



# Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 3<sup>rd</sup> Quarter 2012

## Environmental Recreation

### Grab Your Kayak and Go!

On November 1<sup>st</sup> through 4<sup>th</sup> is the 2012 Calusa Blueway Paddling Festival. This annual event includes live music, fishing tournament, tours and of course paddling – for the novice to the pro. Please visit [calusabluewaypaddlingfestival.com](http://calusabluewaypaddlingfestival.com) for more information. Go to [calusablueway.com](http://calusablueway.com) for paddling maps to iPhone apps! It's a great resource for anyone who's interested in exploring Southwest Florida the way the Calusa Indians did.

### Kayaking Opportunities

Cape Coral Parks and Recreation offers paddling trips for everyone. From guided paddles of Matlacha Pass and guided daylight or full moon paddling trips through Eco Park, to beginners paddling classes, Cape Coral's Parks and Recreation Department offers a wide variety of paddling experience for anyone. Even if you don't own a kayak there are ways to get out and explore the water. For more information on classes, guided trips and excursions please call Rotary Park Environmental Center at 549 – 4606.

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### Questions? Comments? Let us know!

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## Native Plant profile

### Pineland Heliotrope

#### *Heliotropium polyphyllum*

Pineland heliotrope is an inconspicuous plant that abounds in empty lots and natural areas. It grows low (less than 3 feet) and trails along the ground in most instances. Its white or pale yellow flowers bloom two by two and diminish toward the terminal end of the stem.

The small flowers, which bloom year round, attract numerous pollinators including butterflies. A similar plant, which is useful in the home garden, is scorpion tail (*Heliotropium angiospermum*). Much like the pineland heliotrope it doesn't require much attention and is at home in sun, shade and varying soil types.

This cultivated variety is more full and upright in its growth. It is most commonly applied as a mid-level ground cover in butterfly attracting areas of native landscapes.



Pineland Heliotrope

## The Florida Scrub-Jay *Aphelocoma coerulescens*



Wildlife biologist Tom Allen with scrub jays

The Florida Scrub-Jay is a boldly colored, beautiful songbird found here in Southwest Florida. Its head, wings, and tail are blue; its breast is light grey. This species of Jay is endemic, meaning it is native and confined to the oak scrub and scrubby flatwoods of Florida.



Florida scrub jays (photo by Harry Phillips)

Scrub-Jays breed between the ages of 1 and 7 after establishing a territory. Clutch size is between 1 and 5 eggs; the incubation period is generally about 17 days. Florida Scrub-Jays are cooperative or communal breeders. This means many of the offspring stay with the parents for a year or more after they are able to fly. During this period, the older offspring or other helper birds assist with rearing younger birds, defending their territory, and taking turns looking out for predators. Typically a mated pair of Scrub-Jays will have one to six helper birds. Only about 3% of all species of birds display this interesting cooperative behavior.

The Florida Scrub-Jay is classified as “Threatened” under the Endangered Species Act, signifying that it is a species which is likely to become “Endangered” due to population decline resulting from the degradation and fragmentation of scrub habitat in Florida. It is believed that less than 10,000 remain. There have been at least two families of Florida Scrub-Jays seen in the northwest section of Cape Coral in recent history. Nearby, the Alva Scrub Preserve and Hickey’s Creek Mitigation Park (also in Alva FL) may offer some opportunities to see these beautiful birds.

-Biologist Kathryn R. McBride



Common blue jay (photo by Honey Archey)

# Canalwatch Extra Field Data 3rd Quarter 2012

90A	Jul	Aug	Sep
DO	4.2	3.6	4.6
pH	7.4	7.4	7.6
Temp	30	32	30
Sal	-	3	1

80A	Jul	Aug	Sep
DO	1.3	2	2.1
pH	7.2	7.2	7.2
Temp	28	29	27
Sal	3	4	4

71A	Jul	Aug	Sep
DO	1.65	-	2.07
pH	7.5	-	7.3
Temp	29	-	29
Sal	2	-	3

74B	Jul	Aug	Sep
DO	7.6	5.9	5.2
pH	8.2	8	8
Temp	31	31	32
Sal	-	-	-

74C	Jul	Aug	Sep
DO	6.5	6.1	4.8
pH	8.1	8.1	7.8
Temp	30	33	28
Sal	10	7	-

26D	Jul	Aug	Sep
DO	3.4	-	5
pH	7.6	-	7.6
Temp	29	-	30
Sal	10	-	-

10B	Jul	Aug	Sep
DO	-	-	4.3
pH	-	-	8.1
Temp	-	-	30
Sal	-	-	-

72C	Jul	Aug	Sep
DO	4.75	2.35	1.15
pH	8	7.6	7.7
Temp	30	31	27
Sal	12	-	-

4E	Jul	Aug	Sep
DO	4.15	5	6.05
pH	8	8.1	8
Temp	25.5	30	29.5
Sal	21	14	5

64C	Jul	Aug	Sep
DO	-	3.1	-
pH	-	7.6	-
Temp	-	32	-
Sal	-	18	-

	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.

Please see the 2nd quarter 2009 newsletter for a more in-depth explanation of these water quality measurements.

		bd = below detection						benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.											
	July 2012						August 2012						September 2012						Avg TSI
	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	
3F	bd	bd	bd	1.1	1.1	0.01	bd	bd	bd	0.5	0.5	bd	bd	bd	bd	0.8	0.8	0.07	38.11
4E	bd	bd	bd	1.5	1.5	0.08	bd	bd	bd	0.7	0.7	0.08	bd	bd	bd	1.0	1.0	0.10	55.97
6F	bd	bd	bd	1.3	1.3	0.10	bd	bd	bd	0.6	0.6	0.08	bd	bd	bd	1.0	1.0	0.12	55.34
7C	bd	bd	bd	1.2	1.2	0.09	bd	bd	bd	0.5	0.5	0.10	bd	bd	bd	1.1	1.1	0.13	52.05
7D	bd	bd	bd	1.2	1.2	0.09	bd	bd	bd	0.4	0.4	0.10	bd	bd	bd	1.1	1.1	0.12	55.36
9E	bd	bd	bd	1.1	1.1	0.07	bd	bd	bd	0.4	0.4	0.10	bd	bd	bd	0.9	0.9	0.10	48.66
10B													bd	bd	bd	0.8	0.8	0.06	54.68
11E	bd	bd	bd	1.8	1.8	0.12	bd	bd	bd	1.0	1.0	0.11	bd	bd	bd	1.2	1.2	0.15	60.66
15D	bd	bd	bd	1.3	1.3	0.06	bd	bd	bd	0.6	0.6	0.06	bd	bd	bd	0.8	0.8	0.00	54.59
15E													bd	bd	bd	1.0	1.0	0.06	59.57
16E	bd	bd	bd	1.1	1.1	bd	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	0.8	0.8	0.03	55.36
19D							bd	bd	bd	0.9	0.9	0.01	bd	bd	bd	1.2	1.2	0.24	46.34
19K	bd	bd	bd	1.4	1.4	0.11	bd	bd	bd	0.5	0.5	0.01	bd	bd	bd	1.3	1.3	0.12	52.43
21D	bd	bd	0.2	1.3	1.3	0.09	bd	bd	bd	0.4	0.4	0.09	bd	bd	bd	1.3	1.3	0.12	56.39
26D	bd	bd	bd	2.1	2.1	0.04							bd	bd	bd	1.1	1.1	bd	56.30
28D	bd	bd	bd	0.8	0.8	0.10	bd	bd	bd	0.3	0.3	0.02	bd	bd	bd	0.8	0.8	0.03	55.86
30C	bd	bd	bd	1.1	1.1	0.07	bd	bd	bd	0.1	0.1	0.02							40.03
35A	bd	bd	bd	0.6	0.6	0.08							bd	bd	bd	0.6	0.6	0.01	41.24
41A	bd	bd	bd	0.6	0.6	0.06	bd	bd	bd	0.2	0.2	0.01	bd	bd	bd	0.7	0.7	0.01	33.51
45D	bd	bd	bd	0.7	0.7	0.06	bd	bd	bd	0.5	0.5	0.03	bd	bd	bd	0.7	0.7	0.02	54.01
48A	bd	bd	bd	0.6	0.6	0.04	bd	bd	bd	0.3	0.3	0.01	bd	bd	bd	0.7	0.7	0.01	40.43
52B	bd	bd	bd	0.7	0.7	0.06	bd	bd	bd	0.2	0.2	0.01	bd	bd	bd	0.6	0.6	0.01	24.35
55B							bd	bd	bd	0.6	0.6	0.06	bd	bd	bd	1.2	1.2	0.07	57.82
58F							bd	bd	bd	0.6	0.6	0.03	bd	bd	bd	0.7	0.7	0.03	48.58
58G	bd	bd	bd	1.0	1.0	0.04	bd	bd	bd	0.3	0.3	0.03	bd	bd	bd	0.7	0.7	0.03	47.84
58I	bd	bd	bd	1.0	1.0	0.03	bd	bd	bd	0.3	0.3	0.03	bd	bd	bd	0.7	0.7	0.02	41.72
59B	bd	bd	bd	1.2	1.2	0.02							bd	bd	bd	0.8	0.8	0.02	43.27
64B							bd	bd	bd	0.6	0.6	0.08							45.89
64C							bd	bd	bd	0.5	0.5	0.10							37.31
65B	bd	bd	bd	1.3	1.3	0.08	bd	bd	bd	0.6	0.6	0.05	bd	bd	bd	0.7	0.7	0.06	59.45

65C	bd	bd	bd	1.4	1.4	0.06	bd	bd	bd	0.5	0.5	0.08	bd	bd	bd	0.6	0.6	0.06	51.00
66A	bd	bd	bd	1.2	1.2	0.03	bd	bd	bd	0.3	0.3	0.02	bd	bd	bd	0.6	0.6	0.01	40.42
70F	bd	bd	bd	1.3	1.3	0.05	bd	bd	bd	0.4	0.4	0.04	bd	bd	bd	0.9	0.9	0.05	48.51
71A	bd	bd	bd	0.6	0.6	0.17	bd	bd	bd	0.4	0.4	0.04	bd	bd	bd	0.9	0.9	0.04	47.57
72A	bd	bd	bd	1.4	1.4	0.09	bd	bd	bd	0.8	0.8	0.05	bd	bd	bd	0.8	0.8	0.06	54.36
72C	bd	bd	bd	1.4	1.4	0.05	bd	bd	bd	1.4	1.4	0.05	bd	bd	bd	0.9	0.9	0.06	56.79
74B	bd	bd	bd	1.3	1.3	0.04	bd	bd	bd	0.9	0.9	0.04	bd	bd	bd	1.7	1.7	0.05	50.10
74C	bd	bd	bd	1.4	1.4	0.06	bd	bd	bd	0.6	0.6	0.03	bd	bd	bd	0.8	0.8	0.06	45.88
74F	bd	bd	bd	1.1	1.1	0.04	bd	bd	bd	0.5	0.5	0.04	bd	bd	bd	0.7	0.7	0.05	50.87
80A	bd	bd	bd	1.1	1.1	0.02	bd	bd	bd	0.5	0.5	0.01	bd	bd	bd	0.8	0.8	0.01	38.70
81A	bd	bd	0.7	6.8	6.8	0.18							bd	bd	bd	2.4	2.4	0.61	75.76
81B							bd	bd	bd	0.9	0.9	0.02	bd	bd	bd	0.8	0.8	0.03	48.22
82A	bd	bd	bd	1.3	1.3	0.06	bd	bd	bd	0.7	0.7	0.02	bd	bd	bd	0.9	0.9	0.02	54.75
83A							bd	bd	bd	0.5	0.5	0.02	bd	bd	bd	0.9	0.9	0.03	53.88
89A	bd	bd	bd	1.4	1.4	0.12	bd	bd	0.1	0.7	0.7	0.14	bd	bd	bd	1.1	1.1	0.15	57.93
90A	bd	bd	0.1	2.3	2.3	0.03	bd	bd	bd	1.2	1.2	0.02	bd	bd	bd	1.4	1.4	0.02	54.11
91A	bd	bd	bd	1.9	1.9	0.03	bd	bd	bd	0.6	0.6	0.01	bd	bd	bd	0.9	0.9	0.02	50.34
93B							bd	bd	bd	0.5	0.5	0.05	bd	bd	bd	0.8	0.8	0.06	59.88
97A	bd	bd	bd	0.7	0.7	0.01	bd	bd	0.1	0.4	0.4	0.02	bd	bd	bd	0.7	0.075	0.03	22.24
<b>Median</b>	<b>bd</b>	<b>0.20</b>	<b>1.20</b>	<b>1.20</b>	<b>0.06</b>		<b>bd</b>	<b>0.10</b>	<b>0.50</b>	<b>0.50</b>	<b>0.04</b>		<b>bd</b>	<b>bd</b>	<b>0.80</b>	<b>0.80</b>	<b>0.05</b>	<b>51.00</b>	
<b>Max</b>	<b>0.00</b>	<b>0.70</b>	<b>6.80</b>	<b>6.80</b>	<b>0.18</b>		<b>0.00</b>	<b>0.10</b>	<b>1.40</b>	<b>1.40</b>	<b>0.14</b>		<b>0.00</b>	<b>0.00</b>	<b>2.40</b>	<b>2.40</b>	<b>0.61</b>	<b>75.76</b>	

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

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), one sites scored FAIR (60-70), and one scored POOR (>70). Summer is coming to an end once again so rainfall should decrease. This means canal water levels will drop. Especially with the help of winds pushing water off shore as they chance from a SW direction to a NE direction. Expect Secchi measurements to improve as well. Water clarity improves with less rainfall and cooler water.

## October

3<sup>rd</sup> Canalwatch

19<sup>th</sup> The Mangrove Gathering  
Rotary Park Environmental  
Center  
Info: 549-4606

20<sup>th</sup> Native Plant Sale  
9am-2pm at Manatee Park  
Info: 690-5030

27<sup>th</sup> Full Moon Paddle  
Eco Preserve  
5pm-7pm  
Info: 549-4606

## November

7<sup>th</sup> Canalwatch

17<sup>th</sup> Nature of Cape Coral  
Bus Tour  
8am-noon  
Info: 549-4606

17<sup>th</sup> Guided hike  
Yellow Fever Creek  
9am-11am  
Info: 549-4606

30<sup>th</sup> Full Moon Paddle  
Eco Preserve  
5pm-7pm  
Info: 549-4606

## December

5<sup>th</sup> Canalwatch

8<sup>th</sup> Nature of Cape Coral  
Bus Tour  
8am-noon  
Info: 549-4606

10<sup>th</sup> Florida's Reptiles  
A free seminar  
Rotary Park Environmental  
Center  
1pm-2pm  
Info: 549-4606

### Reminder!

The Canalwatch November Event is November 7<sup>th</sup> at Rotary Park!  
Please RSVP by November 2<sup>nd</sup>.

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