-up of vegetation in fire-suppressed natural communities, but also to maintain healthy ecosystems. The Pinellas County Wildland Fire Team in cooperation with the Florida Division of Forestry conducts prescription burns.



Hydrological restoration continues to be a major focus for our ecologists and land managers. Small changes in the elevation of the land, brought about through road and ditch construction or old trails and historical plow lines, can result in significant shifts in how surface water flows across the land.

Exotic invasive vegetative species control and removal in natural areas and subsequent replanting with native species is another form of restoration. Brazilian pepper, air potato, chinaberry, camphor and ear trees, melaleuca, and Australian pine are the exotic species that require our constant attention.



Mitigation is a process where natural lands are enhanced, restored, or created due to a loss of habitat on lands that were converted to other uses such as roads and urban development. At times, mitigation can occur on the same site as the impact that necessitates it, while at other times, it occurs elsewhere. Our preserves and management areas have benefited from mitigation projects.

Ecological monitoring provides the knowledge about the plants and animals that live, or should live, within a managed area. Inventories provide us a list of species occupying an area and, in the case of restoration projects, are typically done to establish a set of baseline data on current conditions. Monitoring studies assess changes in resources and can be designed to evaluate the effects of a particular restoration treatment, or used to estimate general trends.



Research is used to support environmental lands conservation initiatives of the Division. Through research, the Division advances the scientific knowledge of our protected lands, provides opportunities for professional advancement to students and other environmental professionals, and shares its experiences and knowledge with other agencies and the scientific community.

What public opportunities are provided?

Public use varies on Pinellas County's Environmental Lands depending on site conditions and generally consist of low-impact activities. The challenge for our land managers is to decide which uses are appropriate, where they should be located and resolve any long-term maintenance issues. Public uses on these lands include day hiking, horseback riding, paddling trails, fishing, picnicking, shelling, swimming, boating, and nature appreciation. Future plans may include primitive camping. Please contact us for further information at (727) 453-6900.

Brooker Creek Preserve - At over 8,000 acres, Brooker Creek Preserve is the largest natural area in Pinellas County. Located in the northeast corner of the county, it is comprised mostly of pine flatwoods and freshwater swamps. A significant portion of the watershed for Brooker Creek, a major tributary of Lake Tarpon, is included within the boundary of the Preserve. Public use opportunities in *"Our Wildest Place"* include:

- * Over 10 miles of equestrian trails
- * A 1.5 mile self-guided hiking trail
- * Brooker Creek Preserve Environmental Education Center
 - State of the art exhibits
 - Picnic shelters



Weedon Island Preserve – Including the associated Gateway Tract, this expansive 3,000-acre region on Tampa Bay in north St. Petersburg is comprised mostly of marine habitats with some uplands. It also is a site rich in cultural history as indigenous peoples, including those during the Weeden Island Cultural Period, occupied this site for thousands of years. The public can experience the ecological and cultural wonders of *"A Place to Remember"* through:

- * Weedon Island Cultural and Natural History Center
 - Environmental art gallery
 - Archaeological and natural exhibits
- * Fishing Pier with public restrooms and paddling launch
- * Two marked paddling trails
- * Over 4 miles of hiking trails
- * A boardwalk and observation tower complex

Shell Key Preserve – Established in 2000 with the cooperation of the Florida Department of Environmental Protection, Shell Key Preserve protects sensitive marine and barrier island habitats. Included in this 1,800-acre preserve is the County's largest undeveloped barrier island (Shell Key), which is home to numerous nesting, migrating, and wintering shorebirds. West Indian Manatees are often encountered in the extensive seagrass beds adjacent to the island, and loggerhead sea turtles nest along its western beaches. Public use opportunities include:

- * Beachcombing and shelling
- * Swimming and snorkeling
- * Boating and kayaking
- * Camping and fishing
- * Nature appreciation



Weedon Island Preserve Cultural and Natural History Center

Weedon Island Preserve Cultural and Natural History Center opened its doors in December 2002, and over 15,000 visitors enjoyed this beautiful facility in 2003. The Center continues to draw both residents and tourists with an array of educational programs, presentations and workshops including professional meetings and special events. Guided hikes and canoe trips, boardwalk and special tours, an environmental art gallery, and archaeological and natural exhibits continue to promote our mission to foster a greater understanding and appreciation of the special relationship between the natural and Native American cultural aspects of Weedon Island Preserve.

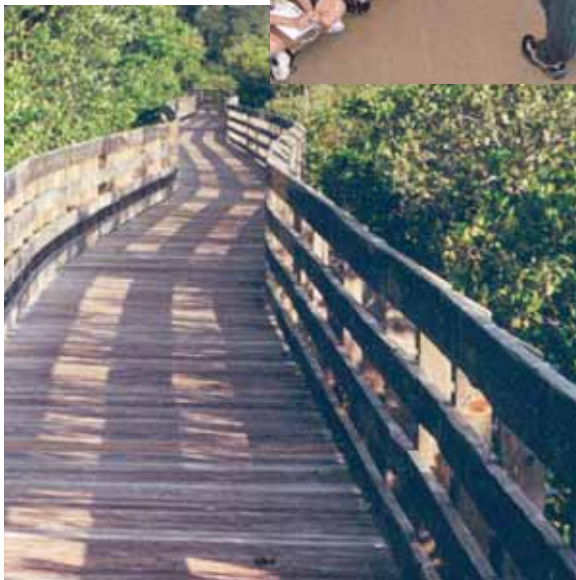


Weedon Island Preserve Cultural and Natural History Center.

Scenic trail at Weedon Island Preserve.



Environmental class at the Center.



ADA-accessible boardwalk.

Brooker Creek Preserve Environmental Education Center

The Brooker Creek Preserve Environmental Education Center opened its doors to the public in June 2004. The mission of the Center is to raise awareness and understanding of the natural systems in Florida and how humans interact with them. Programs highlight the importance of conserving and managing wildlands. The Center buildings were designed with minimum impact in mind. Each building not only blends with its surrounding landscape, but also brings nature in through spacious windows. An exhibit hall showcases the five main ecosystems found at the Preserve. The Center also includes one outdoor and two indoor classrooms and an auditorium that seats over 200. Access to Brooker Creek from the classrooms will provide unique opportunities to classes, students and researchers to study this dynamic system. The Center also features a Nature Store and a Resource Center equipped to provide information, guidance and logistic support to citizens interested in carrying out environmental projects in their homes, communities and work places.



Enjoy "Metamorphosis", a sculpture along the boardwalk by artist Tim Upham.

Native plants flank the entrance to the Exhibits Hall.



The Object Theater exhibit tells a fascinating story.



Take a stroll along the boardwalk and become surrounded by Florida's natural beauty.

Volunteerism and Internships

Pinellas County volunteers continue to serve the Environmental Lands Division in a large variety of positions. Volunteer activities span from the northern woods of Brooker Creek Preserve to the southern beaches of Shell Key Preserve, and from the eastern mangrove swamps of Weedon Island Preserve to the western shores of Mariner's Point Management Area. From 2002 to 2003, volunteer contributions nearly doubled to over 8,600 total hours. This level of commitment, provided primarily by our 100 long-term volunteers, remains strong during 2004. Environmental Lands Division volunteers pick up trash, provide public outreach, assist with research studies, help monitor animal populations, and assist the public as exhibit docents. They build picnic shelters, maintain trails and boardwalks. They count birds and butterflies. They blaze new trails and plant gardens. They volunteer as camp counselors and hike guides. They do all of these activities and services with minimal supervision by staff, thus enabling the Environmental Lands Division to achieve its mission.

Our Division continually provides educational enhancement opportunities for local university students through six Pinellas County-funded Management Intern positions. These positions are designed to provide college students experience and training in a variety of ecological and educational projects while working with our staff. In addition, opportunities exist for unpaid interns looking to earn academic exit requirements from accredited environmental programs to work side-by-side with our research and education staff. The Division also supports local high school internships. All of our interns have greatly contributed to the Division's mission of providing sound stewardship and appreciation of our environmental lands.



Volunteers assist visitors at the Brooker Creek Preserve Environmental Education Center's environmental resource center.

Volunteers check in before an event.



Volunteer hike guides explain the uniqueness of natural Florida environments.



University students gain experience through our Management Intern program.

Please Visit Our Centers



Brooker Creek Preserve Environmental Education Center

3940 Keystone Road
Tarpon Springs, FL 34688
Phone: (727) 453-6800
Fax: (727) 453-6801
Information Desk: (727) 453-6970



Weedon Island Preserve Cultural and Natural History Center

1800 Weedon Drive NE
St. Petersburg, FL 33702
Phone: (727) 453-6500
Fax: (727) 217-7202
Information Desk: (727) 453-6506