Kayakers often encounter this unique animal in the Park’s estuary—the horseshoe crab (*Limulus polyphemus*) is a marine arthropod that comes back to the shallows in late spring to early summer for spawning. Small juveniles can be seen in the estuary all year.

There are many interesting facts about the horseshoe crab: it has existed for more than 200 million years; it is more closely related to spiders than crabs; it has ten eyes, and it swims in a backstroke style. The horseshoe crab is an important food source for loggerhead sea turtles and shore birds.

The crab is just as important to humans as it is to wildlife. Researchers found that the blood of the horseshoe crab is very useful to us. A protein in the blood is used by pharmaceutical and medical device manufacturers to test their products for the presence of endotoxins—bacterial substances that can cause fevers and even be fatal to humans. Researchers have also been studying horseshoe crabs’ blood for other uses, such as detecting cancer or developing medicines for AIDS. The blood is taken from adult horseshoe crabs without harming them. This valuable blood is blue-colored. The blue color is due to hemo-cyanin, an oxygen-carrying protein that contains copper. Hemocyanin is usually colorless, but when oxygenated, it turns slightly blue. (In contrast, our blood has hemoglobin, an iron-based oxygen-carrying protein that turns red when oxygenated). Blue-colored blood is not unique in invertebrates; mollusks such as octopusses and squids, and crustaceans, such as shrimps and crabs also have blue blood.

This noble and valuable blue-blooded animal is facing the same critical issue as many other animals are—lack of habitat. *Limulus polyphemus*’s cousin, *Tachypleus tridentatus*, used to be abundant in my homeland, Japan, but now the species is endangered because of intense coastal development. I remember being surprised and fascinated, when I found numerous horseshoe crabs in the Park’s estuary for the first time. Scientists at the Fish and Wildlife Research Institute (FWRI) are asking for help from the public in identifying beaches in Florida where horseshoe crabs spawn. See the following link for their Horseshoe Crab Survey: [http://research.myfwc.com/horseshoe_crab](http://research.myfwc.com/horseshoe_crab).

Keeping a healthy horseshoe crab population is important for both wildlife and humans, and it’s partly up to us whether this amazing living fossil will live another million years.
Welcome New Friends Members!

Sharon Bauer
Walter Bauke
Kevin Bell
Walter Colbitts
Mr. & Mrs. Matthew Costello
Benjamin Cote
Brian Davis
Pamela Drettmann
Mr. & Mrs. Bob Friedman
Mr. & Mrs. Andreas Georghiou
Patti Hamilton
Edwin Hernandez
Deborah Knep
Bob Kronenberg & John Kasula
Susan Lytal & Mark Williams Fam.
Lupita McElroy
Brian Mudd
Mary Murphy
Miriam Patton
John Pew Family
Carolyn Pfrommer
J. Proujansky
Stacie & John Spoto
José Torres
Brian Warfield
Ben Warmuth
Brian Wilson
Derek Wolfhope
Barbara Wright

The design phase for our proposed new building is now complete, and the architects are at work on the construction phase of the building plans. Displayed below is a rendering of the Proposed Education and Welcome Center Facility.

We are very excited about this major addition to the Park's facilities and the resulting enhancement to its educational programs and Park exhibits. But before we can begin construction, much fundraising work lies ahead for the Friends of MacArthur Beach State Park.

Ted Thoburn, President
Friends of MacArthur Beach State Park

Board of Directors 2007

Ted Thoburn, President
Paul Aleskovsky
Leni Bane
Kay Carnes
Terry Coulliette
E.J. Crittenden
Margretta Curry
Mary-Therese Delate
Rebecca Doane
Deborah Drum
Watesah Dytrych
Lynn Focht
René Friedman
Susie Fruehauf
Patti Hamilton
Larry Harjehausen
Janet Heaton
Susan Lytal
Debra McCloskey
Dr. Bill Mech
Kitty Omura
Stephanie Pew
Carolyn Stone
Nancy Best Van Dueren
Gilda Vogel
Stephen Wigal

Honorary Directors
William J. Hyland, Jr.
Bill Nolan

Community Relations Mgr
Cheryl Houghtelin
Administrator
Martin A. Shiffman

Newsletter Coordinator
Leni Bane

Bottom row from left: Kitty Omura, EJ Crittenden, Janet Heaton, Larry Harjehausen, Gilda Vogel, Bill Nolan (standing).
Second row from left: Susie Fruehauf, Paul Aleskovsky, Rebecca Doane, Stephanie Pew, Gretta Curry, Board President Ted Thoburn, Vice-President Bill Mech, Carolyn Stone.
Third row from left: Leni Bane, Patti Hamilton, Secretary Debra McCloskey, Debra Fell, Friends Administrator Marty Shiffman, René Friedman
Fourth row from left: Director of Community Relations Cheryl Houghtelin, Park Manager Terry Coulliette.

Not Pictured: Treasurer Tesa Dytrych, Kay Carnes, Deborah Drum, Susan Lytal, John Marr, Paul Thompson, Stephen Wigal, Nancy Van Deuren, Bill Hyland, Assistant Park Manager Patrick Rash.
The Park’s annual NatureScaping Earth Day Celebration is scheduled for April 14 from 10-3:00 p.m. along with a coastal clean-up from 8-11:00 a.m. Since the early 1990s, John D. MacArthur Beach State Park has hosted an Earth Day Celebration, featuring environmentally-themed vendors, speakers, a silent auction, eco-crafts for kids, animal exhibits, storytelling, kayak tours, nature walks, native plants for sale, great food and music. Money raised from the event benefits school programs at the Park.

Guest speakers include Larry Wood, Curator of the Loggerhead Marinelife Center in Juno Beach, speaking about the biology and conservation of sea turtles. Also is Dr. George Rogers, Chairman of the Horticulture Department at Palm Beach Community College, who will focus on using native plants for low maintenance gardens. Local butterfly expert, Alana Edwards, will teach how to attract and identify butterflies of South Florida. Clive Pinnock, of the Okeeheelee Nature Center, and his live animal show will be in the amphitheater, where you will learn about animal survival strategies. The New Day Singers will wow you with their solos, duets and group performances. Who will receive the Environmental Champion Award this year? Find out whom the Park will award for making a difference in environmental awareness and conservation. Get out your camera for Busch Wildlife Sanctuary’s live animal show, featuring barred owls, king snakes, raptors and opossums.

There’s lots to do at the kids’ eco-craft area. Volunteers will show how to make necklaces, bracelets, bookmarks and more from treasures found on the beach. And storytelling and face-painting aren’t just for kids! More than 50 vendors will be selling everything from exotic musical instruments to artwork and Florida native plants. Exclusive for us this year are NatureScaping t-shirts for sale, designed by a student at the Benjamin Lower School. Don’t forget to check out the silent auction in the Nature Center. All the items for auction have been donated by local businesses and include gift certificates to local restaurants, kayaks, framed photographs, plants and more.

This popular event is all for free. The only things to pay for are gifts from one of the vendors, or if you make the top bid in the silent auction!

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Summer Day Camps 2007

Please pick up a Summer Camp registration form at the Nature Center or visit the Park’s Website: www.macarthurbeach.org, or call (561) 624-6952.

Little Turtle Art Camp

Little Turtle Camp is designed for children 7 and 8 years old. The camp offers a variety of crafts, games and stories based on a Native American theme. Indoors and outdoors. Snacks provided daily. Cost: $80.

July 30-Aug. 3 • 8:30 a.m.-12:30 p.m.

Junior Ranger Camp

Junior Ranger Camp is designed for children 9 and 10 years old. Campers will explore the beach, maritime hammock, and rock reef and learn about the natural communities in South Florida. Children must be good swimmers. Snorkel equipment required. Snacks provided daily. Cost: $80 per session, one session per child.

Session 1: July 2-6 • 8:30 a.m.-12:30 p.m.
Session 2: July 16-20 • 8:30 a.m.-12:30 p.m.

Marine Biology Camp

Marine Biology Camp offers 11 through 13 year-old children a rare opportunity to learn about the marine environment of the Park through snorkeling, beach exploration and mudflat walking. Campers must come with an enthusiasm for learning, willingness to explore, and be good swimmers who are comfortable swimming in the ocean. Snorkel equipment required. Snacks provided daily. Cost: $95 per session, one session per child.

Session 1: June 11-15 • 8:30 a.m.-12:30 p.m.
Session 2: June 18-22 • 8:30 a.m.-12:30 p.m.
Farewell Kiwi, Welcome Nalu!
by Stephanie Gardella

Park visitors may remember Kiwi, our young loggerhead sea turtle. He was growing fast (maybe a little too fast!) and outgrew our reef tank that had been his home for a year. On November 3, 2006 Kiwi was transferred to Living Sea’s aquarium at Walt Disney’s Epcot Center. There he will stay until he grows to a releasable size. We’ll miss you, Kiwi!

On the day after Thanksgiving, 2006, MacArthur Park’s Nature Center received something to be thankful for: a new baby sea turtle. The rescued turtle was born on a local beach in the late summer and was acquired from the Marinelife Center of Juno Beach. The only problem was that he (or she) didn’t have a name!

When the Park receives a new loggerhead sea turtle (about once a year) we hold a “Sea Turtle Naming Contest.” Local elementary schools send us names to be chosen. This year, we received 88 submissions. We then narrow it down to 10 names and allow the public to vote for their favorite. The winning name (out of 387 votes) was Nalu (pronounced nah-loo), which means “breaking wave” in Hawaiian. Miss Ward’s class from Allamanda Elementary School submitted the name, because they have a Hawaiian-themed classroom.

Little Nalu is doing fine and growing well. The Park plans to build a large outdoor tank for Nalu before he outgrows his current residence. There we will keep Nalu until he reaches a shell length of 45cm (about 1.5 feet). Then we will release him into the ocean.

Creating a Friendly Beach for Sea Turtles
by Junko Nomura, Park Services Specialist

On March 3, the first leatherback sea turtle nest was reported in St. Lucie County. This is a sign that spring has arrived in Florida, and the exciting turtle season has begun.

The beach at MacArthur Park has been a favored nesting site for mother turtles. The Park has conducted sea turtle nesting surveys since 1982, just after the property became a State Park. Our beach is one of the many survey beaches in Florida, and data is gathered by the Fish and Wildlife Conservation Commission (FWC). 2006 nesting survey data shows the typical tendency: leatherback turtles come to nest first in early spring, followed by loggerhead turtles and later green turtles. In total, the Park recorded about 1,300 nests on our 1.8-mile beach. This may sound like a great number, but when we look at the data from the past 16 years, it was not the best. In terms of the most common species—the loggerhead turtle—the recent eight-year average has dropped about 200 from the peak in the mid to late ’90s. According to the FWC, the number of loggerhead nests in Florida has been in significant decline since the late ’90s.

The saddest aspect of this news is that too many adult turtles die at sea as a result of the fishing industry. Longline fishing hooks often get ingested by the turtles, and shrimp trawl nets catch sea turtles accidentally, drowning them. Dark, quiet beaches like
**Gift Gab**

**Hot Item:** "Turtle eggs" that hatch and a turtle grows to maturity! They are at the desk in the Gift Shop.

**New Item:** Kids t-shirts that you color with special crayons: turtles, dolphins, mermaids, and fish. You can throw the shirt in the laundry and re-color it!

**New Item:** Puppets that talk. Two styles are available.

A new floor display enables us to carry a greater selection of magnets: wood, clay, glass, etc.

We are in the process of replacing our fleet of kayaks and life-jackets. The current fleet of kayaks and life-jackets will be part of the silent auction at NatureScaping.

Look for our display ad in the Palm Beach Post “TGIF” section each Friday. We also have ads in many of the special sections published by the Palm Beach Post. Please let us know what you think of them.

Membership continues to grow. January and February set new highs for new and renewed memberships... Thanks to Donna!

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**Manager’s Musings**

After a mild winter, we are looking forward to a beautiful spring with lots of fun activities in the Park. Our winter visitors and volunteers at the Park are beginning to head back north. Summer will be here before we know it.

With Daylight Savings Time beginning earlier this year, you will be able to enjoy the Park even more. With increased daylight, we plan to extend the time to have kayaks available for the public.

Progress continues with our Friends supported Park enhancement programs. Thanks to their support, we will soon be seeing the fruits of the labor of the CSO and Capital Campaign.

Our ranger-led kayak tours continue to explore the Lake Worth Lagoon and Munyon’s Island. This two-hour tour is conducted by our staff and volunteers, sharing their love and knowledge of the natural environment here at John D. MacArthur Beach State Park. Participants often see many migrating birds and sometimes even manatees and dolphins.

Join us as we continue enjoying 2007, celebrating the adventure, exploring The Real Florida!

Terry
Terry Coulliette, Park Manager

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**Did You Know...**

...that in 1976, John D. MacArthur, one of the richest men in the country, received a beautifully engraved invitation from President and Mrs. Ford requesting that he attend a White House dinner on the evening of July 7, 1976. The occasion: the arrival of her majesty Queen Elizabeth the second and his Royal Highness, Prince Philip Duke of Edinburgh. Mr. Mac was not happy about this, and he made sure that all of us at the hotel (that he called home for many years) were aware of how he felt. You see, he was not one to get dressed up for any occasion, let alone one that entertained the rich and famous. The big problem was the required dress attire. For a man that usually dressed like a beach bum, white-tie-and-tails was a big order.

After he realized that he was one of only two hundred people in the nation to be invited, making him one in a million, he decided to go and make the best of it.

Once back from his visit, he sat at his office table in the Colonnades coffee shop. A grin graced his face as he read the front page of the Palm Beach Post: “John D. Unimpressed By Her Majesty.” The article quoted him on several aspects of the White House affair. “The Queen was beautiful from the crown up, and I never saw so many diamonds in one pile.” When asked about the dinner, he replied, “Forgive me if I don’t remember, it started with a cocktail party, and if your glass was empty it didn’t stay that way for long. They were really trying to get rid of that stuff, and I was more than glad to help them.”

...that these are excerpts from Bob Sanford’s biography of John D. MacArthur— A View from the Bar—that you may buy in the Nature Center?
My name is Sarah Widlansky. I started volunteering at the Park in the 7th grade to get community service hours for school. I am now in 10th grade at Suncoast High School. I stayed volunteering at the Park because of the friendly staff and the volunteers I get to meet. I volunteer in the Nature Center, feeding and caring for the animals. I like feeding the fish and handling the snakes. My favorite things to do at the Park are kayaking and going to the beach. In my spare time, I take dance classes and I like going out with my friends. Volunteering at the MacArthur Beach State Park is a great way to earn service hours, having fun at the same time.

Volunteer Awards for 2006
by Junko Nomura, Park Services Specialist

Thanks to all the volunteers who helped the Park in many different ways in the year 2006. The Friends of MacArthur Beach State Park hosted an annual volunteer awards luncheon for about 70 volunteers, their spouses, and Park staff at Sullivan's Irish Pub and Restaurant in North Palm Beach to recognize some of those volunteers who achieved milestones. Long-time volunteer, Gilda Vogel, who volunteers as a school tour guide, was honored for her 4,000 hours given to the Park. Larry Harjehausen, Friday's tram driver and also a Friends board member, was honored for his 3,500 hours of work. Another long-time volunteer, Alicia Didia, who welcomes visitors at the Nature Center, received a 3,000-hour award. Tram drivers Bill Nolan and Mort Green were honored for 2,000 hours and 1,000 hours respectively. One of the friendliest Nature Center volunteers, Morris Zabarkus, also received his 1,000-hour award. Finally, Bruce Kay, David Erlanger, Donna Tighe and Susan Gay received 500-hour awards, Stephanie Grant, Chris Halfpap, Frosty Sutherland, Jo Ann Smith and Helen Coffey received 250-hour awards, and Paulette Szlivko, Serena Carton, Joe Coyle, Bill Mech, Kitty Omura, Lori Miller, Kate Weingart and Kari Foster received 100-hour awards.

John D. MacArthur Beach State Park has the second largest volunteer group in the Florida Park Service. We are fortunate to have so many dedicated volunteers with various backgrounds and abilities. The Park staff would like to give a huge thank-you to every volunteer for your time and passion.
### April

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<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>01</td>
<td>Sunday</td>
<td>2:00 p.m.</td>
<td>Intro to Kayaking by Adventure Times Kayaks</td>
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<tr>
<td>07</td>
<td>Saturday</td>
<td>10:00 a.m.</td>
<td>Butterfly Walk</td>
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<tr>
<td>08</td>
<td>Sunday</td>
<td>1-3:00 p.m.</td>
<td>Volunteer Orientation</td>
</tr>
<tr>
<td>11</td>
<td>Wednesday</td>
<td>8:30 a.m.</td>
<td>Yoga on the Beach</td>
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<tr>
<td>14</td>
<td>Saturday</td>
<td>8-11:00 a.m.</td>
<td>Beach Clean-up</td>
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<tr>
<td>14</td>
<td>Saturday</td>
<td>10-3:00 p.m.</td>
<td>NatureScaping, An Earth Day Event</td>
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<tr>
<td>15</td>
<td>Sunday</td>
<td>1-5:00 p.m.</td>
<td>Bluegrass Music</td>
</tr>
<tr>
<td>25</td>
<td>Wednesday</td>
<td>8:30 a.m.</td>
<td>Yoga on the Beach</td>
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<tr>
<td>28</td>
<td>Saturday</td>
<td>10:00 a.m.</td>
<td>Butterfly Walk</td>
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<tr>
<td>28</td>
<td>Saturday</td>
<td>7-9:00 p.m.</td>
<td>MacArthur Under Moonlight Concert: Feelin’ Good</td>
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### May

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<tr>
<th>Date</th>
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<tr>
<td>06</td>
<td>Sunday</td>
<td>2:00 p.m.</td>
<td>Intro to Kayaking by Adventure Times Kayaks</td>
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<tr>
<td>09</td>
<td>Wednesday</td>
<td>8:30 a.m.</td>
<td>Yoga on the Beach</td>
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<td>12</td>
<td>Saturday</td>
<td>10:00 a.m.</td>
<td>Butterfly Walk</td>
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<td>13</td>
<td>Sunday</td>
<td>1-3:00 p.m.</td>
<td>Volunteer Orientation</td>
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<td>20</td>
<td>Sunday</td>
<td>1-5:00 p.m.</td>
<td>Bluegrass Music</td>
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<tr>
<td>23</td>
<td>Wednesday</td>
<td>8:30 a.m.</td>
<td>Yoga on the Beach</td>
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<td>26</td>
<td>Saturday</td>
<td>10:00 a.m.</td>
<td>Butterfly Walk</td>
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<tr>
<td>26</td>
<td>Saturday</td>
<td>7-9:00 p.m.</td>
<td>MacArthur Under Moonlight Concert: Bill Rich &amp; Friends</td>
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<tr>
<td>27</td>
<td>Sunday</td>
<td>1-3:00 p.m.</td>
<td>Recreational Skills: Introduction to Snorkeling</td>
</tr>
<tr>
<td>29</td>
<td>Tuesday</td>
<td>9:00 a.m.</td>
<td>Turtle Walk Reservations Start</td>
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### June

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<tr>
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<tr>
<td>02</td>
<td>Saturday</td>
<td>10-Noon</td>
<td>Guided Reef Tour</td>
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<tr>
<td>03</td>
<td>Sunday</td>
<td>2:00 p.m.</td>
<td>Intro to Kayaking by Adventure Times Kayaks</td>
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<tr>
<td>09</td>
<td>Saturday</td>
<td>10:00 a.m.</td>
<td>Birding at MacArthur Park</td>
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<tr>
<td>09</td>
<td>Saturday</td>
<td>10-Noon</td>
<td>Guided Reef Tour</td>
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<tr>
<td>10</td>
<td>Sunday</td>
<td>1-3:00 p.m.</td>
<td>Volunteer Orientation</td>
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<tr>
<td>16</td>
<td>Saturday</td>
<td>10-Noon</td>
<td>Guided Reef Tour</td>
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<tr>
<td>17</td>
<td>Sunday</td>
<td>1-5:00 p.m.</td>
<td>Bluegrass Music</td>
</tr>
<tr>
<td>23</td>
<td>Saturday</td>
<td>10-Noon</td>
<td>Guided Reef Tour</td>
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<tr>
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<td>10:00 a.m.</td>
<td>Butterfly Walk</td>
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<tr>
<td>30</td>
<td>Saturday</td>
<td>7-9:00 p.m.</td>
<td>MacArthur Under Moonlight Concert: Band TBA</td>
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Every Weekend Animal Feeding in the Nature Center at 11:00 a.m.  
Every Sunday at 3:00 p.m. Snake Talk in the Nature Center

### Turtle Walks 2007

Reservations Begin Soon!

The Turtle Walk program is one of the most popular educational programs at the Park. The evening begins in the Nature Center with a slide presentation about sea turtles. Afterwards, participants will be led by an experienced Park ranger to the beach to observe a mother’s night-time nesting. Although we schedule the programs during the height of the nesting season, we cannot, of course, control whether or not sea turtles come, or if there is fine weather. When we are lucky enough to see a mother turtle nesting, it can create an unforgettable memory.

All sea turtle species in the world are endangered or threatened. They need people’s help to thrive. We are happy to hold this program to educate people and share this wonderful experience.

Reservation begins on May 28, 9 a.m.  
Call the Nature Center: (561) 624-6952.

You will need to provide:
- Master or VISA card number
- E-mail or fax to receive a confirmation
- Participants’ names & phone numbers

### Program Information

**Fee:** $5.00/person  
**Dates:** June & Early July (Dates TBA).  
**Time:** 8:15 p.m. until midnight
MacArthur are becoming rare in South Florida. Mother turtles approaching the shore at night are very careful to avoid bright areas. Light from roads and buildings keeps turtles away from the shore. Light also negatively affects hatchlings. They are supposed to crawl towards the brighter horizon (which should be the ocean in natural surroundings), but they get confused by artificial light and crawl in the opposite direction and often end up dying, eaten by predators, smashed by cars or dehydrated.

All species of sea turtles are threatened or endangered; that means they are in danger of becoming extinct. They need all the help they can get.

Local residents can easily get involved in protecting this magnificent species. Let’s keep the beach dark and quiet during the nesting and hatching seasons from March through November. Also, picking up trash along the beach is very important to avoid ocean debris that causes deadly injury to sea turtles and other marine animals. All of us at MacArthur Beach hope that many mother turtles will return once again to our local beaches this year.