Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 3rd Quarter 2013

Environmental News

Little Free Libraries are coming to Cape Coral

Little Free Libraries (LFL's) are decorative wooden boxes where one can borrow a book, return a book, or leave used books for others to enjoy. These "mini-libraries" are often placed in strategic areas of the community where people of all ages can share and exchange their favorite books.

Here in Cape Coral we would like to use LFL's as an opportunity to specifically promote environmental literacy. LFL's will soon be available in our passive recreation areas: Rotary, Jaycee, and Joe Stonis Parks, Four-Mile Cove Ecological Preserve, and the Yacht Club. These LFL's will hold collections of children's books, environmental science texts, and field guides.

Environmental Resources Division and Rotary Park staffs are accepting book donations. If you would like to help support us in this endeavor, please consider donating an environmentally themed book or other appropriate text. You can bring your donation to Rotary Park. All donations will be greatly appreciated. For more information on this national program, visit http://littlefreelibrary.org.

Inside This Issue:

Questions? Comments? Let us know!

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Native Plant profile

Pickeralweed
Pontederia cordata

Pickeralweed is an aquatic plant found throughout Canada and the Americas. It's often associated with freshwater ecosystems, such as lake shorelines, marshes or other wetlands, and can sometimes be found in drainage ditches. Pickeralweed can be identified among other aquatic plants by its long stalk of purple flowers. Its leaves are lance shaped and are often pointing upward. Pickeralweed is useful as a shoreline stabilizer but also attracts bees and butterflies to the many flowers it produces. For landscape design, Pickeralweed can be used in koi ponds as a decorative aspect, adding height with its three to four foot stature.

Another novel use in landscape is in rain gardens, again adding height or purple hues among some other popular native aquatic plants (i.e. duck potato, lilies, irises).

Pickeralweed
Photo courtesy of Atlas of Florida Vascular Plants

The loss of green space and the "remember when" factor Essay by Harry Phillips

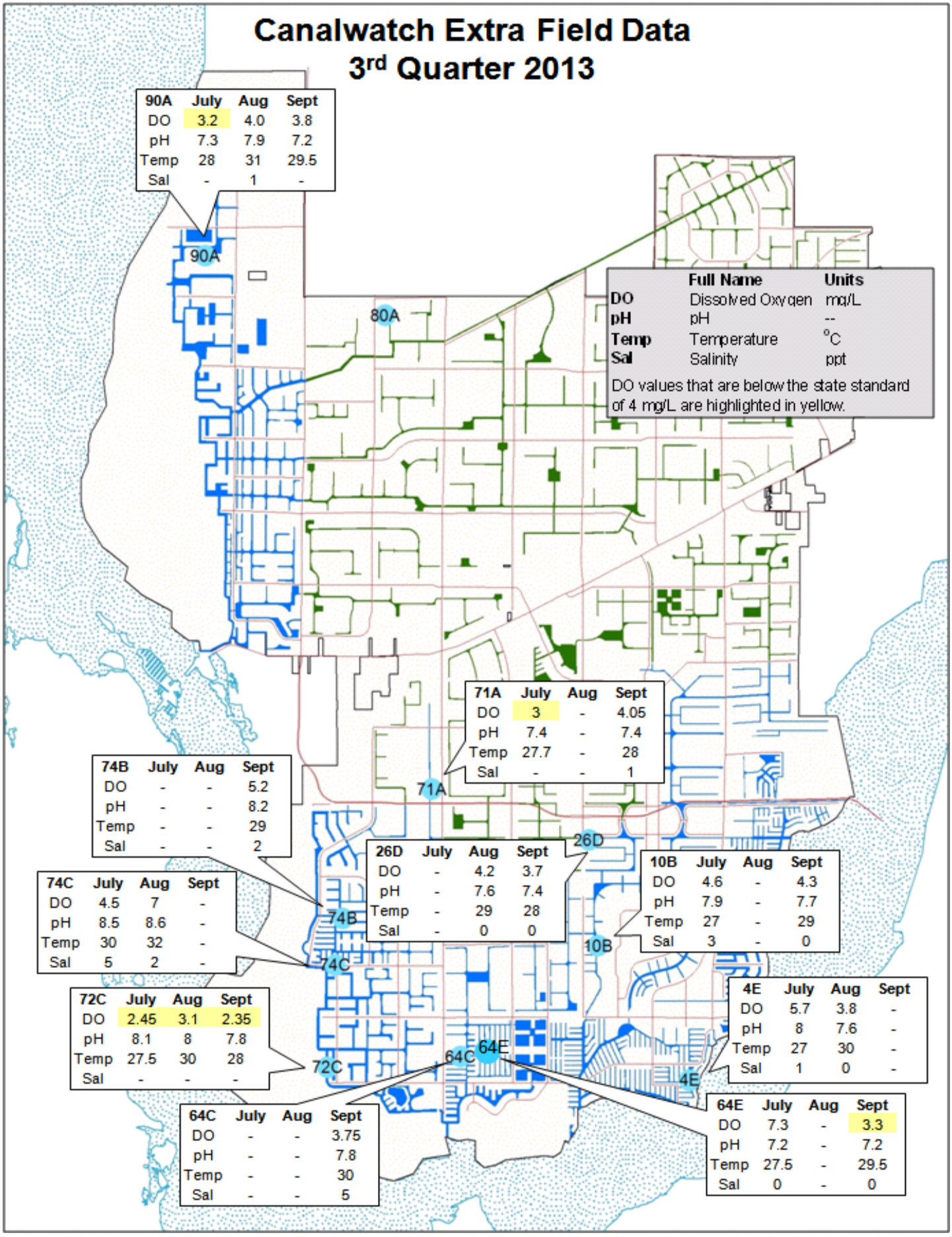
Life is filled with remembrances, accumulated just as surely as one accumulates years. Vestiges of old acquaintances, family gatherings or the neighborhood of one's youth all leave an impression that helps to shape personal characteristics. Novelties and nostalgia that have slipped away into the past may leave an unwillingness to adapt, but often come alive to succeeding generations with storytelling about "the way things were" and "I remember when". These remembrances, traditions and glory day tales are an important aspect of who we are, and generate the realization of one's becoming older and wiser. They also shape a narrative that is important in alleviating generational amnesia. Children are forever mesmerized by stories from their parents or grandparents or an unedited yarn from the "crazy uncle" - sometimes to the chagrin of their parents. These chronicles, no matter how colorful, dull, infrequent or re-told are important bridges between generations.

Stories of green space are often lost in translation between older and younger generations in the modern era. It's an undeniable fact that most children, for whatever reason, don't seem to go outside just to play anymore unless they are prompted by a parent or care giver. Earlier generations didn't hesitate to play outside and, in fact, looked forward to that part of their day when they could get away to woods, sandlots, tree houses or the local swimming hole. They often did that on a daily basis. These homes away from home offered many opportunities for unfettered play. Bonding with friends, experiencing nature, stretching the imagination, or just moving - running, climbing or swimming – these were all accomplished by play. Nature and outside play offered unique opportunities to the astute observer: awareness of flowers and trees blooming, caterpillars and butterflies arriving, days becoming longer, frogs' choruses, air crisping as the leaves begin to change, and limitless other examples of cycles, rhythms and harmonies. However, it seems that the present generation has lost touch with nature, or even concerns for environmental issues. While environmental education is still acknowledged in schools, learning about deforestation, pollution and global warming is different than experiencing nature through play.

Here lies the impasse. If connection with nature is lost, then what is ultimately missed in those broad concepts of deforestation, pollution or even global warming? Are these environmental issues truly understood when the sense of community is absent? For various reasons, such as the many technological distractions, fears of kidnappings or even poison ivy and bug bites, children are not playing outside. It is becoming apparent that their care for the environment is fleeting due to this lost pastime. How is gaining knowledge about global environmental issues a concern for children if they are not interested in the immediate world around them?

One aspect of remembrances I did not mention earlier is the remembrance of loss. The "remember when" can be attached just as much to a loved one, a nostalgic first car or the green spaces that offered a playground to so many of us in our youth. The fact that the tree was cut down, the sandlot built on, the river polluted or the forest cleared should give us emotional pause for the many fond memories those secret gardens offered. If youth today are pushed out into green spaces and encouraged to enjoy the natural attraction of the outdoors, then perhaps the scope of environmental issues, great and small, would have more impact on their minds and actions. Maybe a simple plot of green will again be a cherished aspect of their community.

Canalwatch Extra Field Data
3rd Quarter 2013



90A	July	Aug	Sept
DO	3.2	4.0	3.8
pH	7.3	7.9	7.2
Temp	28	31	29.5
Sal	-	1	-

	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.

71A	July	Aug	Sept
DO	3	-	4.05
pH	7.4	-	7.4
Temp	27.7	-	28
Sal	-	-	1

74B	July	Aug	Sept
DO	-	-	5.2
pH	-	-	8.2
Temp	-	-	29
Sal	-	-	2

26D	July	Aug	Sept
DO	-	4.2	3.7
pH	-	7.6	7.4
Temp	-	29	28
Sal	-	0	0

10B	July	Aug	Sept
DO	4.6	-	4.3
pH	7.9	-	7.7
Temp	27	-	29
Sal	3	-	0

74C	July	Aug	Sept
DO	4.5	7	-
pH	8.5	8.6	-
Temp	30	32	-
Sal	5	2	-

72C	July	Aug	Sept
DO	2.45	3.1	2.35
pH	8.1	8	7.8
Temp	27.5	30	28
Sal	-	-	-

4E	July	Aug	Sept
DO	5.7	3.8	-
pH	8	7.6	-
Temp	27	30	-
Sal	1	0	-

64C	July	Aug	Sept
DO	-	-	3.75
pH	-	-	7.8
Temp	-	-	30
Sal	-	-	5

64E	July	Aug	Sept
DO	7.3	-	3.3
pH	7.2	-	7.2
Temp	27.5	-	29.5
Sal	0	-	0

	bd = below detection				benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.													
	July 2013						August 2013						September 2013						
	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
3F	bd	bd	bd	0.7	0.7	0.07	bd	0.10	bd	1.4	1.50	0.14	bd	bd	bd	0.6	0.6	0.05	57.01
4E	bd	0.08	bd	1.2	1.28	0.13	bd	0.10	bd	1.8	1.90	0.15							53.66
6F							bd	bd	bd	1.8	1.8	0.17	bd	bd	bd	1.3	1.3	0.14	59.81
7C	bd	0.06	bd	1.0	1.06	0.12							bd	bd	bd	0.8	0.8	0.11	60.00
7D	bd	0.15	bd	1.2	1.35	0.16	bd	0.18	bd	1.2	1.38	0.12	bd	0.15	bd	0.8	0.95	0.11	66.89
9E	bd	bd	bd	1.2	1.2	0.09							bd	bd	bd	0.8	0.8	0.12	55.89
10B	bd	bd	bd	0.9	0.9	0.07							bd	0.07	bd	0.3	0.37	0.05	48.95
11E	bd	0.05	bd	1.2	1.25	0.14	bd	0.19	bd	2.2	2.39	0.25	bd	0.19	bd	1.2	1.39	0.13	63.41
15D	bd	0.20	bd	1.0	1.20	0.08	bd	bd	bd	1.4	1.4	0.10	bd	0.07	bd	1.0	1.07	0.09	70.58
16E	bd	bd	bd	0.7	0.7	0.04	bd	bd	bd	1.3	1.3	0.03	bd	bd	bd	0.9	0.9	0.03	53.00
19D							bd	bd	bd	1.8	1.8	0.19	bd	bd	bd	1.4	1.4	0.16	67.04
19K	bd	bd	bd	1.8	1.8	0.17	bd	0.13	bd	1.8	1.93	0.15	bd	0.08	bd	1.2	1.28	0.15	65.65
21D	bd	bd	bd	0.9	0.9	0.09	bd	0.05	bd	1.3	1.35	0.11	bd	bd	bd	0.5	0.5	0.08	61.04
26D	bd	0.06	bd	0.8	0.86	0.04	bd	0.05	bd	1.2	1.25	0.04	bd	bd	bd	0.6	0.6	0.04	52.58
28D							bd	bd	bd	1.0	1.0	0.06	bd	bd	bd	0.2	0.2	0.07	52.96
30C	bd	bd	bd	0.7	0.7	0.04	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	0.5	0.5	0.03	50.15
41A	bd	bd	bd	0.7	0.7	0.02	bd	0.06	bd	bd	bd	bd							17.00
45D	bd	bd	bd	0.9	0.9	0.04	bd	bd	bd	1.2	1.2	0.03							57.80
48A							bd	bd	bd	0.8	0.8	bd	bd	bd	bd	0.7	0.7	0.02	39.90
52B	bd	bd	bd	0.7	0.7	0.02	bd	bd	bd	0.7	0.7	bd							31.23
58B	bd	bd	bd	0.8	0.8	0.03							bd	bd	bd	1.0	1.0	0.04	51.99
58F	bd	bd	bd	0.8	0.8	0.03	bd	bd	bd	1.9	1.9	0.09	bd	bd	bd	0.9	0.9	0.06	61.25
58G	bd	bd	bd	0.8	0.8	0.03	bd	bd	bd	1.2	1.2	0.04							53.29
58I	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	1	1.0	0.03	bd	bd	bd	0.6	0.6	0.03	45.74
59B	bd	bd	bd	0.7	0.7	0.02	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	0.3	0.3	bd	42.64
60C	bd	bd	bd	0.6	0.6	0.02	bd	bd	bd	0.6	0.6	bd	bd	0.07	bd	0.3	0.37	bd	32.54

64B	bd	0.07	bd	1.0	1.07	0.10							bd	0.08	bd	0.5	0.58	0.11	45.16
64C													bd	0.09	bd	0.7	0.79	0.10	54.70
64E	bd	0.05	bd	0.9	0.95	0.09	bd	0.16	bd	1.2	1.36	0.12							63.70
65C	bd	bd	bd	0.8	0.8	0.07	bd	0.10	bd	1.3	1.40	0.11	bd	0.06	bd	0.8	0.86	0.11	61.23
66A	bd	bd	bd	1.0	1.0	0.02	bd	bd	bd	1	1.0	0.02	bd	bd	bd	0.5	0.5	bd	33.02
70G	bd	bd	bd	1.1	1.1	bd													43.56
71A	bd	0.11	bd	0.7	0.81	0.02							bd	0.08	bd	0.4	0.48	0.06	42.54
72A	bd	bd	bd	1.0	1.0	0.08	bd	bd	bd	1.3	1.3	0.09	bd	0.05	bd	0.5	0.55	0.08	54.45
72C	bd	bd	bd	1.2	1.2	0.08	bd	bd	bd	1.1	1.1	0.08	bd	bd	bd	0.5	0.5	0.07	57.84
74B													bd	bd	bd	0.6	0.6	0.06	55.30
74C	bd	bd	bd	1.3	1.3	0.07	bd	bd	bd	1	1.0	0.07							59.04
74F	bd	bd	bd	1.0	1.0	0.08	bd	bd	bd	0.8	0.8	0.07	bd	bd	bd	0.4	0.4	0.10	57.09
81B	bd	bd	bd	0.9	0.9	0.03	bd	bd	bd	0.6	0.6	0.03	bd	bd	bd	0.5	0.5	0.04	45.49
82A	bd	bd	bd	0.9	0.9	0.02	bd	bd	bd	1.1	1.1	0.04	bd	bd	bd	0.6	0.6	0.03	53.27
83A	bd	bd	bd	1.0	1.0	bd	bd	bd	bd	0.9	0.9	0.03							46.77
83B	bd	bd	bd	1.1	1.1	bd							bd	bd	bd	0.6	0.6	0.02	47.35
89A	bd	bd	bd	1.1	1.1	0.16	bd	0.09	bd	1.1	1.19	0.20	bd	bd	bd	1.1	1.1	0.17	67.82
89B	bd	bd	bd	1.1	1.1	0.15													60.71
90A	bd	bd	bd	1.5	1.5	bd	bd	bd	bd	1.6	1.6	0.03	bd	bd	bd	1.5	1.5	0.02	48.66
91A	bd	bd	bd	1.1	1.1	bd													24.43
97A	bd	bd	bd	2.1	2.1	0.05													54.36
Median		**0.07**	**bd**	**1.00**	**1.00**	**0.07**		**0.11**	**bd**	**1.20**	**1.20**	**0.08**		**0.09**	**bd**	**0.60**	**0.60**	**0.07**	**53.66**
Max		**0.20**	**0.00**	**2.10**	**2.10**	**0.17**		**0.19**	**0.00**	**2.20**	**2.39**	**0.25**		**0.19**	**0.00**	**1.50**	**1.50**	**0.17**	**70.58**

NO2 = Nitrite (inorganic)	TKN = Total Kjeldahl Nitrogen (organic + NH4)
NO3 = Nitrate (inorganic)	TN = Total Nitrogen (inorganic + organic)
NH3 = Ammonia (inorganic)	TPO4 = Total Phosphate

All nutrient concentrations shown in mg/L

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.

TSI = Trophic State Index, a quick indicator of canal health. 36 sites this quarter scored as GOOD (<60). 11 sites scored FAIR (60-70), one scored POOR (>70).
Rainfall continues to influence the water quality this quarter. The increased freshwater inflows and storm water runoff has increased the number of sites in the fair Average TSI. Excess nutrients from runoff is to blame for this and the canals along the Caloosahatchee River seem to have been affected the most. It's been a very wet summer this year. For fall and winter the canals should have a change to recover and return to a "good" average TSI.

November

6th Canalwatch
(at Rotary Park)

1st Guided Paddle of Four Mile Eco Preserve or Matlacha Pass
Both 9 am-11 am
Info: 549-4606

8th Florida Yards & Neighborhoods 1pm – 4pm
Rotary Park
Info: 549-4606

16th Nature of Cape Bus Tour
8am – 1pm
meets at Rotary Park
Info: 549-4606

December

4th Canalwatch

5th Nature Seminar
-Burrowing Owls
Rotary Park 1pm-2pm
Info: 549-4606

13th Guided Tour of Yellow Fever Creek
9am-11am
Info: 549-4606

14th Nature of Cape Bus Tour
8am – 1pm
meets at Rotary Park
Info: 549-4606

21st Florida's Reptiles: Lizards
A free seminar from 1pm-2pm
Rotary Park
Info: 549-4606

January

7th Canalwatch

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Environmental Resources
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