

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 1<sup>st</sup> Quarter 2009

# **Environmental News**

**Native Plant Profile** 

#### Florida Friendly Yards

In Cape Coral, home landscape practices are directly tied to water quality. Whether the home is directly on a canal or is on a 'dry lot', all stormwater eventually runs down the storm drain and into a canal. Each of our properties is tied to the ecosystem, so why not replicate the 'real Florida'.

High maintenance landscaping can stress the environment by adding excess nutrients throughout the watershed. Planting shrubs, wildflowers and trees that don't require additional nutrients will ease the stress on the environment and the wallet.

The Florida Yards and Neighborhoods program is a goal oriented program to change social attitudes and to view home landscapes as part of the ecosystem. By planting native vegetation, not only can you save time and money, but Florida, as it once was, will be preserved for future generations.

For more information on FYN programs please call 549-4606 or contact the Environmental Resources office.

#### **Inside This Issue:**

Native Plants	1
News	2
Map of CW Sites	3
Data	4-5
Upcoming Events	6

Questions? Comments? Let us know! (239)574-0785 Harry: <u>hphillip@capecoral.net</u> Kim: <u>kcressman@capecoral.net</u> Wax Myrtle *Myrica cerifera* 

The wax myrtle is a large bush or small tree (20 feet) that can be found in many habitats. Anywhere from area beaches to the Everglades this hardy plant is salt tolerant, does well in wet or dry soil types, and is cold hardy in the northern reaches of its zone. However, the wax myrtle doesn't tolerate low hedging very well, and is best left as a large screening hedge in areas that are prone to full sun.

The waxy berries are eaten by birds and have been used in candle production for bayberry scented candles in early practices. The leaves can also be substituted for bay leaves in cooking and were once used for medicinal purposes such as to aid stomach ailments.



## 2<sup>nd</sup> Annual Canal Cleanup a Success!

The second annual Canal Cleanup was held on Sunday, March 15<sup>th</sup>, 2009. We had 150 participants, up from 90 last year!

Some of the strange things that were found include: Car bumper Truck cap Glove box Tires A/C unit



There was also all the common stuff you'd expect – plastic bottles, glass bottles, plastic bags, soda cans, fishing line... Please remember to avoid being part of the problem. Be aware of items in the back of your truck, or if you drive with open windows, in your car. Make sure everything that's light is secure so it doesn't blow out. Keep a bag in your car to use for trash, and empty it appropriately.

Also: when you set your trash out on the curb, make sure you tie up the bag. If you throw something in a dumpster, make sure it's inside a bag – when dumpsters get emptied, single cups or lids can blow out and away.



Photo courtesy of Bob Mondgock





Photo courtesy of Tom & Pam Searcy

The biggest lesson here is to make sure your trash is secure! Whether it's in your car, your truck bed, or your garbage cans – take a look and make certain it won't get away from where it's supposed to be.

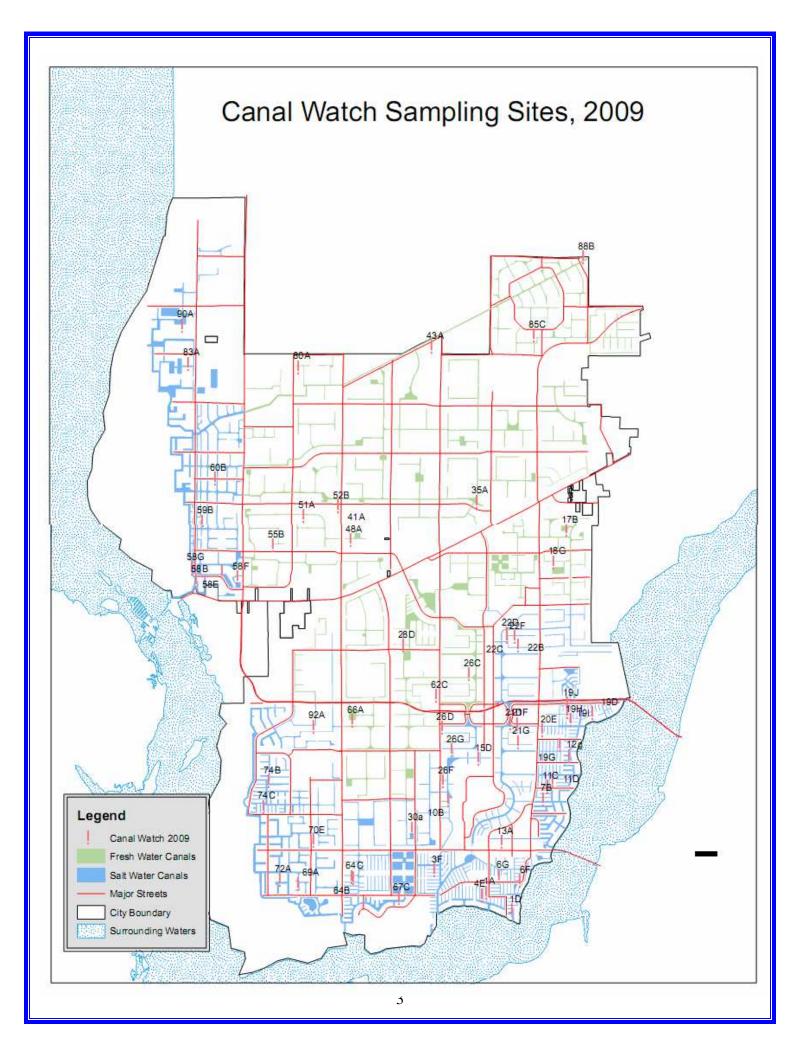
### **Coming Soon**

We are working with Lee County SeaGrant to place monofilament bins at popular fishing sites. Monofilament is extremely dangerous for wildlife, and we want to prevent as much of it as possible from getting into our canals. We will start small, with just a few bins, and hope to expand the program as we are able. **We'll need volunteers** to empty the bins on a regular basis – if you'd like to adopt one (or more!) please call Kim at 574-0785.

### **Cape Coral's Habitat Conservation Plan**

The City of Cape Coral has received a grant from the US Fish and Wildlife Service to compose a Habitat Conservation Plan. The reason for this is that the combination of a fast-growing area and great biological diversity can cause conflicts between development and conservation. Right now, development permitting proceeds on a project-by-project basis. This is generally costly and time consuming for applicants. It also results in fragmented open space, which makes effective species conservation difficult. In crafting this Habitat Conservation Plan, we are looking ahead at the needs of the City and the wildlife that inhabits it. By working together, we can address the issues that will be faced in the future and deal with these issues in a positive manner. For more information on the HCP, please go to www.capecoral.net.

A Friendly Reminder: Don't forget to turn in your data sheet when you bring in a sample!



bd = below detection benchmark numbers								pers: Marked data are in the highest 20% of values found by Hand et. al, 1988.											
	January 2009						February 2009					March 2009							
	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	Avg
	<1.0	<1.0	non	e set	<2.0	<0.46	<1.0	<1.0	non	e set	<2.0	<0.46	<1.0	<1.0	non	e set	<2.0	<0.46	TSI
1A	bd	bd	0.1	1	1.00	0.07	bd	bd	bd	1.3	1.30	0.06	bd	bd	bd	bd	bd	0.05	38.15
1D	bd	bd	bd	0.9	0.90	0.06	bd	bd	0.1	1.1	1.10	0.05	bd	bd	bd	bd	bd	0.05	36.21
3F	bd	bd	bd	0.9	0.90	bd	bd	bd	0.2	1.1	1.10	bd	bd	bd	bd	bd	bd	bd	26.54
4E	bd	bd	bd	0.4	0.40	0.06	bd	bd	bd	0.9	0.90	0.05	bd	bd	bd	bd	bd	0.06	29.56
6F	bd	bd	bd	0.9	0.90	0.06	bd	0.21	bd	1.1	1.31	0.06	bd	0.08	bd	bd	bd	0.06	37.35
7B	bd	bd	0.9	1.1	1.10	0.06	bd	bd	0.2	1.1	1.10	0.05	bd	bd	bd	bd	bd	0.06	36.88
10B	bd	bd	0.5	0.4	0.40	bd	bd	bd	0.1	1	1.00	bd	bd	bd	bd	bd	bd	bd	27.94
11C	bd	0.10	0.5	1	1.10	0.07	bd	bd	bd	1.2	1.20	0.05							58.12
11D	bd	bd	0.7	1.1	1.10	0.07	bd	bd	bd	1.2	1.20	0.06	bd	bd	bd	bd	bd	0.05	38.20
13A	bd	bd	bd	1.1	1.10	0.06	bd	bd	bd	1.3	1.30	0.05	bd	0.06	bd	0.1	0.16	0.07	48.05
15D	bd	bd	0.2	1.4	1.40	0.06	bd	bd	bd	1.2	1.20	0.05	bd	bd	bd	bd	bd	bd	37.96
17B	bd	bd	bd	1.6	1.60	bd	bd	bd	bd	1.6	1.60	bd	bd	bd	bd	0.7	0.70	bd	51.16
18G	bd	0.09	0.1	1.5	1.59	bd	bd	bd	bd	1.5	1.50	bd	bd	bd	bd	0.7	0.70	bd	42.71
19D	bd	0.05	0.1	1.3	1.35	0.08	bd	bd	bd	1.4	1.40	0.08	bd	bd	0.1	0.1	0.10	0.08	45.27
19G	bd	0.05	0.1	1.2	1.25	0.08	bd	bd	bd	1.3	1.30	0.05	bd	bd	bd	bd	bd	0.07	38.24
19H													bd	bd	bd	0.1	0.10	0.08	10.41
191			0.4		4.40	0.00				4.4	4 40	0.00	bd	bd	0.1	0.2	0.20	0.07	24.13
19J	bd	bd	0.1	1.1	1.10	0.08	bd	bd	bd	1.4	1.40	0.06	bd	bd	0.1	0.1	0.10	0.10	53.31
21D 21F	bd bd	bd bd	bd bd	1 0.5	1.00 0.50	0.05	bd bd	bd bd	bd	1.3 1.4	1.30 1.40	0.05	bd bd	bd	bd	0.3	0.30	0.06	48.37
21F 21G	bd	0.09	0.3	1.4	1.49	0.06	bd	bd	bd bd	1.4	1.40	0.05	bd	bd 0.05	bd bd	0.1 bd	0.10 bd	0.06	45.29
21G 22B	bd	bd	0.3	1.4	1.30	0.09	bd	bd	bd	1.5	1.50	0.08	bd	bd	bd	0.4	0.40	0.08	41.14
22B 22C	bd	bd	0.3	1.3	1.30	0.06	bd	bd	bd	1.5	1.50	0.05	bd	bd	bd	0.4	0.40	0.08	52.18 51.73
220 22D	bd	bd	0.9	1.5	1.50	bd	bd	bd	bd	1.6	1.60	0.00	bd	bd	bd	0.3	0.30	0.08	44.56
22D 22F	bd	0.46	1.2	8.4	8.86	0.34	bd	bd	0.1	1.6	1.60	0.08	bd	0.07	0.2	2.1	2.17	0.78	74.00
26C		0.10		011	0.00	0.01			0.1			0.00	bd	bd	bd	0.9	0.90	0.06	64.73
26D	bd	bd	1.1	1.3	1.30	0.06	bd	bd	0.2	1.3	1.30	0.05	bd	bd	bd	bd	bd	bd	51.91
26F	bd	bd	bd	0.4	0.40	bd	bd	bd	bd	1.6	1.60	bd	bd	bd	bd	bd	bd	bd	25.94
26G	bd	bd	bd	1	1.00	bd	bd	bd	bd	1.3	1.30	bd							41.47
28D	bd	0.17	0.1	1.7	1.87	bd	bd	bd	bd	1.8	1.80	bd	bd	bd	bd	0.7	0.70	bd	42.71
30A	bd	bd	bd	1.1	1.10	bd	bd	bd	bd	1	1.00	bd	bd	bd	bd	bd	bd	bd	27.60
35A	bd	0.08	bd	1	1.08	bd	bd	bd	bd	1.5	1.50	bd	bd	bd	bd	0.6	0.60	bd	47.37
41A	bd	0.09	bd	1.2	1.29	bd	bd	bd	bd	1.2	1.20	bd	bd	bd	bd	0.5	0.50	bd	41.60
43A	bd	bd	bd	1.3	1.30	bd	bd	bd	bd	, bd	bd	bd	bd	bd	bd	0.3	0.30	bd	24.99
-									2	1									

48A	bd	bd	bd	1.5	1.50	bd	bd	bd	bd	1.1	1.10	bd	bd	bd	bd	0.5	0.50	bd	50.58
51A	bd	bd	bd	1.6	1.60	0.05	bd	bd	bd	1.6	1.60	bd							47.92
52B	bd	0.19	bd	1	1.19	bd	bd	bd	bd	1.3	1.30	bd	bd	bd	bd	0.6	0.60	bd	42.21
55B	bd	0.08	bd	1.7	1.78	0.05	bd	bd	bd	1.8	1.80	bd							53.43
58B	bd	bd	0.8	1	1.00	0.05	bd	bd	bd	0.9	0.90	bd	bd	bd	bd	bd	bd	bd	43.65
58E							bd	bd	bd	1.3	1.30	bd							47.15
58F	bd	bd	1.1	1.4	1.40	0.06	bd	bd	bd	1.5	1.50	0.07							66.68
58G	bd	bd	0.2	1	1.00	bd	bd	bd	bd	1	1.00	bd	bd	bd	bd	bd	bd	bd	26.54
59B	bd	bd	0.4	0.6	0.60	bd							bd	bd	bd	bd	bd	bd	41.78
60B	bd	bd	0.8	1.1	1.10	bd	bd	bd	bd	1.2	1.20	bd	bd	bd	bd	bd	bd	bd	38.67
64B	bd	0.06	1	1.3	1.36	bd	bd	bd	0.1	0.8	0.80	bd	bd	bd	bd	bd	bd	bd	26.54
64C	bd	0.09	0.4	2.1	2.19	0.05							bd	0.07	bd	bd	bd	bd	25.52
66A	bd	bd	bd	1.5	1.50	bd							bd	bd	bd	0.7	0.70	bd	43.34
67C	bd	0.05	0.6	0.6	0.65	0.06	bd	bd	0.1	0.8	0.80	0.06	bd	bd	bd	bd	bd	0.05	40.41
69A	bd	bd	0.5	1.5	1.50	0.05	bd	0.05	bd	1.7	1.75	bd	bd	bd	0.1	0.4	0.40	bd	46.78
70E	bd	bd	0.1	0.5	0.50	bd	bd	bd	bd	1.3	1.30	bd	bd	bd	bd	0.4	0.40	bd	41.88
72A	bd	bd	bd	1.4	1.40	0.05													51.97
74B	bd	bd	bd	1.4	1.40	0.05	bd	bd	bd	1.6	1.60	bd	bd	bd	bd	0.6	0.60	bd	53.70
74C	bd	bd	0.4	1.5	1.50	0.05	bd	bd	0.2	1.7	1.70	bd	bd	bd	bd	0.7	0.70	bd	52.34
80A	bd	bd	bd	1	1.00	bd	bd	bd	bd	1	1.00	bd	bd	bd	bd	0.3	0.30	bd	44.49
83A	bd	bd	bd	1.2	1.20	bd	bd	bd	bd	1.3	1.30	bd							50.51
85C	bd	0.08	bd	1.3	1.38	bd	bd	bd	bd	1.4	1.40	bd	bd	bd	bd	0.4	0.40	bd	40.87
88B	bd	bd	bd	1.4	1.40	bd	bd	bd	bd	1.3	1.30	bd	bd	bd	bd	0.4	0.40	bd	43.25
90A	bd	bd	0.1	1	1.00	bd	bd	bd	bd	1.3	1.30	bd	bd	bd	bd	bd	bd	bd	40.70
92A	bd	bd	0.2	1.4	1.40	0.05	bd	bd	bd	1.9	1.90	0.09							68.20
Median		0.09	0.40	1.20	1.25	0.06		0.13	0.10	1.30	1.30	0.05		0.07	0.10	0.40	0.40	0.06	42.71
Max		0.46	1.20	8.40	8.86	0.34		0.21	0.20	1.90	1.90	0.09		0.08	0.20	2.10	2.17	0.78	74.00

NO2 = Nitrite (inorganic)	TKN = Total Kjeldahl Nitrogen (organic + NH4)	High levels of nutrients in our canals can indicate the presence of fertilizer runoff
NO3 = Nitrate (inorganic)	TN = Total Nitrogen (inorganic + organic)	or effluent from wastewater or septic systems. Excessive nutrients can lead to
NH3 = Ammonia (inorganic)	TPO4 = Total Phosphate	nuisance plant growth and algal blooms.

TSI = Trophic State Index, a quick indicator of canal health. 55 sites this quarter scored as GOOD (<60). 3 sites scored FAIR (60-70), and one was POOR (>70).

Canal quality was generally very good this quarter. The exception was extremely high TKN at site 22F in January. What caused this is unknown, but the fact that it came back down is reassuring. We will keep an eye on this site.

All nutrient concentrations shown in mg/L

## April

#### May

1st Sunset Celebration @ Yacht Club Pier 6pm

3<sup>rd</sup> - 17<sup>th</sup> FYN Landscape Design Class 1pm -3pm Rotary Park 549-4606

10<sup>th</sup> Full Moon Paddle @ Eco Park 549-4606

18<sup>th</sup> Native Plant Sale Rotary Park 9am-1pm

22<sup>nd</sup> Earth Day

24<sup>th</sup> Arbor Day

1<sup>st</sup> Sea Turtle Season Begins

 $6^{th}$  Canalwatch

10<sup>th</sup> Mother's Day

15<sup>th</sup> FYN Introductory Class Rotary Park 549-4606

25<sup>th</sup> Memorial Day

 $1^{st}$  Hurricane Season Begins

June

3rd Canalwatch

City of Cape Coral Environmental Resources Division P.O. BOX 150027 Cape Coral, FL 33915-0027