Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 4th Quarter 2012

Environmental Recreation

Burrowing Owl Festival

Honey Archey

There is one bird species that is known throughout Cape Coral, many people come from all over to get a glimpse of, and some lucky residents share a yard with. These cute little critters quickly win hearts with their lack of fear, curious looks and adorable babies. They love to watch people as much as people love to watch them. Meet the burrowing owl!

The burrowing owl is the official city bird of Cape Coral and a species of special concern . They are birds of prey and feed on insects, anoles, frogs and mice. These small owls make their home in the ground, or sometimes in a culvert, and are excellent at decorating their houses, too! They bring bits of trash to place about their burrows in order to dissuade predators from approaching their homes.

Learn more about these fascinating creatures at the Annual Burrowing Owl Festival, sponsored by Cape Coral Friends of Wildlife and Cape Coral Parks and Recreation on Saturday, February 23 from 10:00 a.m. - 4:00 p.m. at Rotary Park, 5505 Rose Garden Road. Bring your family, bring your friends and enjoy this fantastic day! There will be educational programs, children's crafts, guided walking tours, bus tours to nearby owl burrows, butterfly house access, live animals, food and a great time for all! The cost is just $5 per person and children under 16 are free. So, don't miss this awesome day packed full of fun and learning!

Questions? Comments? Let us know!

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Native Plant Profile

St. John's Wort

Hypericum spp.

St. John's Wort is a common plant that is successful in all areas and in many different ecosystems. There are about 16 species that occur in Florida; most grow less than 3 feet tall, except for a few, including *H. fasciculatum*, which can grow to heights of 6 to 7 feet. St. John's wort has either 4 or 5 petals per pale yellow flower and often blooms year round, but some species have shorter flowering periods.

The small yellow flowers can make an attractive addition to any native landscape. Propagation occurs through seeds. While St. John's wort can tolerate varying soil types, it generally likes full sun. Its best use is to pair it with other weedy plants (e.g., beggar ticks, blanket flower, mist flower) as an untidy butterfly attracting area in the yard. The natural display of congregating plants as an assortment will please many different nectar seeking insects.

St. John's Wort

The Great Backyard Bird Count 2013

What is, The Great Backyard Bird Count (GBBC)?

It is an annual 4-day event that includes bird watchers of all ages and experience levels in counting birds. The event collects data on where birds are and how many there may be. These data give scientists a better idea of where the birds are located during this time of year. GBBC is a joint project of the Cornell Lab of Ornithology and National Audubon Society, with partner Bird Studies Canada. The annual count typically receives sightings from tens of thousands of people reporting over 600 bird species in the United States and Canada. 2013 is the first year it will be global, open to bird watchers through eBird.

How does eBird work?

eBird is a free, real-time, online checklist program which catalogs data in a database. Its web-interface engages tens of thousands of birders who submit their observations to the eBird database or view results with interactive queries into the eBird database. It documents the presence/absence of species, as well as abundance through checklist data.

Who can participate?

Everyone, including beginning bird watchers and experts! It can take as little as 15 minutes on one day, or you can count for as long as you like each day of the event. It's free, fun, and easy. It helps the scientific community and it helps birds.

How can I participate?

Beginning in 2013, the GBBC will be integrated with eBird. This change means you have to create a free account in order to enter your 2013 bird checklists for the GBBC (this function should be up and running soon on the GBBC website). You'll only have to do this once to participate in all future GBBC events. If you are already an eBird user, go birding during the GBBC and submit your checklists through eBird. Your data will show up on all GBBC output.

Participants watch birds for at least 15 minutes. They then tally the number of individual birds of each species they see during their counting period. If you are a beginning birder you can use a bird identification guide or watch with an experienced birder to confirm your identification. If you are unsure of an ID, you don't have to count it.

Beginning at 7:00 AM Eastern Time on the first day of the count, the GBBC website home page will have a button marked "Enter Your Checklists!" Click the button to enter your count tally numbers on the GBBC website. Participants can also submit photographs of the birds they see for the GBBC photo contest.

When is it happening?

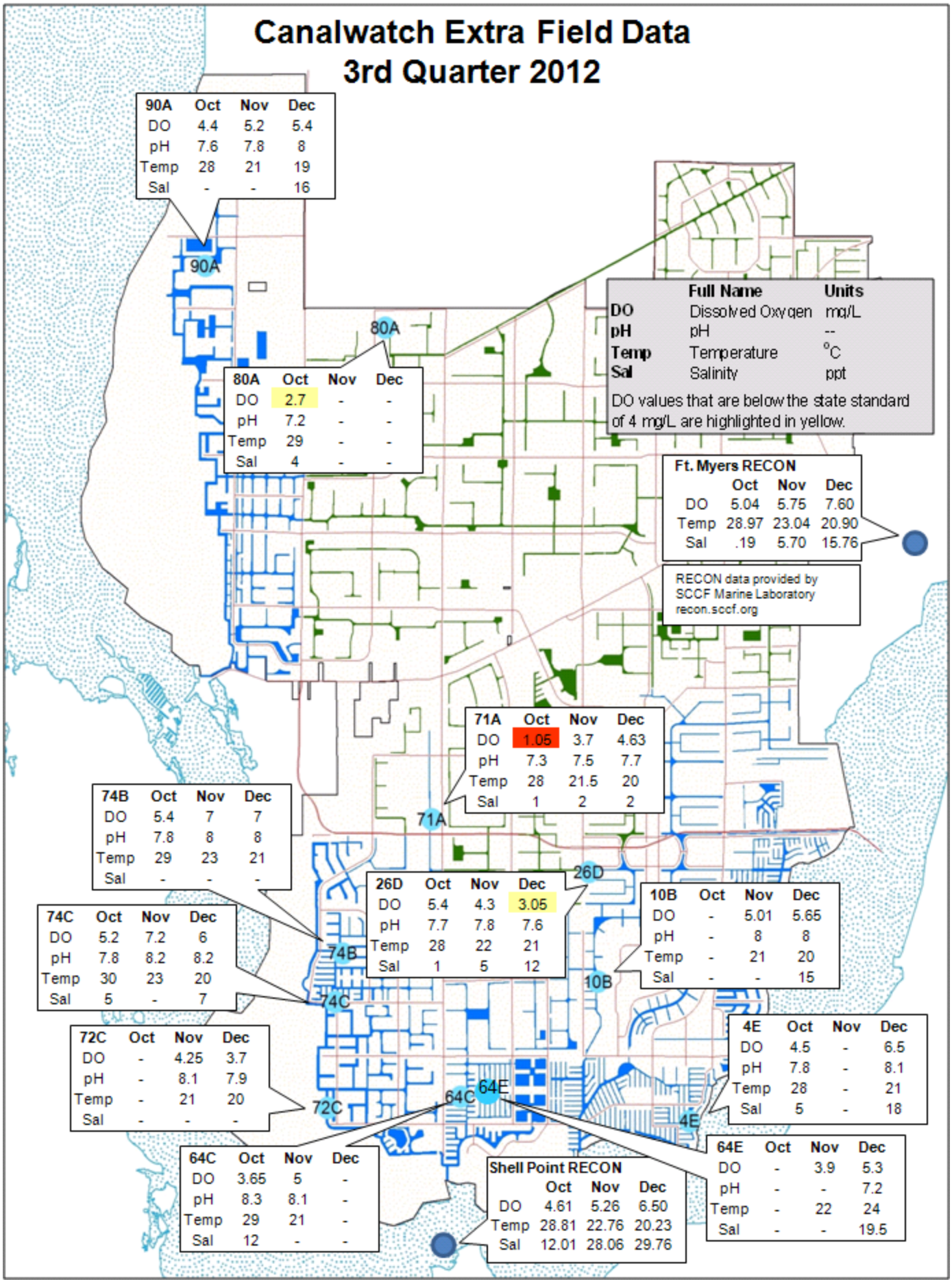
The 2013 GBBC will take place Friday, February 15, through Monday, February 18. This will be the 16th annual count.

Why count birds?

Knowing where birds are nesting, feeding and migrating is important to scientists and bird lovers who want to protect them. Bird populations vary over time and space. No one scientist could follow so many different populations of birds. The GBBC gives snapshots of populations which may not be currently monitored by researchers. These data can be used to determine how environmental factors, like changing temperatures affect bird health or how migration patterns change over time. This information can also be used by travelers to plan birding trips to see a favorite species or to visit an area with a high abundance of species. The GBBC is a fun, free, excuse to get outside a enjoy nature! Why not do it?

You can visit www.birdsource.org/gbbc/ to see results from previous years, view photos, set up an account and more. Also visit ebird.org to start your own digital life list and birds.audubon.org for conservation, education, and lots more interesting information.

Canalwatch Extra Field Data
3rd Quarter 2012



90A	Oct	Nov	Dec
DO	4.4	5.2	5.4
pH	7.6	7.8	8
Temp	28	21	19
Sal	-	-	16

80A	Oct	Nov	Dec
DO	2.7	-	-
pH	7.2	-	-
Temp	29	-	-
Sal	4	-	-

	Full Name	Units
DO	Dissolved Oxygen	mg/L
pH	pH	--
Temp	Temperature	°C
Sal	Salinity	ppt

DO values that are below the state standard of 4 mg/L are highlighted in yellow.

Ft. Myers RECON	Oct	Nov	Dec
DO	5.04	5.75	7.60
Temp	28.97	23.04	20.90
Sal	.19	5.70	15.76

RECON data provided by SCCF Marine Laboratory recon.sccf.org

71A	Oct	Nov	Dec
DO	1.05	3.7	4.63
pH	7.3	7.5	7.7
Temp	28	21.5	20
Sal	1	2	2

74B	Oct	Nov	Dec
DO	5.4	7	7
pH	7.8	8	8
Temp	29	23	21
Sal	-	-	-

26D	Oct	Nov	Dec
DO	5.4	4.3	3.05
pH	7.7	7.8	7.6
Temp	28	22	21
Sal	1	5	12

10B	Oct	Nov	Dec
DO	-	5.01	5.65
pH	-	8	8
Temp	-	21	20
Sal	-	-	15

74C	Oct	Nov	Dec
DO	5.2	7.2	6
pH	7.8	8.2	8.2
Temp	30	23	20
Sal	5	-	7

72C	Oct	Nov	Dec
DO	-	4.25	3.7
pH	-	8.1	7.9
Temp	-	21	20
Sal	-	-	-

4E	Oct	Nov	Dec
DO	4.5	-	6.5
pH	7.8	-	8.1
Temp	28	-	21
Sal	5	-	18

64C	Oct	Nov	Dec
DO	3.65	5	-
pH	8.3	8.1	-
Temp	29	21	-
Sal	12	-	-

Shell Point RECON	Oct	Nov	Dec
DO	4.61	5.26	6.50
Temp	28.81	22.76	20.23
Sal	12.01	28.06	29.76

64E	Oct	Nov	Dec
DO	-	3.9	5.3
pH	-	-	7.2
Temp	-	22	24
Sal	-	-	19.5

bd = below detection

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

	October 2012						November 2012						December 2012						
	NO2 <1.0	NO3 <1.0	NH3 none set	TKN	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN	T-N <2.0	T-PO4 <0.46	Avg TSI
3F	bd	bd	bd	0.7	0.7	0.08	bd	0.17	bd	0.8	0.97	0.07	bd	0.13	bd	0.7	0.83	0.06	53.30
4E	bd	0.18	bd	1.1	1.28	0.11							bd	0.09	bd	0.8	0.89	0.05	59.35
6F							bd	bd	bd	1.5	1.5	0.12	bd	0.19	bd	0.9	0.89	0.07	59.04
7C	bd	bd	bd	1.2	1.2	0.13	bd	0.11	bd	0.9	1.01	0.09	bd	0.17	bd	0.9	1.09	0.06	56.40
7D	bd	0.21	bd	1.2	1.41	0.15	bd	0.26	bd	1.0	1.26	0.10	bd	0.09	bd	0.8	1.07	0.05	62.97
9E	bd	bd	bd	1.2	1.2	0.13	bd	bd	bd	1.3	1.3	0.10	bd	0.12	0.1	0.9	0.89	0.05	67.01
10B							bd	0.10	bd	0.7	0.80	0.06	bd	0.11	bd	0.7	1.02	0.05	52.31
11E	bd	0.22	bd	1.2	1.42	0.14	bd	0.28	bd	0.8	1.08	0.11	bd	0.18	bd	1.0	0.81	0.05	56.34
15D	bd	bd	bd	0.9	0.9	0.08	bd	bd	bd	1.1	1.15	0.07	bd	0.12	bd	1.5	1.18	0.06	57.87
15E	bd	bd	bd	0.8	0.8	0.07	bd	bd	bd	0.7	0.7	0.11							53.83
16E	bd	bd	bd	0.7	0.7	bd	bd	bd	bd	1.1	1.1	0.03	bd	bd	bd	1.0	1.0	0.02	53.44
19D	bd	bd	bd	1.1	1.1	0.12	bd	0.24	bd	1.2	1.44	0.12	bd	0.17	bd	0.8	0.97	0.06	62.38
19K	bd	0.07	bd	1.4	1.47	0.17	bd	0.25	bd	0.9	1.15	0.12	bd	0.18	bd	0.9	1.08	0.06	63.07
19L													bd	0.24	bd	1.0	1.24	0.10	63.76
21D	bd	bd	bd	0.8	0.8	0.08	bd	0.14	bd	1.4	1.54	0.08	bd	0.17	0.1	0.9	1.07	0.09	63.37
26D	bd	bd	bd	1.8	1.8	bd	bd	bd	bd	0.7	0.7	0.19	bd	0.07	bd	1.0	1.07	0.02	51.69
26F							bd	bd	bd	0.7	0.75	0.05							53.19
28D	bd	bd	bd	0.8	0.8	0.04	bd	bd	bd	0.7	0.7	0.05	bd	bd	bd	0.8	0.8	0.02	53.69
30C	bd	bd	bd	0.6	0.6	bd	bd	bd	bd	0.7	0.7	0.05	bd	0.06	0.1	1.0	1.06	0.10	54.17
35A	bd	bd	bd	0.5	0.55	0.02	bd	bd	bd	0.6	0.7	0.03	bd	bd	bd	0.7	0.75	0.02	36.85
41A	bd	bd	bd	0.4	0.5	0.02	bd	bd	bd	0.3	0.6	0.02	bd	bd	bd	0.6	0.6	0.02	30.10
45D							bd	bd	bd	0.7	0.3	0.04	bd	bd	bd	0.8	0.8	0.02	55.18
48A	bd	bd	bd	0.6	0.6	0.02													41.60
52B	bd	bd	bd	0.5	0.5	0.02	bd	bd	bd	1.2	1.2	0.12	bd	0.06	bd	0.4	0.46	0.02	43.07
55B							bd	bd	bd	0.7	0.7	0.04							49.58
58B													bd	0.06	bd	0.8	0.86	0.04	54.14
58E													bd	bd	bd	1.3	1.35	0.08	53.74
58F	bd	bd	bd	0.7	0.7	bd	bd	bd	bd	1.1	1.1	0.08	bd	bd	bd	2.0	2.0	0.12	60.22
58G	bd	bd	bd	0.7	0.7	bd	bd	bd	bd	0.6	0.6	0.04	bd	bd	0.1	0.9	0.9	0.06	51.84
58I	bd	bd	bd	0.6	0.6	0.02	bd	bd	bd	0.6	0.65	0.03	bd	bd	0.1	1.0	1.05	0.05	43.48
59B	bd	0.13	bd	0.6	0.73	0.02	bd	bd	bd	0.6	0.6	0.03							45.26
64B	bd	0.15	bd	0.6	0.75	0.09	bd	0.18	bd	0.6	0.78	0.08	bd	0.10	bd	0.6	0.70	0.05	46.30

64C	bd	0.11	bd	0.7	0.81	0.10	bd	0.20	bd	0.7	0.90	0.10							50.30
64E	bd	bd	bd	0.7	0.7	0.10	bd	0.20	bd	0.6	0.80	0.10	bd	0.11	bd	0.5	0.61	0.05	50.28
65B	bd	bd	0.1	0.9	0.7	0.05	bd	0.15	bd	0.7	0.85	0.09							57.56
65C	bd	bd	bd	0.7	0.9	0.06	bd	0.16	bd	0.8	0.96	0.09							57.62
66A	bd	bd	bd	0.6	0.7	0.02	bd	bd	bd	0.6	0.8	0.02							41.60
69A							bd	bd	bd	1.0	0.6	0.08	bd	bd	bd	1.0	1.0	0.04	56.33
70F							bd	bd	bd	0.8	1.0	0.05	bd	bd	bd	0.9	0.9	0.02	45.11
71A	bd	bd	bd	0.9	0.0	0.10	bd	bd	bd	0.6	0.8	0.04	bd	0.06	bd	0.7	0.76	0.02	46.55
72A	bd	bd	bd	0.7	0.9	0.07	bd	bd	bd	0.7	0.6	0.06	bd	bd	bd	0.9	0.7	0.03	46.22
72C	bd	bd	bd	0.8	0.7	0.08	bd	bd	bd	0.7	0.7	0.04	bd	bd	bd	0.8	0.9	0.02	43.89
74B	bd	bd	bd	0.6	0.8	0.06	bd	bd	bd	0.7	0.7	0.04	bd	bd	bd	0.7	0.8	0.02	41.96
74C	bd	bd	bd	0.7	0.6	0.05	bd	bd	bd	0.8	0.7	0.05	bd	bd	bd	0.8	0.7	0.02	44.26
74F	bd	bd	bd	0.7	0.7	0.06	bd	bd	bd	0.6	0.8	0.04	bd	bd	bd	0.6	0.8	0.02	45.82
80A	bd	bd	bd	0.7	0.7	0.02													42.85
81A							bd	bd	bd	2.9	2.9	0.06							57.75
81B	bd	bd	bd	0.6	0.6	0.03	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	0.9	0.9	0.02	38.90
82A	bd	bd	bd	0.8	0.8	0.02	bd	bd	bd	0.8	0.8	0.03	bd	bd	bd	0.9	0.9	0.02	48.73
83A	bd	bd	bd	0.9	0.9	0.56	bd	bd	0.1	0.9	0.9	0.04	bd	bd	bd	0.9	0.9	0.02	50.51
89A	bd	0.11	0.1	1	1.11	0.16	bd	0.22	bd	1.0	1.22	0.12	bd	0.21	bd	1.0	1.21	0.07	63.07
90A	bd	bd	bd	1.4	1.4	0.08	bd	bd	bd	1.6	1.65	0.02	bd	bd	bd	1.4	1.4	0.02	52.57
91A	bd	bd	bd	0.8	0.8	0.03	bd	0.09	bd	0.6	0.69	0.03	bd	0.08	bd	0.6	0.68	0.02	42.30
93B	bd	bd	bd	0.8	0.8	0.11	bd	bd	bd	0.6	0.6	0.03	bd	bd	bd	0.7	0.7	0.02	44.56
97A	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	0.4	0.4	0.03	bd	0.06	bd	0.5	0.56	0.02	37.56
Median		**0.14**	**0.10**	**0.70**	**0.78**	**0.07**		**0.18**	**0.10**	**0.70**	**0.80**	**0.05**		**0.11**	**0.10**	**0.90**	**0.90**	**0.04**	**52.31**
Max		**0.22**	**0.10**	**1.80**	**1.80**	**0.56**		**0.28**	**0.10**	**2.90**	**2.90**	**0.19**		**0.24**	**0.10**	**2.00**	**2.00**	**0.12**	**67.01**

NO2 = Nitrite (inorganic)	TKN = Total Kjeldahl Nitrogen (organic + NH4)
NO3 = Nitrate (inorganic)	TN = Total Nitrogen (inorganic + organic)
NH3 = Ammonia (inorganic)	TP04 = Total Phosphate

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.

All nutrient concentrations shown in mg/L

TSI = Trophic State Index, a quick indicator of canal health. 47 sites this quarter scored as GOOD (<60). Eight sites scored FAIR (60-70), and no one scored POOR (>70).
It has been a very mild winter so far. Water temperatures may explain some of the higher TSI values that some of you have received this month. However, some of you have improved TSI values from last month, but nevertheless temperature seems to be a driving factor. Rainfall patterns are still consistent for this time of year, although I feel it will be a wetter winter overall. Perhaps decreased canal water levels won't be much of a concern for some of you this year.

January

2nd Canalwatch

5th Nature of Cape Coral
Bus Tour
8am-noon
Info: 549-4606

18th Florida Yards and
Neighborhoods Intro Class
1pm – 4pm
Rotary Park Environmental
Center
Info: 549-4606

19th Butterfly Gardening
10:30am – 12:30pm
Rotary Park Environmental
Center
Info: 549-4606

19th Florida Environment 101
A Free Seminar
3pm – 5pm
Rotary Park Environmental
Center
Info: 549-4606

February

2nd Nature of Cape Coral
Bus Tour
8am-noon
Info: 549-4606

6th Canalwatch

12th Cape Coral Friends of
Wildlife meeting
7pm – 9pm
Rotary Park Environmental
Center
Info: 549-4606

23rd 11th annual
30th Full Moon Paddle
Eco Preserve
5pm-7pm
Info: 549-4606

March

2nd Nature of Cape Coral
Bus Tour
8am-noon
Info: 549-4606

6th Canalwatch

7th Florida Environment 101
A Free Seminar
1pm – 3pm
Rotary Park Environmental
Center
Info: 549-4606

12th Cape Coral Friends of
Wildlife meeting
7pm – 9pm
Rotary Park Environmental
Center
Info: 549-4606

16th Florida Yards and
Neighborhoods Yard Tours
9am-12pm
Info: 549-4606

The Canalwatch BBQ is coming up! April 3rd at the Yacht Club Pavilion from 11:00am to 12:00pm

City of Cape Coral
Environmental Resources
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Cape Coral, FL 33915-0027