Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 2nd Quarter 2017

Environmental News

Cape Coral's Newest Attraction -A Community Garden-

The Rotary Club of Cape Coral has begun construction of the new community garden in August. The Rotary Community Garden sits behind City Hall off of SE 10th Street. The garden will be gated and will contain 52 raised box plots, irrigation, paver and shell paths and a small pavilion for outdoor gardening classes. The Rotary Club of Cape Coral has donated $20,000 to this project and combined with the donated lot from the City of Cape Coral, grant money, and volunteer donations, this community garden is truly a community wide effort.

The completion of the garden is set for some time in October. Garden plot availability is still to be determined at this time. A $50 annual rental fee will most likely be the most viable opportunity to secure a plot. However, a lottery system may be put into effect, depending on popularity or demand for the Rotary Community Garden. This is the first of its kind in Cape Coral, so chances are, it will be a hit.

For more information please contact Rotary Park Environmental Center at 549-4606.

Inside This Issue:

Questions? Comments? Let us know!

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Native Plant profile

Buccaneer Palm
Pseudophoenix sargentii

The buccaneer palm can be readily found in the Florida Keys. This slow growing palm reaches about 20 feet tall at mature height. It is also ideal for a coastal community landscape, as it is drought and salt tolerant and prefers sandy, rocky soil.

Many native nurseries are propagating this unique palm, so it's becoming more available than in the past. This palm is ideally suited as an accent tree or in small clusters due to its small size. It can also be used in constricted areas, such as between houses or near power lines for the same reason.

Buccaneer Palm (Photo coutesy of Leon Levy Native Plant Preserve, Bahamas)

Safe Boating Around Manatees

The manatees in Florida (*Trichechus manatus latirostris*) inhabit salt, brackish, and fresh water environments along the coast. Many of Cape Coral's canals often allow manatees to seek refuge from the Caloosahatchee River or Matlacha Pass to feed. These marine mammals are herbivores, and leisurely graze on sea grasses. This slow-paced grazing has earned them the nickname "sea cows". Slow and steadily, manatees consume from 4 to 9 percent of their body weight in aquatic vegetation every day. Manatees breathe air at the water's surface and often a manatee's snout is the only part of its body that is seen when they come up for air. Additionally, a "boil" of water from their tail thrusts is also an indicator that a manatee is below the surface.
Unfortunately, manatee behaviors and diet place them in areas that are often used for recreational boating. About 25-30% of manatee deaths statewide are attributed to watercraft. Strikes from boats can result in death or severely injure a manatee. Manatees that survive boat strikes are often left with permanent prop scars. The scars are used by wildlife officials to identify individual manatees, but also serve as a reminder that these gentle creatures are often in harm's way. Here are some tips to enjoying boating and being safe around these wonderfully charismatic marine mammals.

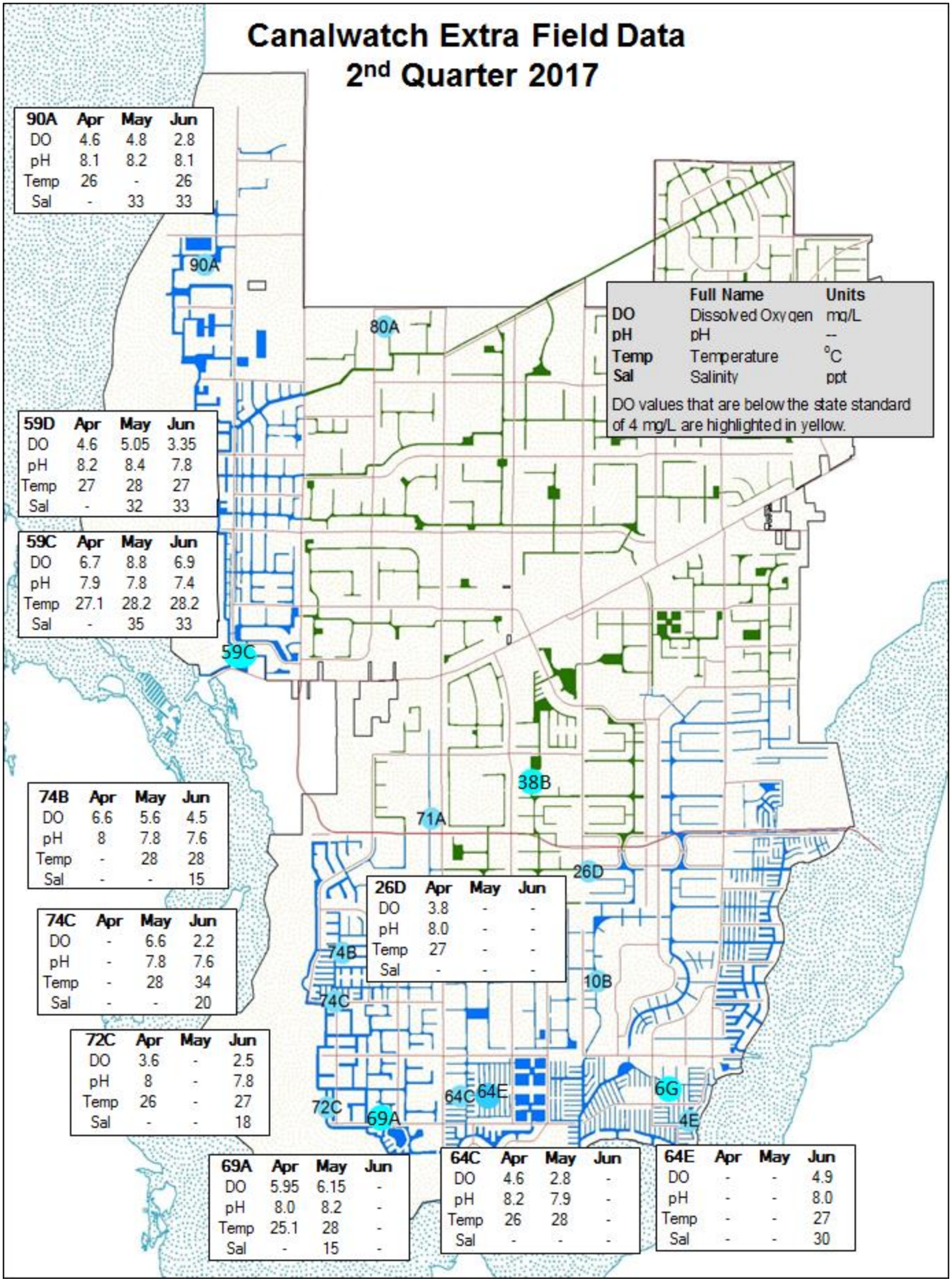
- When boating, always abide by the posted speed zone signs and especially manatee slow zones. Outside a channel, when in doubt of whether an area is used by manatees, take it slow.
- Wearing polarized sunglasses can reduce glare on the water, which will enable you to see below the surface more easily.
- Try to stay in deep-water channels and avoid boating over seagrass beds and shallow areas as these are manatee feeding areas. This also prevents prop scars in seagrass beds.
- If you do see a manatee, give it space. Try to stay at least 50 feet away when operating a boat motor. Even if you only see one animal, it is likely other manatees are in the area.
- Try not to pass directly over manatees and never separate mothers and calves.
- Look for a circular wave pattern (boil) left on the surface of the water by the manatee's tail as it swims underwater. Even if the manatee can't be seen, this is an indication of where it's headed.
- Do not discard monofilament line, hooks, or any other litter into the water. Manatees and other wildlife may ingest it or become entangled in this debris and can become injured or even die.
- Never try to touch or feed manatees, as doing so teaches them to seek out human interaction and brings them into close contact with boats.

If you do see and injured manatee while boating please call the Wildlife Alert number:

1-888-404-FWCC (3922)
Or just dial #FWC or *FWC on cell phone, or text Tip@MyFWC.com

It is important that you obtain immediate help for the animal. The sooner the animal is located and its condition is assessed, the better its chances for survival. Please be responsible, obey posted speed limits, no motor and manatee slow zones. Protect our marine mammals.

Canalwatch Extra Field Data
2nd Quarter 2017



90A	Apr	May	Jun
DO	4.6	4.8	2.8
pH	8.1	8.2	8.1
Temp	26	-	26
Sal	-	33	33

	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.

59D	Apr	May	Jun
DO	4.6	5.05	3.35
pH	8.2	8.4	7.8
Temp	27	28	27
Sal	-	32	33

59C	Apr	May	Jun
DO	6.7	8.8	6.9
pH	7.9	7.8	7.4
Temp	27.1	28.2	28.2
Sal	-	35	33

74B	Apr	May	Jun
DO	6.6	5.6	4.5
pH	8	7.8	7.6
Temp	-	28	28
Sal	-	-	15

26D	Apr	May	Jun
DO	3.8	-	-
pH	8.0	-	-
Temp	27	-	-
Sal	-	-	-

74C	Apr	May	Jun
DO	-	6.6	2.2
pH	-	7.8	7.6
Temp	-	28	34
Sal	-	-	20

72C	Apr	May	Jun
DO	3.6	-	2.5
pH	8	-	7.8
Temp	26	-	27
Sal	-	-	18

69A	Apr	May	Jun
DO	5.95	6.15	-
pH	8.0	8.2	-
Temp	25.1	28	-
Sal	-	15	-

64C	Apr	May	Jun
DO	4.6	2.8	-
pH	8.2	7.9	-
Temp	26	28	-
Sal	-	-	-

64E	Apr	May	Jun
DO	-	-	4.9
pH	-	-	8.0
Temp	-	-	27
Sal	-	-	30

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

	April 2017						May 2017						June 2017						
	NO2 <1.0	NO3 <1.0	NH3 none set	TKN none set	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN none set	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN none set	T-N <2.0	T-PO4 <0.46	Avg TSI
3F	bd	bd	0.05	0.05	0.1	0.04													17.71
5D	bd	bd	0.3	0.3	0.3	0.05							bd	bd	0.1	0.1	0.1	0.06	30.90
6F	bd	bd	0.3	0.3	0.3	0.08	bd	bd	0.05	0.2	0.2	0.06	bd	bd	0.1	0.1	0.1	0.09	37.46
7E	bd	bd	0.2	0.2	0.2	0.05	bd	bd	0.2	0.1	0.1	0.06	bd	bd	0.05	0.05	0.1	0.07	17.48
10C	bd	bd	0.5	0.5	0.5	0.03	bd	bd	0.05	0.4	0.4	0.03	bd	bd	0.2	0.2	0.2	0.06	41.39
11E	bd	bd	0.4	0.4	0.4	0.05	bd	bd	0.1	0.5	0.5	0.08	bd	0.11	0.1	0.1	0.1	0.09	30.18
12H	bd	bd	0.2	0.2	0.2	0.05													32.00
16E	bd	bd	0.2	0.3	0.3	0.04	bd	bd	0.05	0.6	0.6	0.02	bd	bd	0.1	0.3	0.3	0.03	51.90
16H	bd	bd	0.3	0.4	0.4	0.04							bd	bd	0.3	0.5	0.5	0.03	43.80
18J	bd	bd	0.2	0.4	0.4	0.03	bd	bd	0.1	0.4	0.4	0.02	bd	bd	0.4	0.4	0.4	0.20	44.07
18K	bd	bd	0.1	0.1	0.1	0.03	bd	bd	0.1	0.2	0.2	0.05	bd	0.05	0.05	0.5	0.5	0.02	42.55
18L							bd	bd	0.05	0.3	0.3	0.14	bd	bd	0.2	0.2	0.2	0.13	40.34
19D	bd	bd	0.2	0.2	0.2	0.06							bd	bd	0.1	0.1	0.1	0.09	25.40
19K	bd	bd	0.2	0.2	0.2	0.06	bd	bd	0.05	0.5	0.5	0.11	bd	bd	0.05	0.3	0.3	0.10	41.81
21D	bd	bd	0.2	0.2	0.2	0.07	bd	bd	0.05	0.5	0.5	0.09	bd	bd	0.05	0.2	0.2	0.10	35.49
26D	bd	bd	0.5	1.3	1.3	0.05													39.42
28D	bd	0.06	0.3	0.9	0.96	0.06	bd	0.05	0.1	0.7	0.7	0.08	bd	bd	0.1	0.4	0.4	0.04	49.81
31C	bd	bd	0.1	0.2	0.2	0.02	bd	0.12	0.05	0.2	0.2	0.04	bd	bd	0.1	0.4	0.4	0.01	45.28
38B	bd	bd	0.1	0.5	0.5	0.05	bd	bd	0.05	0.6	0.6	0.07	bd	0.05	0.05	0.4	0.4	0.04	55.80
41A	bd	bd	0.2	0.3	0.3	0.03	bd	0.09	0.05	0.4	0.4	0.07	bd	bd	0.1	0.2	0.2	0.03	33.50
41B													bd	bd	0.05	0.3	0.3	0.02	34.74
45D	bd	bd	0.2	0.4	0.4	0.02													37.59
48A	bd	bd	0.1	0.1	0.1	0.01	bd	bd	0.05	0.3	0.3	0.05	bd	bd	0.05	0.1	0.1	0.01	29.87
52B	bd	bd	0.1	0.1	0.1	0.03	bd	bd	0.05	0.3	0.3	0.02	bd	bd	0.05	0.2	0.2	0.02	31.62
58B	bd	bd	0.2	0.2	0.2	0.04													36.52
58I	bd	bd	0.2	0.2	0.2	0.04	bd	bd	0.05	0.2	0.2	0.04	bd	bd	0.05	0.2	0.2	0.04	30.41
58J	bd	bd	0.2	0.2	0.2	0.03	bd	bd	0.2	0.2	0.2	0.03	bd	bd	0.6	0.2	0.2	0.03	31.13
59C	bd	bd	0.2	0.2	0.2	0.02	bd	bd	0.05	0.1	0.1	0.03	bd	bd	0.05	0.3	0.3	0.02	35.29
59D	bd	bd	0.3	0.3	0.3	0.04	bd	bd	0.1	0.6	0.6	0.02	bd	bd	0.3	0.3	0.3	0.03	41.33

64B	bd	bd	0.2	0.2	0.2	0.06							bd	0.05	0.3	0.3	0.3	0.06	27.89
64C	bd	bd	0.2	0.2	0.2	0.05	bd	bd	0.05	0.2	0.2	0.05							29.44
64E													bd	0.06	0.05	0.1	0.1	0.06	36.87
64F	bd	bd	0.2	0.3	0.3	0.05	bd	bd	0.3	0.1	0.1	0.05	bd	0.05	0.2	0.1	0.1	0.06	23.63
65C	bd	bd	0.2	0.2	0.2	0.05	bd	bd	0.05	0.2	0.2	0.06							33.46
65E													bd	0.05	0.1	0.1	0.1	0.07	28.15
69A	bd	bd	0.1	0.3	0.3	0.06	bd	bd	0.1	0.6	0.6	0.11							39.02
69D	bd	bd	0.2	0.4	0.4	0.08							bd	0.05	0.1	0.3	0.3	0.13	42.46
71B	bd	bd	0.3	0.3	0.3	0.02	bd	bd	0.05	0.4	0.4	0.02	bd	0.05	0.2	0.3	0.3	0.02	42.37
72C	bd	bd	0.3	0.3	0.3	0.06							bd	bd	0.05	0.2	0.2	0.06	41.15
72E							bd	bd	0.05	0.3	0.3	0.08	bd	bd	0.2	0.4	0.4	0.07	41.83
74B	bd	bd	0.3	0.3	0.3	0.06	bd	bd	0.05	0.5	0.5	0.08	bd	0.05	0.3	0.3	0.3	0.07	35.53
74C	bd	bd	0.4	0.4	0.4	0.08	bd	bd	0.05	0.1	0.1	0.08	bd	bd	0.1	0.1	0.1	0.08	18.79
82A	bd	bd	0.2	0.2	0.2	0.03	bd	bd	0.05	0.3	0.3	0.03	bd	bd	0.05	0.1	0.1	0.03	41.10
83C	bd	bd	0.3	0.3	0.3	0.02	bd	bd	0.1	0.3	0.3	0.03	bd	bd	0.2	0.2	0.2	0.03	44.07
89A	bd	bd	0.5	0.5	0.5	0.08	bd	bd	0.05	0.8	0.8	0.09	bd	bd	0.1	0.4	0.4	0.13	50.98
90A	bd	bd	0.2	0.2	0.2	0.03	bd	bd	0.05	0.4	0.40	0.03	bd	bd	0.05	0.6	0.6	0.14	42.25
Median		**0.06**	**0.20**	**0.30**	**0.30**	**0.05**		**bd**	**0.05**	**0.30**	**0.30**	**0.05**		**bd**	**0.10**	**0.20**	**0.20**	**0.06**	**37.17**
Max		**0.06**	**0.50**	**1.30**	**1.30**	**0.08**		**0.12**	**0.30**	**0.80**	**0.80**	**0.14**		**0.11**	**0.60**	**0.60**	**0.60**	**0.20**	**55.8**

NO2 = Nitrite (inorganic)	TKN = Total Kjeldahl Nitrogen (organic + NH4)
NO3 = Nitrate (inorganic)	TN = Total Nitrogen (inorganic + organic)
NH3 = Ammonia (inorganic)	TPO4 = 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. 50 sites this quarter scored as GOOD (<60). zero sites scored FAIR (60-70), and zero scored POOR (>70).
Second quarter 2017 water quality continued to maintain with the lack of stormwater influence. Significant rainfall began in the month of June and this much needed rainfall helped restore canal water levels in the freshwater basins. While this alleviated the prolonged dry period that affected this region, the introduction of stormwater runoff will increase the likelihood of algae blooms and other pollution concerns.

International Coastal Cleanup

Keep Lee County Beautiful is the Lee County coordinator for Ocean Conservancy's annual International Coastal Cleanup, the largest volunteer effort of its kind. Every September for 31 years, ICC has motivated over nine million people from around the world to pick up over 144 million pounds of trash from nearly 300,000 miles of shoreline. Of all ages are welcome and any individual, family, school, group, place of worship, business or government entity can coordinate or participate in an average of 25 simultaneous projects around the area.

Saturday, September 16, 2017
9:00 to 12:00 p.m. various locations throughout Lee County

Registration is still available for
Horton Park - 2618 SE 26th PL, Cape Coral 33904
Please visit http://www.klcb.org/coastal-cleanup.html
to register for this event.

City of Cape Coral
Environmental Resources
P.O. BOX 150027