UNIVERSITY OF FLORIDA
EXTENSION
Institute of Food and Agricultural Sciences

Sea Grant Florida

AT THE WATERS EDGE

Miami-Dade County
Florida Sea Grant

MIAMI-DADE COUNTY

□□□□M□□□□□□□□

February 2005– March 2005

Upcoming Events:

February 17-21
Miami International Boat Show at M.B. Convention Center

February 26
Sea Science Career Day
Miami Museum of Science
10am-1pm.

March 1-5
Beach Management & Tourism Conference at FIU University Park Campus. Call 305-348-1339 for information.

March 17—April 3
Miami-Dade County Fair

March 19
Miami River Day at Jose Marti's Park, 11am– 5pm. Call 305-421-4850 for more information.

For more information on these upcoming events, call the Sea Grant Extension Office at 305-421-4017.

Inside this issue:

Our Health and the Oceans

Our health is connected to the oceans. The activities we do on land affects what happens downstream. Pollutants like oil, fertilizers, pesticides, soap suds, and animal waste contain excess nutrients which are released into our watershed making it an unhealthy place for fish and other wildlife to live and reproduce. In addition, the sea is a place where people live, work , and play.

Recently, Congress passed the Oceans and Human Health Act, 33 U.S.C 3101-3104. This act will establish a coordinated effort of national research by the National Science and Technology Council to study the relationship between human health and the ocean environment. A 10 year plan is being designed which will create goals to further understand marine-related public health problems. Research may yield new treatments for human diseases and provide innovative perspectives of how our health is linked to the oceans.

The National Sea Grant Program will be working with other federal agencies in providing the public with information and outreach programs on Oceans and Human Health research and education.

Research on red tide has shown that it may have some potential therapies for Cystic Fibrosis. Studies have shown compounds found in red tide may improve the flow of mucus through the respiratory track, allowing air to move more quickly through the lungs.

Red tide is a bloom of toxic microscopic plant-like cells that causes fish kills, containments shellfish, creates respiratory irritation in humans. It also causes irritation of the eyes, nose, throat, and tongue.

There is much more to be discovered from the oceans. Visit the National Institute of Environmental Health for more knowledge.

Risk of a Tsunami in Florida?

By, Jim Lushine, National Weather Service

"The terrible megatsunami around Christmas in the Indian Ocean that killed more than 150,000 people was obviously a devastating but rare event. Could such an event occur in southeast Florida? Although not totally impossible, the chances of a megatsunami affecting Miami-Dade County are extremely remote, even much less likely than in the Indian Ocean. Much more likely is the Storm Surge from a strong hurricane such as Andrew in 1992.

The effects of a Tsunami are very similar to the Storm Surge in a hurricane which along the Miami-Dade County Coast has ranged up to a height of 17 feet during hurricane Andrew. A 30-foot megatsunami would obviously inundate the barrier islands such as Miami Beach and travel inland at least several hundred yards. In areas of Miami-Dade, South of Cutler Ridge, a megatsunami could move water inland several miles.

Tsunamis, although rare, have occurred along the Atlantic Coast of the United States and in the Caribbean Sea. To my knowledge there has never been a Tsunami that has affected Miami-Dade County. To understand why this would be such a rare event, we need to look at the ingredients that might cause a Tsunami in the Atlantic Ocean and then how that Tsunami might actually affect Miami-Dade.

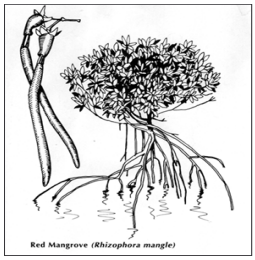
Tsunamis are usually caused by underwater seismic events such as earthquakes or volcanoes, but can also occur in connection with underwater landslides and with large meteorites. Seismic activity is much rarer in the Atlantic Ocean Basin than in the Pacific Ocean, but underwater earthquakes do occur, especially in the vicinity of the mid-Atlantic Ridge and in a subduction zone near the eastern Caribbean Sea. Earthquake-generated tsunamis are usually limited in height to about 30 feet, such as the one that just occurred in the Indian Ocean. Earthquakes from these locations have produced tsunamis, but they have never affected Miami-Dade County, probably because of the sheltering affects of the Bahama Islands, which would absorb much of the wave energy coming from these areas. A large earthquake occurred near Charleston, S.C. in the late 1800s. The tsunami from such a location could theoretically strike south Florida.

Volcanoes, such as those that could erupt in the Canary or Cape Verde Islands could produce a much megatsunami with a height of 150 feet or more. Although much of the energy would likely be blocked by the Bahamas, a megatsunami of this height could possibly reach Miami-Dade County.

It is possible that an underwater landslide could occur in the Florida Straits just offshore the southeast Florida coast. Theoretically, this could produced a tsunami that would affect Miami-Dade.

Lastly, a large meteorite landing in the Atlantic Ocean, Caribbean Sea or even the Gulf of Mexico could produce a tsunami of incredible height that would swamp all of south Florida."

Mangrove Maintenance Short Course



Are you interested in learning how to properly manage mangroves or just want to know more about the mangroves habitat?

The UF/IFAS Miami-Dade County Cooperative Extension Service and Florida Sea Grant offer a **Mangrove Maintenance Short Course, April 8th.** A 5-hour training devoted solely to teach identification, biology, pruning & management of mangroves in Southeast Florida.

This course will provide you the fundamental knowledge on mangrove ecology, pruning rules & regulations, and restoration of mangroves. We will visit Cape Florida Bill Baggs State Park to see a mangrove habitat restoration in progress.

To register , please call (305) 248-3311 ext. 225. The cost of the program is $40, ($45 after April 5) per person, Registration includes Extension Publications and lunch is provided. Course is held at the UM RSMAS Campus, Virginia Key.

Clean Marina/ Boatyard Workshop

Have you seen this Clean Marina flag?

Marinas and boatyards are awarded the Clean Marina Flag when they are designated as a "Clean Marina or Boatyard" facility by the Florida Clean Marina Program. Florida has **over 90** certified "Clean Marinas" and more than 20 "Clean Boatyards" statewide.

Coming soon, Florida Sea Grant and the Miami River Commission with FLDEP are hosting a Clean Marina Workshop, April 5 to help you achieve "Clean Marina/Boatyard" recognition. There are many benefits and incentives when you become designated a "Clean Marina/ Boatyard" facility.

From attending the workshop, you will receive a Panic Preventer file, Marine Environmental Measures handbook, and a free bilge sock and absorbent pad for your boat and much more!

The workshop is **Tuesday April 5**, 10am—1pm at the University of Miami RSMAS School, Virginia Key. There is no cost to attend. Please register with Marella at (305) 421-4017.

Crab-licious Receipe

Swiss Crab Melt

- 2 English muffins
- 8 ounces backfin crab meat
- 4 slices tomato
- salt and pepper
- 1/3 cup finely chopped celery
- 1 teaspoon lemon juice
- mayonnaise
- 4 slices Swiss cheese

Preparations:

Split two English muffins, and broil until lightly browned, top each half with 1/4 of the crab meat. Place a slice of tomato on each, and sprinkle with salt and pepper. Combine celery and lemon juice and enough mayonnaise to make a spreading consistency, spread over tomato slices. Top with Swiss cheese slices, and broil until cheese melts. Yieds 2-4 servings.

Source:

http://www.crabplace.com

Teaching Tips for Fish Handling

At first glance, fish seem very different from humans. They live in water and breathe air with gills. We have arms and legs and breath air using our lungs. We have a nose to smell, fish have nares, a notch near their mouths that gives them a sense of smell.

Despite these differences, humans and fish are alike in very basic ways. We share similar organs like backbones, eyes, mouth, and teeth. We also share similar waters. As humans, we live on land, but most of what we do on land affects what happens downstream, the water. Fish need healthy clean water to live and reproduce. Keeping our waters healthily is the first step in having clean places to live and recreate .

A released fish to be caught another day, needs to be released with care and handed gently. To release a fish too small to keep, the first thing to do is (1) leave the fish in the water, hold your rod up in the air, with your hands, follow the line down until you get hold of the hook, turn the hook upside down.

If that doesn't work, try step two. (2) Wet your hands first before you touching the fish, then hold it firmly enough so it won't get away, hold it softly enough so it isn't injured and gently remove the hook. Using wet hands, cradle the fish under its belly and swirl it gently in the water to help restore its breathing. Using catch n' release techniques will make a difference in the conservation and management of fish populations.

ERROR: undefined
OFFENDING COMMAND: scale_the_picture

STACK: