Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 4th Quarter 2021

Environmental News

Manatees

Manatees often seek refuge and food in Cape Coral's canals, so please heed "idle speed" and "no wake" zones throughout the canals and surrounding waterways. This includes any waterway within a quarter mile of the shoreline. These are designated as manatee zones.

During the cooler weather months, manatees will seek warmer water. Often this could be a secluded canal or the warm water near the Florida Power & Light (FPL) power plant. This popular spot for this marine mammal is also a popular spot for manatee viewing. Manatee Park is located directly across from the FPL plant on Palm Beach Blvd. in Fort Myers and provides a great opportunity to see manatees in the cooler months.

No matter what time of year, it is best to be a responsible boater and heed "idle speed" and "no wake" signs for these gentle marine mammals and for safety reasons within our canal waterways.

For more information on Manatee Park, please visit leeparks.org or call 239-690-5030.

Native Plant Profile

False Buttonweed
Spermacoce verticillata

False buttonweed can be an unwelcome weed to most homeowners. However, letting of few of these white flower clusters grow will be very attractive to butterflies, bees, and wasps. Especially the predatory wasp, *Larra bicolor*. An introduced predator to mole crickets, a common turf grass nuisance. This hardy weed is found just about anywhere grass will grow.

While it might not be desirable in turf grass, this plant is useful in butterfly gardens, as it does provide a nectar source.

Continued on next

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Questions? Comments? Let us know!

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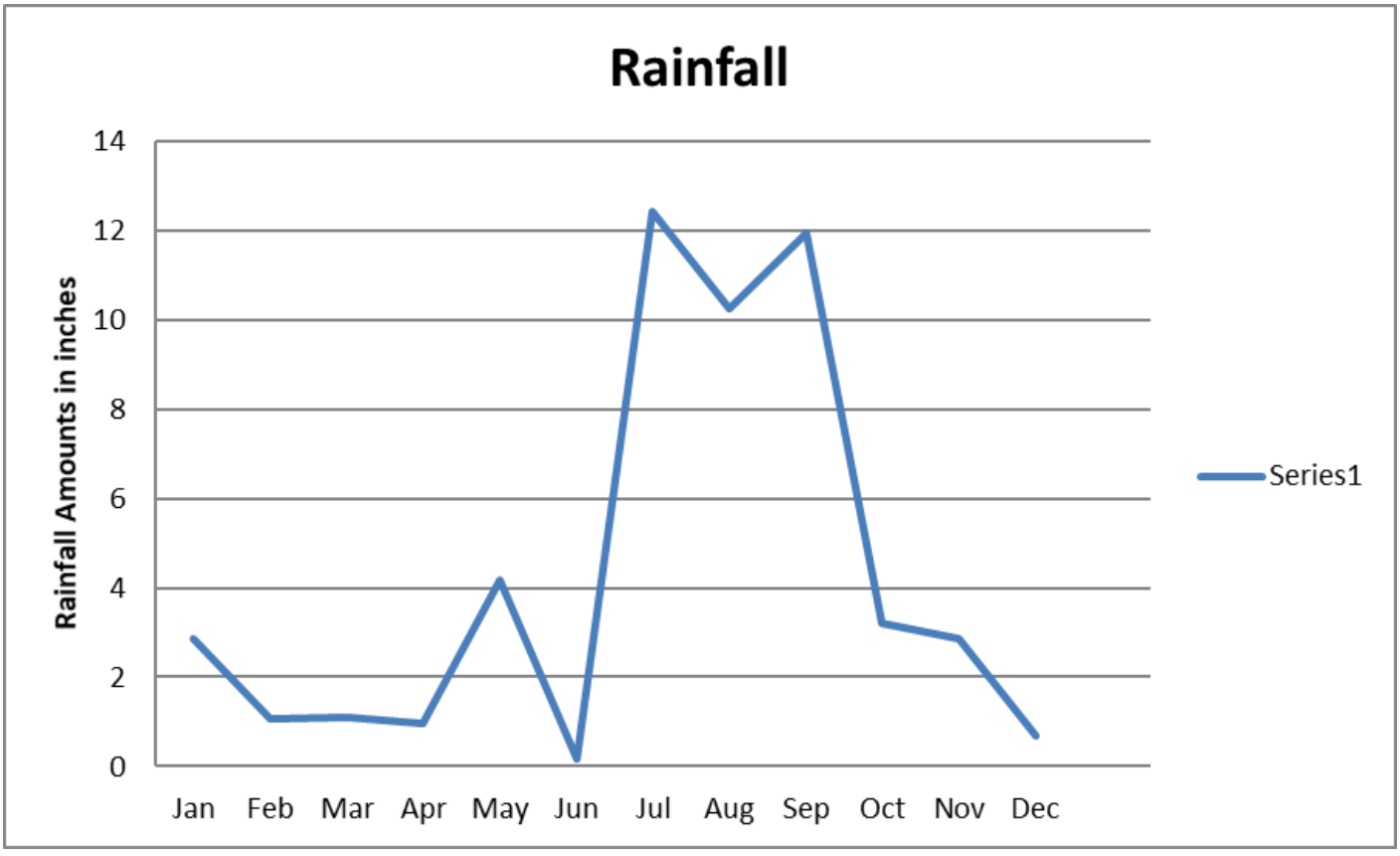
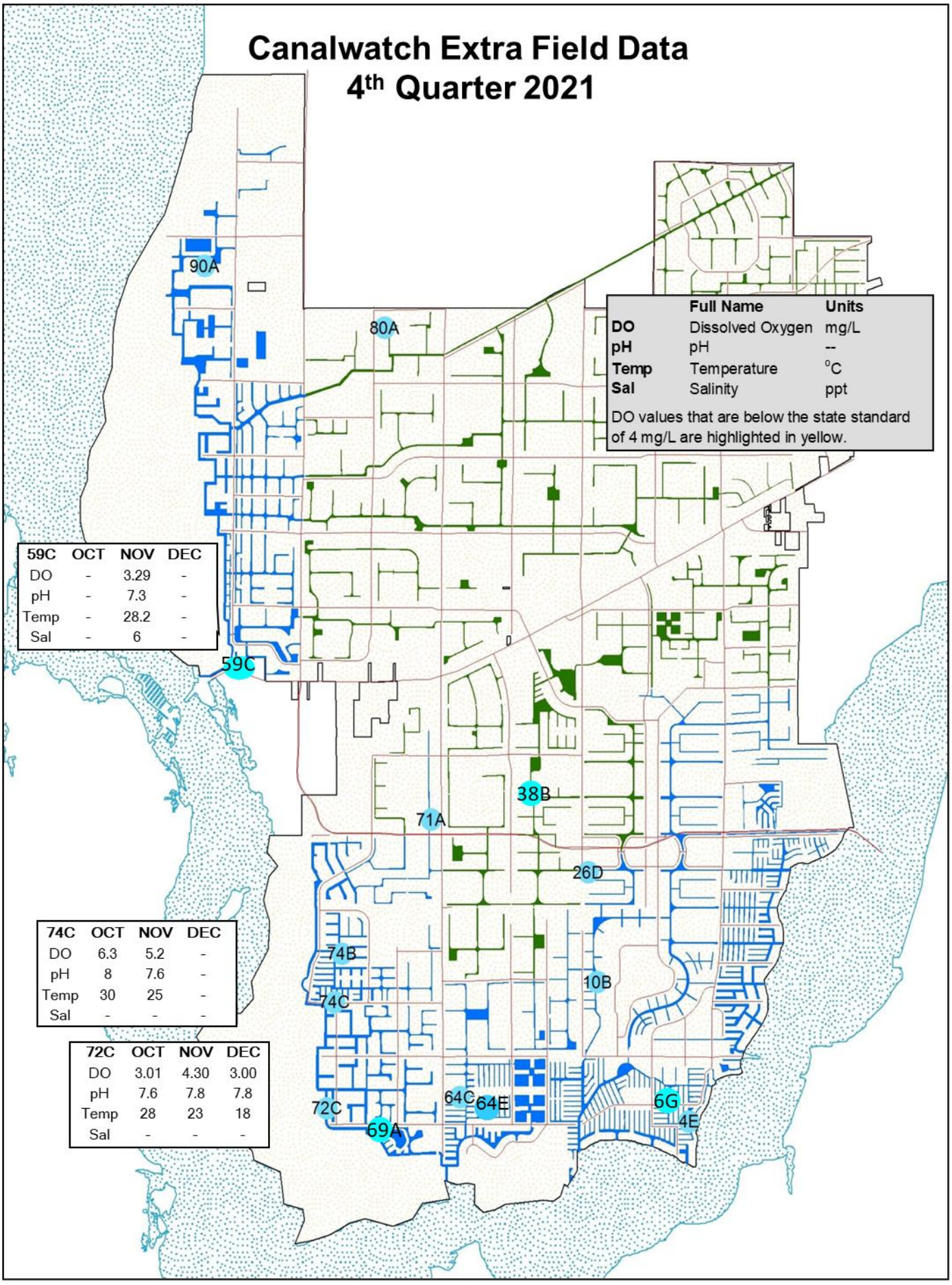
The next time you see it popping up in a plant bed or growing alongside a road, take note as to what is buzzing, flying or perched on its bloom. The tiny flowers surprisingly provide plentiful nectar for those pollinating visitors.

2021 Year in Review

- In 2021, we received 290 Canalwatch samples. Thank you for all your hard work and participation this year!
- Also in 2021, we received 141 Chlorophyll samples in addition to our regular samples.
- We trained 3 new volunteers this year. Welcome!
- There are currently 35 active stations.
- Total average rainfall for Cape Coral for the past year was about 58 inches.



Rainfall amounts are from January 2020 to December 2021 and are an average of monthly totals from all volunteers who recorded rainfall data.


Canalwatch Extra Field Data
4th Quarter 2021
90A
80A
59C
38B
71A
26D
74B
74C
10B
72C
69A
64C
64E
6G
4E
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.
59C OCT NOV DEC
DO - 3.29 -
pH - 7.3 -
Temp - 28.2 -
Sal - 6 -
74C OCT NOV DEC
DO 6.3 5.2 -
pH 8 7.6 -
Temp 30 25 -
Sal - - -
72C OCT NOV DEC
DO 3.01 4.30 3.00
pH 7.6 7.8 7.8
Temp 28 23 18
Sal - - -

	bd = below detection				benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.													
	October 2021						November 2021						December 2021						
	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	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	TSI
4-2A	0.05	0.10	0.2	1.1	1.20	0.10	0.05	0.18	0.1	0.5	0.68	0.10							59.07
5D	0.05	0.05	0.2	1.1	1.10	0.11	0.05	0.25	0.05	0.6	0.85	0.10	0.05	0.16	0.1	0.5	0.66	0.10	54.56
5H	0.05	0.05	0.1	0.8	0.80	0.10	0.05	0.15	0.05	0.6	0.75	0.10	0.05	0.18	0.05	0.4	0.58	0.10	49.84
5I	0.05	0.05	0.1	0.9	0.90	0.10	0.05	0.20	0.05	0.6	0.80	0.10	0.05	0.05	0.05	0.5	0.50	0.10	51.47
6F	0.05	0.32	0.3	1.5	1.82	0.21	0.05	0.32	0.1	1.2	1.52	0.16	0.05	0.26	0.1	0.7	0.96	0.10	60.34
7E													0.05	0.31	0.05	0.7	1.01	0.10	56.98
9H	0.05	0.10	0.2	0.7	0.80	0.10	0.05	0.29	0.1	0.9	1.19	0.15	0.05	0.33	0.1	0.6	0.93	0.10	54.68
12H	0.05	0.20	0.2	1.1	1.30	0.14	0.05	0.34	0.05	0.8	1.14	0.14							57.52
13B													0.05	0.39	0.1	0.7	1.09	0.25	60.20
16E	0.05	0.05	0.1	0.6	0.60	0.05	0.05	0.23	0.1	0.7	0.93	0.15	0.05	0.05	0.05	0.5	0.50	0.05	51.00
16I	0.05	0.05	0.1	0.8	0.80	0.05	0.05	0.05	0.05	0.5	0.50	0.05	0.05	0.05	0.05	0.4	0.40	0.05	48.29
18K													0.05	0.17	0.05	0.7	0.87	0.10	59.73
18L	0.05	0.11	0.05	0.9	1.01	0.14	0.05	0.05	0.05	0.6	0.60	0.05	0.05	0.05	0.05	0.7	0.70	0.10	50.98
18M	0.05	0.05	0.05	0.9	0.90	0.10	0.05	0.25	0.05	0.7	0.95	0.11	0.05	0.05	0.05	0.6	0.60	0.10	58.98
19D	0.05	0.05	0.05	1.5	1.50	0.15	0.05	0.05	0.05	0.8	0.80	0.10	0.05	0.33	0.05	0.8	1.13	0.10	63.18
21D	0.05	0.05	0.05	0.8	0.80	0.10	0.05	0.36	0.05	0.9	1.26	0.14	0.05	0.27	0.1	0.6	0.87	0.10	55.98
21I	0.05	0.10	0.05	0.6	0.70	0.05	0.101	0.24	0.1	0.8	1.04	0.12							54.21
24D	0.05	0.05	0.05	0.8	0.80	0.10	0.05	0.24	0.05	0.7	0.94	0.10	0.05	0.10	0.3	0.8	0.90	0.10	53.42
30D	0.05	0.05	0.05	0.6	0.60	0.05	0.05	0.05	0.05	0.8	0.80	0.26	0.05	0.10	0.1	0.6	0.70	0.05	50.37
41B													0.05	0.05	0.05	0.7	0.70	0.05	51.65
44A	0.05	0.05	0.05	0.7	0.70	0.05	0.05	0.05	0.05	0.6	0.60	0.05	0.05	0.10	0.2	0.7	0.80	0.10	51.33

45D	0.05	0.05	0.05	0.6	0.60	0.05	0.05	0.05	0.05	0.7	0.70	0.05	0.05	0.05	0.1	0.5	0.50	0.05	50.23
48A	0.05	0.05	0.05	2.6	2.60	0.05	0.05	0.05	0.05	0.5	0.50	0.05	0.05	0.11	0.1	0.7	0.81	0.05	59.59
58I	0.05	0.05	0.2	0.8	0.80	0.05	0.05	0.05	0.05	0.6	0.60	0.05	0.05	0.05	0.3	0.1	0.10	0.10	47.48
59C	0.05	0.05	0.2	0.7	0.70	0.05	0.05	0.05	0.05	0.7	0.70	0.05							39.56
64C													0.05	0.05	0.05	0.05	0.05	0.10	29.47
64H	0.05	0.13	0.2	0.6	0.73	0.10	0.05	0.05	0.05	0.8	0.8	0.05	0.05	0.05	0.05	0.6	0.6	0.10	47.83
72C	0.05	0.05	0.2	0.7	0.7	0.10	0.05	0.05	0.05	0.7	0.7	0.10							48.53
74C	0.05	0.05	0.2	0.7	0.7	0.10	0.05	0.10	0.05	0.6	0.7	0.10							45.46
82A	0.05	0.05	0.1	0.8	0.8	0.05	0.05	0.05	0.05	0.7	0.7	0.05	0.05	0.05	0.05	0.5	0.5	0.05	55.71
96A	0.05	0.05	0.2	0.7	0.7	0.10	0.05	0.11	0.05	0.8	0.91	0.05	0.05	0.05	0.05	0.6	0.6	0.05	56.76
Median		**0.05**	**0.10**	**0.80**	**0.80**	**0.10**		**0.11**	**0.05**	**0.70**	**0.80**	**0.10**		**0.10**	**0.05**	**0.60**	**0.70**	**0.10**	**53.42**
Max		**0.32**	**0.30**	**2.60**	**2.60**	**0.21**		**0.36**	**0.10**	**1.20**	**1.52**	**0.26**		**0.39**	**0.30**	**0.80**	**1.13**	**0.25**	**63.18**

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. 28 sites this quarter scored as GOOD (<60). Three site scored FAIR (60-70), and zero scored POOR (>70).
Water quality remained consistent (GOOD) throughout the summer and into fall for 4th quarter results. With water quality improving slightly this quarter over last quarter. Secchi measurements improved for many sites and many reported that secchi was visible on the bottom throughout the dry season.

For up-to-date City of Cape Environmental Resources Division water quality date visit
https://www.capecoral.net/department/public_works/quarterly_water_quality_reports.php

Keep Lee County Beautiful International Coastal Cleanup

The International Coastal Cleanup is an annual event to help rid coastal environments of trash and debris. This worldwide event involves many volunteers and locally many will be needed to help in this cleanup effort to clean Florida's coastlines of pollution caused by litter. There will be many sites throughout Lee County, and all are coordinated by Keep Lee County Beautiful, Inc. (KLCB), but it is the collective effort of the volunteers that assist in collection and documentation of litter. KLCB will again be looking for volunteers for this global effort for the Annual International Coastal Cleanup. For more information, please visit KLCB.org

International Coastal Cleanup
Saturday, September 17th
8:00 to 11:00 AM

City of Cape Coral
Environmental Resources
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