



Florida-Friendly Living: On the Waterfront

**Integrated Pest Management Grant Program
Final Report 2007**

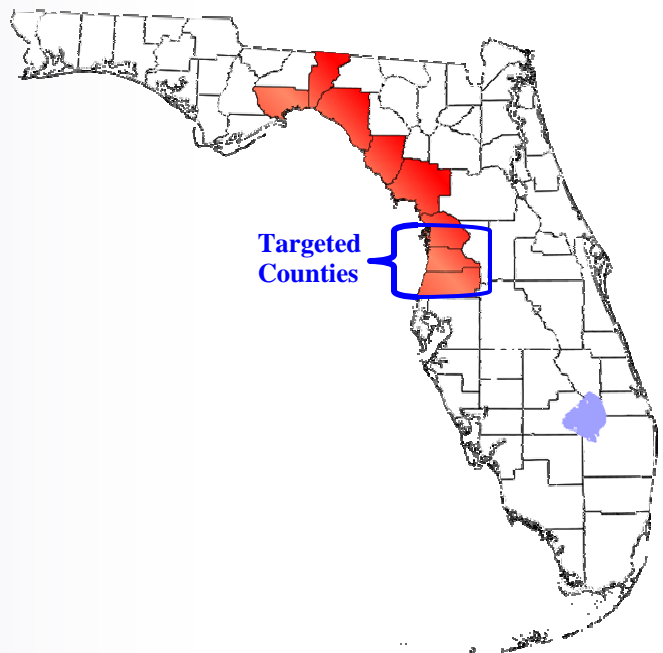
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I. Florida Friendly Living On the Waterfront

Known as Florida's "Nature Coast" with an abundance of waterfront living, the Citrus, Pasco, Hernando and Sumter County area is home to 22 bays, 306 lakes, 73 streams, 5 springs and 71 swamps. With more than 5,000 surface acres of lakes and rivers, not to mention the Gulf of Mexico, the Nature Coast is a boater's paradise. From power boating to kayaking, waterskiing to sailing, there are many fulfilling opportunities for boaters of every interest. Boating enthusiasts share a concern of presenting the spread of invasive, non-native aquatic plants which are a serious threat to the health of lakes, rivers, and streams throughout the state. Excessive weed growth impairs fish and wildlife habitat and restricts recreational activities.



In addition to the concern of non-native aquatic weeds, additional constraints on water resources have been the result of rapid population growth over the past decade (1994 -2004). The targeted four counties experienced an increase in growth rate by the following



amounts:

Citrus County:	26.3%
Hernando County:	29.4%
Pasco County:	24.6%
Sumter County:	68%

Not surprising, this increase in population can also be noted in an increased demand for water resources. The Southwest Florida Water Management District issued a water use permit in 2006 providing 258 gallons per person per day with the condition that progress be made over the next six years to reduce water consumptions to 150 gallons per customer per day. Hasty development and urbanization has resulted in dwindling wilderness areas and competition for natural resources. This being the case, there is clear evidence of growing environmental concerns relative to:

- Shoreline over-development
- Aquatic weeds
- Decline in fish & aquatic organisms
- Loss of habitat
- Water quality- According to the EPA reports, nutrient loading is the leading cause of impairment to Florida's waterways



II. Need for IPM Extension Outreach Programs

Data indicates that 66.6% of the sunshine states residents were born outside the state of Florida. This being the case, newcomers to Florida face diverse and often unfamiliar conditions. Well meaning residents frequently waste or misuse water, fertilizers, pesticides and energy through unsuitable landscaping practices. Landscaping practices which worked "up North" have the potential to cause hardship to fragile coastal environments. Florida's abundance of natural resources as well as its rapid growth makes it vitally important for citizens to adopt Florida-friendly living practices.

Community Based Social Marketing tools, such as commitment, prompts and norms, were employed to maximize the effectiveness of the program message. A variety of educational materials were developed during 2007 to reach target audiences living along the shoreline of water bodies. Community-based social marketing tools such as prompts, norm commitments were employed to maximize the effectiveness of practice change.

III. Educational Materials Development:

In an attempt to augment current programs, a series of educational materials were developed. They are as follows:

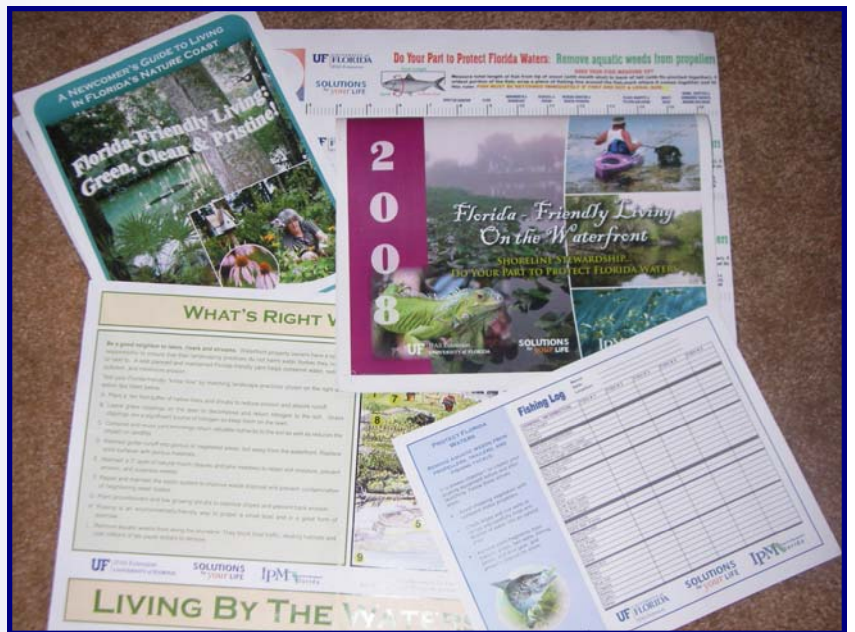
- **Florida -Friendly Living: Green, Clean and Pristine: A Newcomers Guide**

During 2007 a newcomers guide to Florida's "Nature Coast" was developed to address common questions that new residents face when relocating to the Nature Coast. A comprehensive publication was developed to encourage removal of aquatic weeds, water conservation, recycling, stormwater runoff, Florida-friendly landscaping and litter prevention, (Attachment 1). This publication has been made available to realtors, chamber of commerce's, neighborhood associations and other entry community advocate groups.

- **"Living By the Waters Edge - What's Right With This Picture" Table Mats** to reinforce messaging related to "being a good neighbor" to lakes, rivers and streams, the "What's Right With This Picture" table mat (Attachment 2). Ten-thousand table mats were designed and being disseminated to local restaurants bordering the waterfront in Sumter and Citrus Counties. The table mats test a person's Florida-Friendly living know how by matching landscape practices shown in a drawing with action tips. These mats are designed to provide one more avenue to present information to those who frequent local restaurants.

- **Florida Friendly Living on the Waterfront - Shoreline Stewardship**

In an attempt to encourage shoreline stewardship, a 2008 month-to-month guide was developed which provides prompts on how to protect Florida waters, (Attachment 3). Each month a new timely topic is introduced providing actions residents can take to promote a healthy balance of aquatic and shoreline ecosystems.



- **Fishing Logs, Fishing Ruler and Boaters Sponge**

In an attempt to prompt boaters and anglers on how they can protect Florida waters via preventing the spread of aquatic weeds, a variety of nautical educational tools were developed. Fishing logs provide anglers a method of recording their catch while receiving tips of removing aquatic weeds from propellers, trailers and tackle (Attachment 4). Fishing rulers were also developed to assist anglers in determining if their fish is legal size to keep and learn more about protecting Florida waters. (Attachment 5). A boater's sponge was the third messaging tool developed for Florida boaters. This item also served as a reminder to protect Florida waters (Attachment 6).

A summary of grant supported educational materials developed as the result of the 2007 IPM grant are listed in the table below:

Educational Material	Target Audience	Methods of Dissemination	Number Disseminated
Florida - Friendly Living: Newcomers Guide	Newcomers to the Nature Coast in Citrus, Sumter, Pasco and Hernando Counties	Chamber of Commerce, Realtors, Libraries, Extensions Programs/Offices	4,435
Florida - Friendly Living on the Waterfront Month to Month Guide	Shoreline residents and businesses in four county area	Extension programs	2,000
Living on the Waters Edge Table Mats	Recreational users of the waterfront in Citrus and Sumter Counties	Restaurants and cafes along waterfront	10,000
Protect Florida Waters Fishing Logs	Anglers in the Citrus and Sumter Counties	Anglers Clubs, Marinas and tackle shops	2,000
Protect Florida Waters Fishing Rulers	Anglers in the Citrus and Sumter Counties	Anglers Clubs, Marinas and tackle shops	1,500
Protect Florida Waters Boating Sponges	Boaters in the Citrus and Sumter Counties	Boating Clubs, Marinas and tackle shops	800

IV. Results and Findings

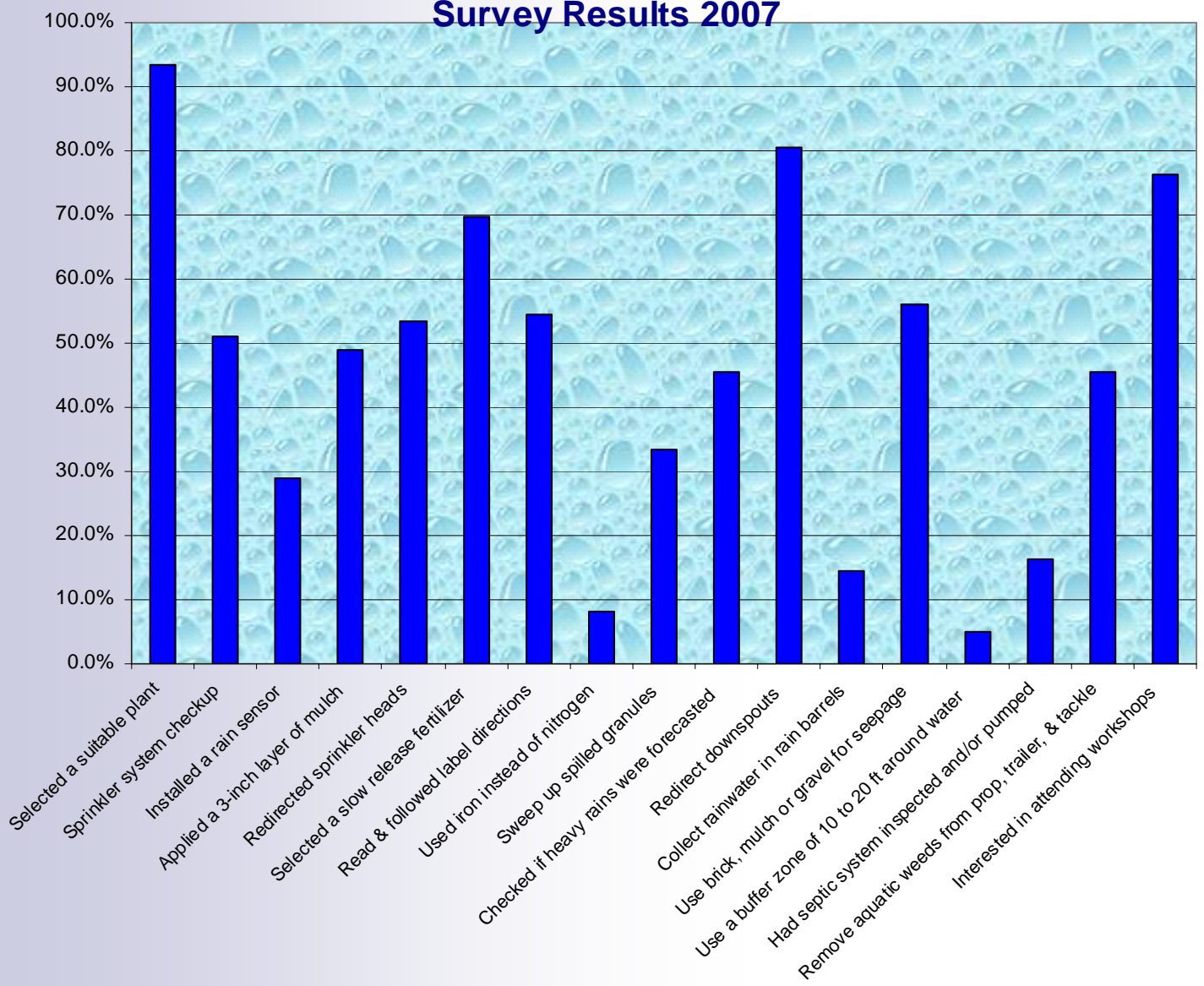
In an attempt to evaluate the effectiveness of educational materials developed to support shoreline stewardship efforts, a 10-question survey was posted on Citrus County Extension web site at <http://www.citrus.ifas.ufl.edu>. To date, an evaluation has been completed on the “Newcomers Guide to Living In Florida's Nature Coast.” Recipients of the guide were invited to respond to the survey and received additional landscape materials. To date forty-five (45) participants responded to the on-line survey, and 65 obtained rain gauge giveaways.

Survey data indicate that as a result of being exposed to shoreline stewardship educational materials developed, respondents now practice the following Florida-friendly practices.

- Selected a plant suitable for the conditions in their yard: 93.3% (42)
- Gave their sprinkler system a checkup: 51.1% (23)
- Installed a rain sensor: 28.9% (13)
- Applied a 3 - inch layer of mulch in their landscape: 48.9% (22)
- Redirected sprinkler heads onto lawn or landscape: 53.3% (24)
- Selected a slow release fertilizer: 69.7% (23)
- Read and followed directions on the pesticide and fertilizer label: 54.6% (18)
- Used iron instead of nitrogen to green-up the lawn: 8.2% (6)
- Swept up granules that accidentally spilled: 33.3% (11)
- Checked the weather to be sure heavy rains weren't forecasted to avoid runoff: 45.5% (15)
- Direct downspouts onto lawn and landscape areas : 80.5% (33)
- Collect rainwater in rain barrels: 14.6% (6)
- Use brick, mulch or gravel to allow rainfall to seep into the ground: 56.1% (23)
- Maintain a buffer zone of 10 to 20 feet around water when applying fertilizers: 4.9% (2)
- Had my septic system inspected and/or pumped 16.2% (6)
- Removed aquatic weeds from prop, trailer and fishing tackle when returning from boating: 45.5% (15)
- Interested in attending Florida-friendly living workshops if they were offered in your community? Yes 76.2% (32)

Additional efforts will be made to evaluate the effectiveness of the remaining educational materials developed as a result of the 2007 IPM grant.

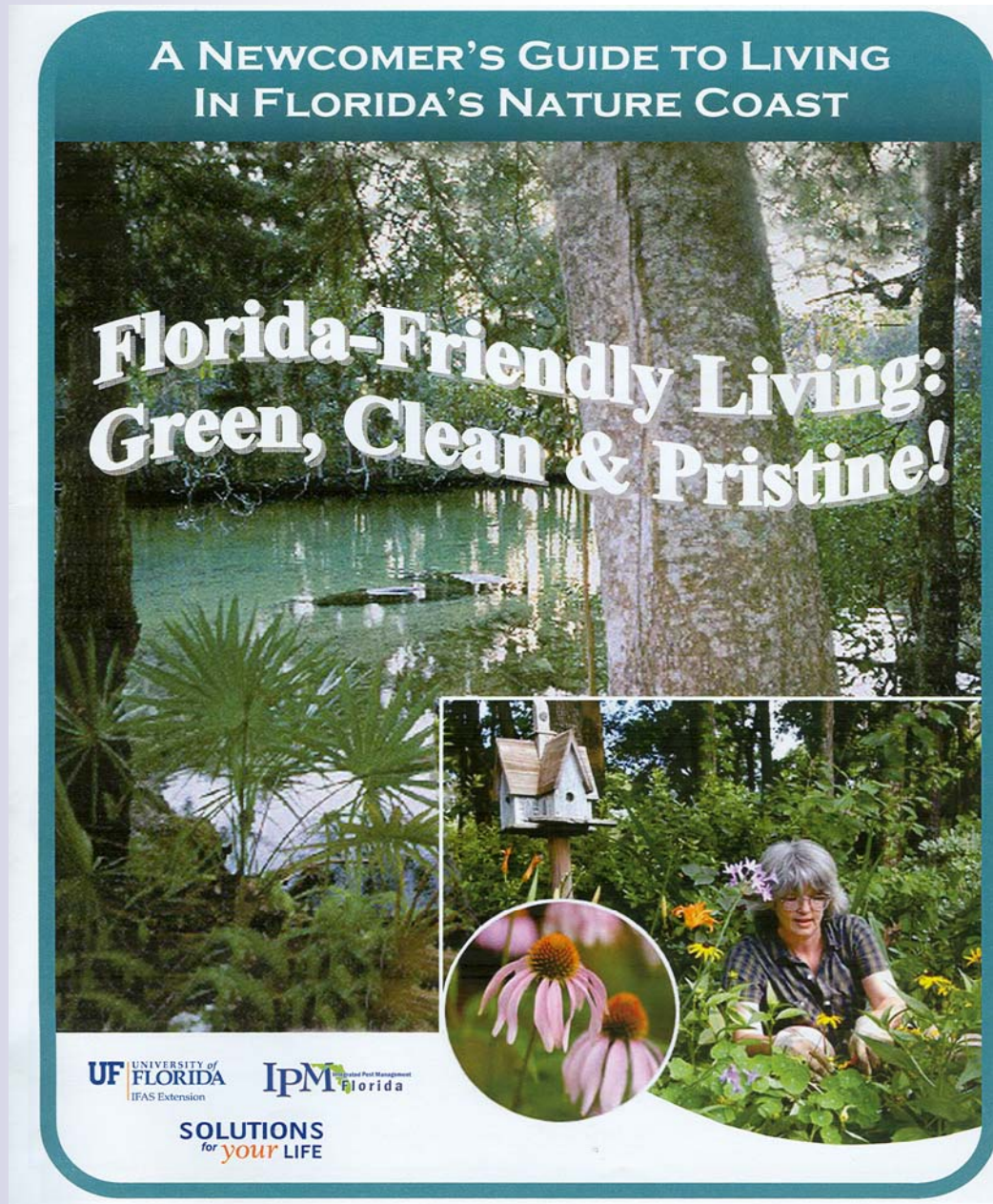
Florida-Friendly Living on the Waterfront Survey Results 2007



Florida Friendly Living Practices

V. Attachments

Attachment 1



Attachment 2

Café and Restaurant Table Mats

WHAT'S RIGHT WITH THIS PICTURE?

Be a good neighbor to lakes, rivers and streams. Waterfront property owners have a special responsibility to ensure that their landscaping practices do not harm water bodies they live on or next to. A well planned and maintained Florida-friendly yard helps conserve water, reduces pollution, and minimizes erosion.

Test your Florida-friendly "know how" by matching landscape practices shown on the right with action tips listed below.

- A. Plant a ten foot buffer of native trees and shrubs to reduce erosion and absorb runoff.
- B. Leave grass clippings on the lawn to decompose and return nitrogen to the soil. Grass clippings are a significant source of nitrogen so keep them on the lawn.
- C. Compost and reuse yard trimmings return valuable nutrients to the soil as well as reduces the impact on landfills.
- D. Redirect gutter runoff into porous or vegetated areas, but away from the waterfront. Replace solid surfaces with porous materials.
- E. Maintain a 3" layer of natural mulch (leaves and pine needles) to retain soil moisture, prevent erosion, and suppress weeds.
- F. Repair and maintain the septic system to improve waste disposal and prevent contamination of neighboring water bodies.
- G. Plant groundcovers and low growing shrubs to stabilize slopes and prevent bank erosion.
- H. Rowing is an environmentally-friendly way to propel a small boat and is a great form of exercise.
- I. Remove aquatic weeds from along the shoreline. They block boat traffic, destroy habitats and cost millions of tax payer dollars to remove.

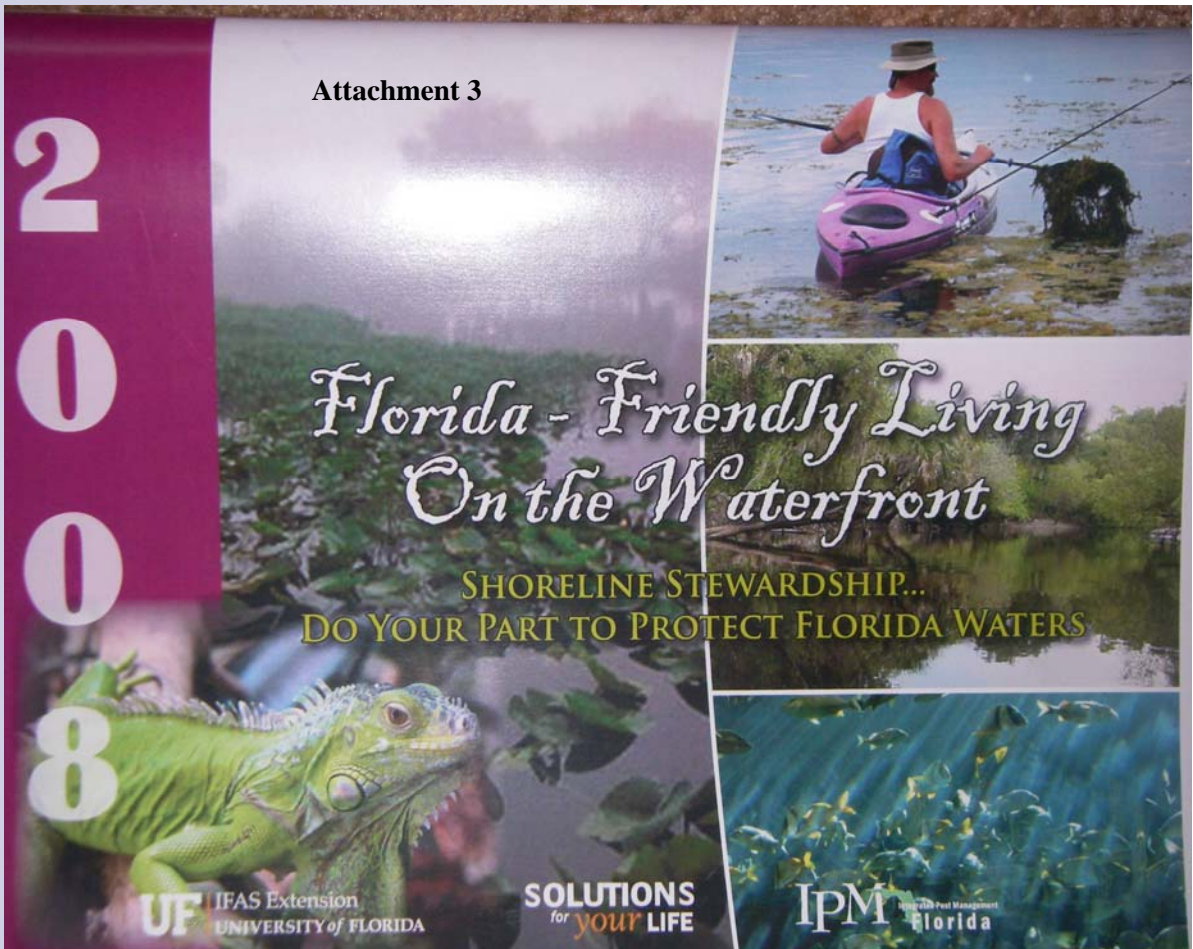
UF IFAS Extension
UNIVERSITY of FLORIDA

SOLUTIONS
for your LIFE

IPM Integrated Pest Management
Florida

For more information on Florida-Friendly yards, please visit Floridayards.org, SolutionsforYourLife.org or contact your local University of Florida/IFAS Extension c

LIVING BY THE WATERS EDGE



2008 Shoreline Stewardship Calendar

Attachment 4

PROTECT FLORIDA WATERS

REMOVE AQUATIC WEEDS FROM PROPELLERS, TRAILERS, AND FISHING TACKLE.

It is always important to inspect your boating equipment before and after launching. Follow these simple steps:

- Avoid chopping vegetation with outboard motor propellers.
- Check bilges and live wells at ramps and carefully rinse and dispose of water into an upland area.
- Remove plant fragments from trailers, props, bait wells, fishing tackle, and dive gear, and properly dispose on shore.



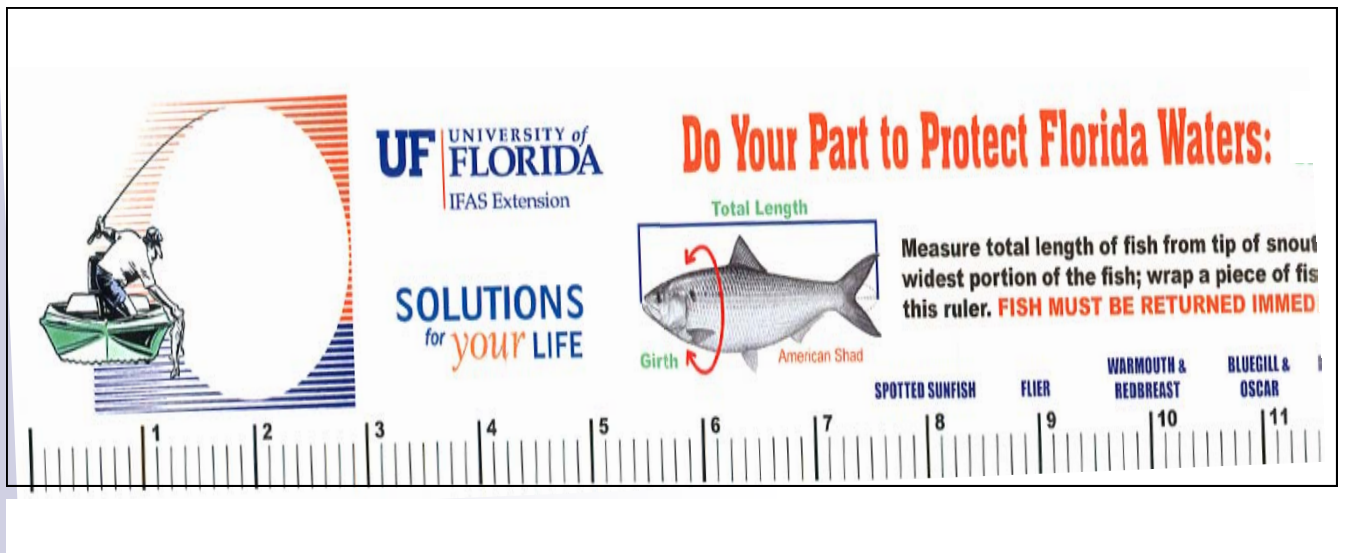
DO YOUR PART TO PROTECT FLORIDA WATERS

Fishing Log

Name: _____
Date: _____
Location: _____

GENERAL INFORMATION	FISH # 1	FISH # 2	FISH # 3	FISH # 4	FISH # 5
Time Caught					
Length					
Weight					
WATER CONDITIONS					
Temperature					
Clarity (dirty, muddy clear)					
Surface (rough, choppy, calm)					
METHOD USED					
Still Fishing					
Trolling					
BAIT USED					
Lure Type					
Color					
Size					
Live Bait (type)					
Live Bait (size)					
Depth Caught					
LOCATION					
GPS Ref. Points					
STRUCTURE					
Weeds					
Lilly Pads					
Pier/Dock					
Wood					
Other					
SPECIES					
Bass					
Trout					
Blue Gill					
Crappie					
Walley					
Catfish					
Other					

Attachment 5



Attachment 6



Florida-Friendly Living: On the Waterfront

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Thank you for the support of this program!