

# Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 2<sup>nd</sup> Quarter 2012

## Environmental News

### July is Parks and Recreation Month!

Parks are one of the few places where it all comes together - good health, a sense of community, respect for nature, personal achievement and ties to our past and future. Whether your goal is to get in shape, appreciate nature or connect with family and friends, "It Starts in Parks!"

**Saturday, July 28**

**Free "Discover Parks & Recreation Day" at Yacht Club Community Park - 10:00 a.m.- 2:00 p.m.** - Several Parks & Recreation facilities will join together to present a free day of information and fun for the whole family at one convenient location. Enjoy live demonstrations, interactive games, pony rides, prize drawings including tickets aboard the Key West Express, golf at Coral Oaks Golf Course, a \$100 gift card to the Arts Studio, and much more!

**Saturday-Sunday, July 28-29**

**Free Boat Trailer Parking at all Cape Coral and Lee County Parks & Recreation Boat Ramps** - For details, call Marine Services at 239-574-0809.

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### Questions? Comments? Let us know!

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## Native Plant profile

### Knotted Spikerush *Eleocharis interstincta*

The knotted spikerush is a rustic looking sedge that typically resides along lakes, wetland areas or along the banks of slow moving rivers. This rush resembles Horsetail (*Equisetum* spp.) an ancient plant considered to be a living fossil. However, knotted spikerush is a flowering plant, a modern attribute compared to the spore dispersing cones of the horsetail.

Spikerush is considered to be one of the largest specimens of the rushes. It is also found in Alabama, Texas, parts of New York and in the West Indies. It grows to 4 feet tall and is a cylindrical "reed" like plant that inhabits freshwater areas. This perennial has whitish flowers that are inconspicuous but plentiful; it blooms during the spring and summer depending on its region.



jointed spikerush  
*Eleocharis interstincta*  
Photo by Vic Rainey  
© 1999 University of Florida

Knotted spikerush

## **Florida Yards and Neighborhoods Program**

The health of Cape Coral's canals, lakes and groundwater is affected in part by how we practice landscape maintenance. Because the health of our waters is linked to our yards, the City of Cape Coral partners with the University of Florida/ IFAS Lee County Extension Office in educating homeowners and businesses on the Florida Yards and Neighborhoods (FYN) program. This program not only provides direction to maintaining a healthy, environmentally friendly yard, but also provides recognition to residents who follow these guidelines.

This program is a partnership of concerned citizens, members of landscape industry, University of Florida's Cooperative Extension Service, the National Estuary Programs, Florida's Sea Grant College Program and numerous environmental agencies. The program focuses on yards since they are the first line of defense for our estuaries, rivers, lakes and aquifers.

The connection between the waterways and the yards is stormwater. As rain flows through yards and streets in route through the stormwater system, the water can collect fertilizers, pesticides, petroleum, pet waste, and debris. Unlike wastewater, stormwater receives no treatment, so these pollutants flow into the canals, river or the aquatic preserve via direct access canals. You do not have to live on a canal to impact the health of the ecosystem. Pollutants are carried by swales and ditches to either the freshwater or saltwater canal systems. Our yards, driveways and roads are pathways to surrounding water bodies.

We can make decisions that help preserve the health and aesthetics of our waterways. The FYN program provides principles on planning and maintaining your landscaping. Within each principle are actions you can take to make your yard friendlier to the environment. It's a goal oriented program. When you reach your goal, your yard is certified, and a sign is provided to let your neighbors know that your yard is recognized by the Florida Yards and Neighborhood program. Here are the nine principles:

### **Right Plant Right Place**

Plants selected to suit a specific site will require minimal amounts of water, fertilizer and pesticides.

### **Water Efficiently**

Irrigate only when your lawn and landscape need water. Efficient watering is the key to a healthy Florida yard and conservation of limited resources.

### **Fertilize Appropriately**

Less is often best. Over-utilization of fertilizers can be hazardous to your yard and the environment.

### **Mulch**

Maintaining a three-inch layer of mulch will help retain soil moisture, prevent erosion, and suppress weeds.

### **Attract Wildlife**

Plants in your yard that provide food, water and shelter can conserve Florida's diverse wildlife.

### **Control Yard Pests Responsibly**

Unwise use of pesticides can harm people, pets, beneficial organisms and the environment.

### **Recycle**

Grass clippings, leaves, and yard trimmings recycled on site provide nutrients to the soil and reduce waste disposal.

### **Reduce Stormwater Runoff**

Water running off from your yard can carry pollutants such as debris, fertilizer and pesticides that can adversely impact water quality. Reduction of this runoff will help prevent pollution.

### **Protect the Waterfront**

Waterfront property, whether on a canal, river, lake, pond or on the Gulf of Mexico, is very fragile and should be carefully protected to maintain freshwater and marine ecosystems.

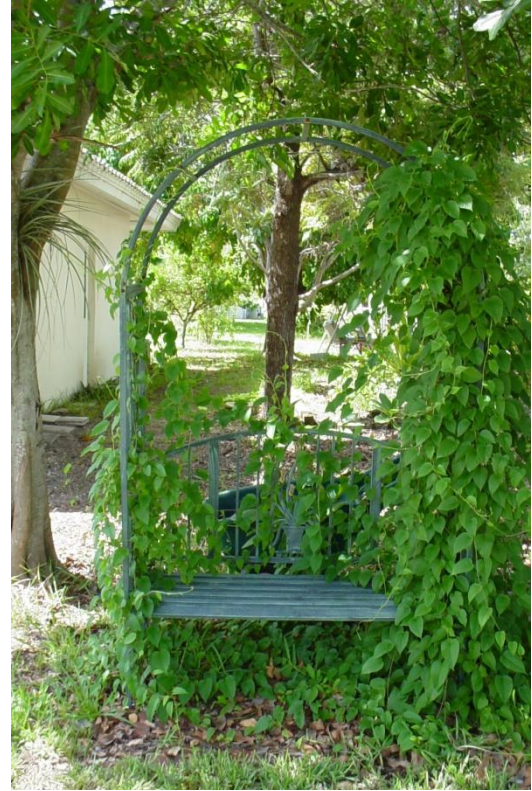
**For more information regarding Florida Yards and Neighborhood classes, Please call Rotary Park Environmental Center at (239) 549-4606 or visit;**

[lee.ifas.ufl.edu/fyn/fynhome.shtml](http://lee.ifas.ufl.edu/fyn/fynhome.shtml)

**The next FYN Introduction class will be held on July 27<sup>th</sup> at Rotary Park Environmental Center from 6:00 pm to 9:00 pm. Please call for registration.**

# Florida Yards & Neighborhoods

Here are some Florida Friendly Yards!



Some useful resources;

  
**FloridaYards.org**

**Florida-Friendly  
Landscaping™ PROGRAM**

[fyn.ifas.ufl.edu/](http://fyn.ifas.ufl.edu/)

**Southwest Florida  
Water Management District**

[www.swfwmd.state.fl.us/yards/](http://www.swfwmd.state.fl.us/yards/)

bd = below detection

benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.

	April 2012						May 2012						June 2012						Avg TSI
	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	
	<1.0	<1.0	none set	<2.0	<0.46	<1.0	<1.0	none set	<2.0	<0.46	<1.0	<1.0	none set	<2.0	<0.46				
3f	bd	bd	0.1	1.0	1.0	0.03	bd	bd	bd	1.0	1.0	0.05	bd	bd	bd	1.1	1.1	0.05	49.21
4e	bd	bd	bd	1.1	1.1	0.03	bd	bd	bd	1.1	1.1	0.05	bd	bd	bd	1.3	1.3	0.05	55.54
6f	bd	bd	0.2	1.0	1.0	0.05	bd	bd	bd	1.1	1.1	0.08	bd	bd	bd	1.1	1.1	0.07	57.03
7b	bd	bd	bd	1.0	1.0	0.10	bd	bd	bd	1.2	1.2	0.08							57.99
7c	bd	bd	bd	1.0	1.0	0.04	bd	bd	bd	1.2	1.2	0.06	bd	bd	bd	1.1	1.1	0.09	57.27
7d	bd	bd	bd	1.0	1.0	0.25	bd	bd	bd	1.0	1.0	0.06	bd	bd	bd	1.1	1.1	0.27	55.51
9e	bd	bd	bd	1.1	1.1	0.04	bd	bd	bd	1.2	1.2	0.05	bd	bd	bd	1.2	1.2	0.11	58.45
10b	bd	bd	bd	0.9	0.9	0.31	bd	bd	bd	0.9	0.9	0.04	bd	bd	bd	1.0	1.0	0.05	53.72
11e													bd	bd	bd	1.3	1.3	0.10	59.14
15d							bd	bd	bd	1.1	1.1	0.05	bd	bd	bd	1.2	1.2	0.07	57.05
15e	bd	bd	bd	1.0	1.0	0.06	bd	bd	bd	1.2	1.2	0.07	bd	bd	bd	1.4	1.4	0.09	61.42
16e	bd	bd	bd	1.2	1.2	0.07	bd	bd	bd	0.8	0.8	0.04	bd	bd	bd	1.1	1.1	0.04	57.84
19d	bd	bd	bd	1.4	1.4	0.05	bd	bd	bd	1.0	1.0	0.07	bd	bd	bd	1.2	1.2	0.10	58.60
19k	bd	bd	bd	0.9	0.9	0.04	bd	bd	bd	1.3	1.3	0.08	bd	bd	bd	1.3	1.3	0.10	58.24
21d	bd	bd	bd	1.1	1.1	0.06	bd	bd	bd	1.3	1.3	0.08	bd	bd	bd	1.3	1.3	0.10	61.40
26d													bd	bd	0.1	2.5	2.5	0.07	62.08
26f	bd	bd	bd	0.7	0.7	0.02	bd	bd	bd	1.0	1.0	0.04							45.08
28d	bd	bd	bd	0.9	0.9	0.03	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	0.8	0.8	0.03	48.30
30c	bd	bd	bd	1.1	1.1	0.03	bd	bd	bd	1.1	1.1	0.05	bd	bd	bd	1.1	1.1	0.08	53.83
35a	bd	bd	bd	0.7	0.7	0.03													46.90
41a	bd	bd	bd	0.6	0.6	0.02	bd	bd	bd	0.6	0.6	0.02	bd	bd	bd	0.6	0.6	0.02	24.43
45d	bd	bd	bd	0.7	0.7	0.02													56.72
48a	bd	bd	bd	0.6	0.6	0.02	bd	bd	bd	0.6	0.6	0.03							35.27
52b	bd	bd	bd	0.5	0.5	0.02	bd	bd	bd	0.4	0.4	0.02	bd	bd	bd	0.6	0.6	0.02	24.43
55b	bd	bd	bd	3.0	3.0	0.03	bd	bd	bd	0.6	0.6	0.04							46.45
58b	bd	bd	bd	1.3	1.3	0.02													48.99
58f	bd	bd	bd	1.8	1.8	0.05	bd	bd	bd	1.8	1.8	0.06	bd	bd	bd	1.8	1.8	0.05	55.54
58g	bd	bd	bd	1.3	1.3	0.05							bd	bd	bd	1.5	1.5	0.05	58.49
58i	bd	bd	bd	1.4	1.4	0.05	bd	bd	bd	1.4	1.4	0.04	bd	bd	bd	1.5	1.5	0.05	53.35

59b	bd	bd	bd	1.3	1.3	0.12	bd	bd	bd	1.4	1.4	0.03	bd	bd	bd	1.4	1.4	0.04	53.05
64b	bd	bd	bd	1.1	1.1	0.04	bd	bd	bd	1.1	1.1	0.04							45.05
64c							bd	bd	bd	1.0	1.0	0.05	bd	bd	0.1	1.1	1.1	0.06	49.12
65b	bd	bd	bd	1.1	1.1	0.05	bd	bd	bd	1.1	1.1	0.05	bd	bd	bd	1.3	1.3	0.07	57.02
65c													bd	bd	bd	1.2	1.2	0.06	58.68
66a	bd	bd	bd	1.0	1.0	0.02	bd	bd	bd	1.0	1.0	0.03	bd	bd	bd	1.2	1.2	0.03	52.52
67c	bd	bd	bd	1.0	1.0	0.04													50.74
69a	bd	bd	bd	1.0	1.0	0.03	bd	bd	bd	1.4	1.4	0.07							53.25
70f	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	1.4	1.4	0.10							57.20
71a	bd	bd	bd	0.8	0.8	0.05	bd	bd	bd	1.0	1.0	0.06	bd	bd	bd	0.7	0.7	0.04	58.39
72a	bd	bd	bd	0.6	0.6	0.02	bd	bd	bd	1.0	1.0	0.06							48.93
72c	bd	bd	bd	0.8	0.8	0.03	bd	bd	bd	1.2	1.2	0.05	bd	bd	bd	1.0	1.0	0.04	55.89
74b	bd	bd	bd	1.1	1.1	0.04	bd	bd	bd	1.5	1.5	0.05	bd	bd	bd	1.2	1.2	0.04	58.37
74c	bd	bd	bd	0.9	0.9	0.04	bd	bd	0.1	1.3	1.3	0.05	bd	bd	0.1	1.1	1.1	0.05	55.97
74f	bd	bd	bd	0.9	0.9	0.04	bd	bd	bd	1.2	1.2	0.04	bd	bd	bd	1.0	1.0	0.05	57.11
80a	bd	bd	bd	0.3	0.3	0.02	bd	0.08	bd	0.2	0.28	0.02	bd	bd	bd	0.1	0.1	0.02	24.44
81a													bd	bd	0.7	4.2	4.2	0.45	84.41
81b	bd	bd	0.1	1.3	1.3	0.02	bd	bd	bd	1.5	1.5	0.04	bd	bd	bd	1.4	1.4	0.04	53.27
82a	bd	bd	bd	1.4	1.4	0.02	bd	bd	bd	1.5	1.5	0.04	bd	bd	bd	1.5	1.5	0.03	54.18
83a	bd	bd	bd	1.2	1.2	0.02	bd	0.10	bd	1.4	1.50	0.02	bd	bd	0.2	1.5	1.5	0.03	46.68
89a	bd	bd	bd	0.9	0.9	0.06	bd	bd	bd	1.2	1.2	0.06	bd	bd	0.2	1.2	1.2	0.11	57.80
90a	bd	bd	bd	1.8	1.8	0.02	bd	bd	bd	1.7	1.7	0.03	bd	bd	0.2	2.3	2.3	0.03	46.93
91a	bd	bd	bd	0.4	0.4	0.02	bd	bd	bd	0.6	0.6	0.04	bd	bd	bd	0.6	0.6	0.04	44.53
93b	bd	bd	bd	1.0	1.0	0.09													67.44
97a	bd	bd	0.1	0.5	0.5	0.02	bd	bd	bd	0.4	0.4	0.02	bd	bd	na	0.2	0.2	0.02	24.38
<b>Median</b>	<b>bd</b>	<b>0.10</b>	<b>1.00</b>	<b>1.00</b>	<b>0.04</b>		<b>0.09</b>	<b>0.10</b>	<b>1.10</b>	<b>1.10</b>	<b>0.05</b>		<b>bd</b>	<b>0.20</b>	<b>1.20</b>	<b>1.20</b>	<b>0.05</b>	<b>55.53</b>	
<b>Max</b>	<b>0.00</b>	<b>0.20</b>	<b>3.00</b>	<b>3.00</b>	<b>0.31</b>		<b>0.10</b>	<b>0.10</b>	<b>1.80</b>	<b>1.80</b>	<b>0.10</b>		<b>0.00</b>	<b>0.70</b>	<b>4.20</b>	<b>4.20</b>	<b>0.45</b>	<b>84.41</b>	

NO2 = Nitrite (inorganic)	TKN = Total Kjeldahl Nitrogen (organic + NH4)	High levels of nutrients in our canals can indicate the presence of fertilizer runoff or effluent from wastewater or septic systems. Excessive nutrients can lead to nuisance plant growth and algal blooms.
NO3 = Nitrate (inorganic)	TN = Total Nitrogen (inorganic + organic)	
NH3 = Ammonia (inorganic)	TP04 = Total Phosphate	

All nutrient concentrations shown in mg/L

TSI = Trophic State Index, a quick indicator of canal health. The majority of the sites are still exhibiting good water quality despite all the rainfall that has occurred. 51 sites this quarter scored as GOOD (<60), one site scored FAIR (60-70), and one was POOR (>70). Water quality has declined slightly in some sights and TSI has increased for most sites overall. This is a result of excess nutrients entering the canals and lakes through all of the rainfall this area has received recently.

## **July**

5<sup>th</sup> Canalwatch

20<sup>th</sup> The Mangrove Gathering  
Rotary Park Environmental  
Center  
Info: 549-4606

27<sup>th</sup> Florida Yards and  
Neighborhoods intro class  
6pm-9pm  
Rotary Park Environmental  
Center  
Info: 549-4606

28<sup>th</sup> Native Plant Sale from  
9am-2pm at Rotary Park  
Info: 549-4606

## **August**

1<sup>st</sup> Canalwatch

10<sup>th</sup> Bird House Workshop  
Rotary Park Environmental  
Center  
9am - noon  
Info: 549-4606

## **September**

5<sup>th</sup> Canalwatch

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