Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 4th Quarter 2009

Environmental News

Happy New Year 2010

Happy New Year to all the Canalwatch volunteers! We hope that all of you had a safe and enjoyable holiday season and wish you only the best for 2010.

Data Sheets and Calendars

The new 2010 data sheets have been passed out as of the November sampling day. If you have not received these please get with either Kim or Harry so you will be ready for the new sampling days in 2010.

The Charlotte Harbor National Esturary Program has sent us a supply of 2010 calendars. If you have not yet received one of these beautiful nature calendars please pick one up the next time you bring in your sample. Supply is limited, but they are still available on the CHNEP website at chnep.org.

Inside This Issue:

Questions? Comments? Let us know!
(239)574-0785
Harry: hphillips@capecoral.net
Kim: kcressman@capecoral.net

Native Plant profile

Swamp Bay
Persea pulustris

Swamp bay is an evergreen tree that grows to about 35 feet. It is common in swamps and low lying areas in the southeast and extends west into parts of Texas and Mexico. The swamp bay does well in full sun, but is mostly an understory tree in the mucky areas it inhabits.

In the spring small greenish yellow flowers appear and then black fruits, which are attractive to birds, are produced until early summer. The leaves are aromatic, similar to the Mediterranean bay (*Laurus nobilus*), and can be use in cooking.

The swamp bay is not common in nurseries, but given the habitat it prefers, it may be difficult to get it established in the average Florida yard.

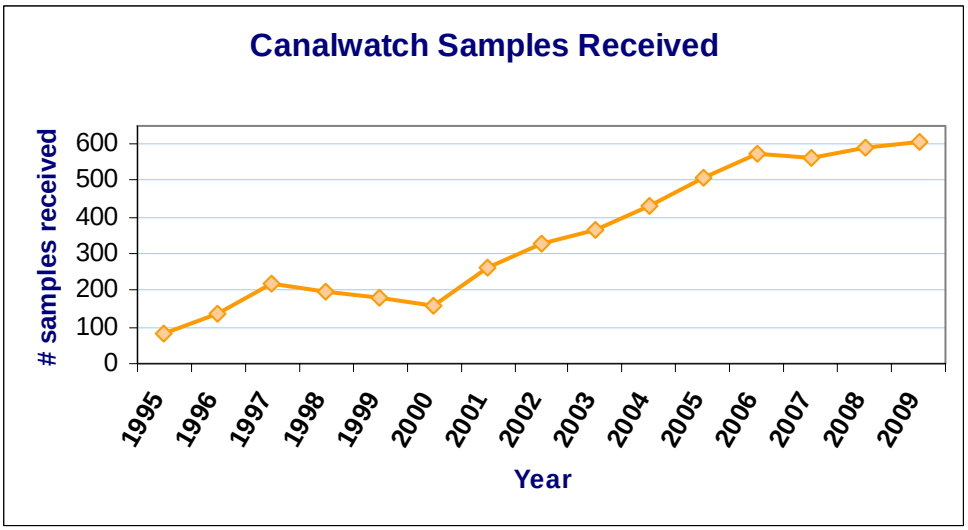
This species, as well as other members of the Persea genus, is affected by the ambrosia beetle, (accidentally introduced from Asia) which causes a fungal infection that is known as laurel wilt.

Year-end Wrap-up

2009 was a good year for the Canalwatch program! Here are some of the stats:

- 609 samples received this year – the first time we've gotten >600 in a year!
- 70 active stations
- 16 new volunteers
- 20 volunteers have been active for more than 5 years
- 3 volunteers have been active for more than 10 years
- 9 volunteers have been trained to measure DO, pH, temperature, and salinity at 14 sites.
- 4 more volunteers will begin measuring those extra parameters in January 2010.

Thanks for making this our best year so far!



Enjoying Florida's Outdoors

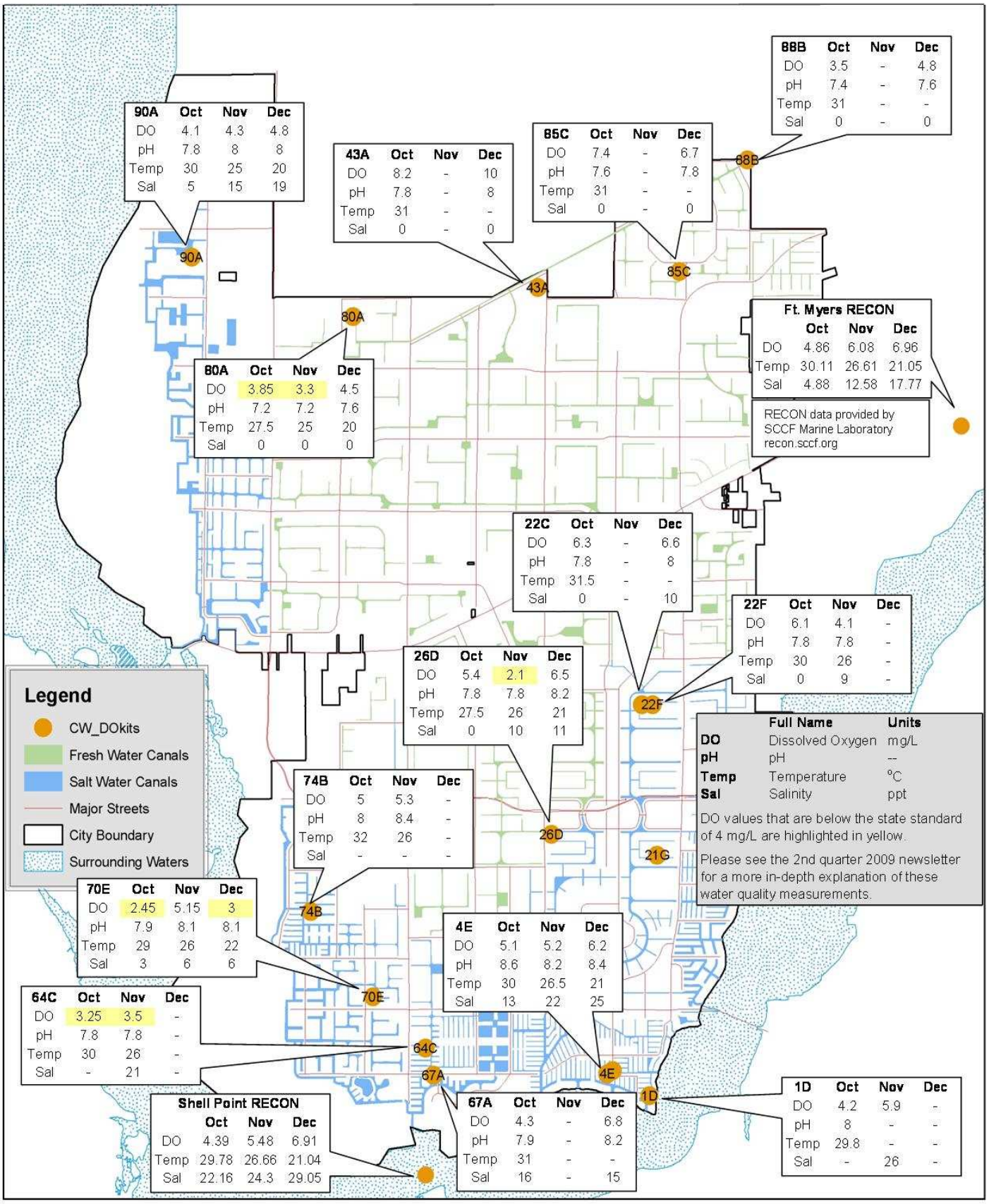
Tis' the season! To enjoy Florida's outdoors! Don't let the snowbirds have all the fun, get outside and enjoy some activities that take you off the beaten path. With the weather turning cooler and less humid it's time to enjoy some of this area's outdoor recreation spots. There are a number of hiking and kayaking trails to enjoy amidst southwest Florida's landscape. Some of these can be explored in just a few hours. A leisurely stroll (or paddle) and a picnic lunch will put you on a worthwhile path to nature's greatest gift – solitude.

However, if a strenuous workout is your goal, a day spent at one of the area's more extensive trails will not disappoint. Southwest Florida has many state parks, and combined with local parks and preserves there is plenty of opportunity to enjoy all things natural. Please visit these web-sites to plan your next adventure.

capecoral.net
floridastateparks.org
conservation2020.org
leeparks.org
caloosablueway.com
crewtrust.org

Canalwatch Extra Field Data

4th Quarter 2009



Lab Data for Canalwatch 4th Quarter 2009

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

	October 2009						November 2009						December 2009						
	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
1A							bd	bd	bd	0.5	0.50	0.10							42.28
1D	bd	bd	bd	0.5	0.50	0.08	bd	0.05	0.1	0.3	0.35	0.07							43.42
3F	bd	0.05	0.1	0.5	0.55	0.07	bd	0.07	bd	0.4	0.47	0.07							42.04
3G	bd	bd	bd	0.5	0.50	0.08	bd	0.09	bd	0.6	0.69	0.07	bd	0.32	bd	0.4	0.72	bd	45.47
4E	bd	bd	bd	1	1.00	0.09	bd	bd	0.1	0.4	0.40	0.07	bd	0.22	bd	0.3	0.52	bd	44.71
6F	bd	bd	bd	0.7	0.70	0.11	bd	bd	bd	0.6	0.60	0.09	bd	0.18	0.1	0.3	0.48	bd	45.43
6G													bd	0.15	0.1	0.2	0.35	bd	38.34
6H	bd	0.06	bd	0.7	0.76	0.14	bd	bd	0.1	0.5	0.50	0.14	bd	0.18	bd	0.4	0.58	bd	53.19
7B	bd	bd	0.1	0.7	0.70	0.10	bd	bd	bd	0.5	0.50	0.09	bd	0.18	bd	0.2	0.38	bd	44.98
10B	bd	bd	bd	0.5	0.50	0.05	bd	0.05	0.1	0.4	0.45	0.06	bd	0.18	bd	0.2	0.38	bd	42.31
11D	bd	bd	bd	0.8	0.80	0.10	bd	bd	0.1	0.5	0.50	0.10	bd	0.11	bd	0.2	0.31	0.05	45.82
13A	bd	bd	0.1	0.9	0.90	0.09	bd	bd	bd	0.5	0.50	0.10	bd	0.23	bd	0.4	0.63	bd	51.27
15D	bd	bd	bd	0.7	0.70	0.06	bd	bd	0.1	0.5	0.50	0.09	bd	0.19	bd	0.4	0.59	0.23	50.66
15E	bd	bd	0.1	0.8	0.80	0.11							bd	0.14	0.1	0.2	0.34	0.65	50.83
16E	bd	bd	0.1	0.5	0.50	bd	bd	bd	bd	0.5	0.50	bd	bd	0.13	bd	0.9	1.03	bd	41.74
16F													bd	0.07	bd	0.7	0.77	bd	41.47
17B							bd	bd	bd	0.5	0.50	bd	bd	0.07	bd	0.8	0.87	0.05	47.84
18G	bd	bd	0.1	1.2	1.20	0.05	bd	bd	bd	0.5	0.50	0.06	bd	0.08	bd	1	1.08	0.08	55.84
18H							bd	bd	bd	0.5	0.50	bd	bd	0.08	bd	1.1	1.18	bd	59.23
18I	bd	bd	0.2	1.1	1.10	0.07	bd	bd	bd	0.5	0.50	0.07	bd	0.06	bd	0.8	0.86	bd	57.26
19D	bd	bd	0.1	0.8	0.80	0.09	bd	0.05	bd	0.5	0.55	0.11							50.65
19H	bd	bd	0.6	1.2	1.20	0.10	bd	bd	bd	0.5	0.50	0.11	bd	0.15	bd	0.3	0.45	bd	47.50
21D	bd	bd	0.6	0.8	0.80	0.09	bd	bd	bd	0.5	0.50	0.11	bd	0.13	bd	0.3	0.43	bd	47.19
21F	bd	bd	0.6	0.7	0.70	0.09	bd	bd	0.1	0.5	0.50	0.11	bd	0.06	bd	0.3	0.36	bd	47.68
22C	bd	bd	0.4	1.4	1.40	0.06							bd	0.11	0.1	1.7	1.81	bd	50.84
22F	bd	bd	bd	0.5	0.50	bd	bd	bd	0.1	0.5	0.50	0.12							43.27
23B	bd	bd	0.2	2.6	2.60	bd							bd	bd	bd	1	1.00	bd	44.62
25B	bd	bd	bd	0.8	0.80	bd													60.89
26C							bd	bd	bd	0.5	0.50	bd							59.67
26D	bd	bd	0.2	2.6	2.60	0.06	bd	bd	0.1	0.5	0.50	0.09	bd	0.10	bd	1.5	1.60	bd	53.71
26F													bd	0.08	bd	0.2	0.28	bd	36.13
28D	bd	bd	0.1	0.8	0.80	bd	bd	bd	bd	0.5	0.50	bd	bd	0.05	bd	1.6	1.65	bd	41.60
30A	bd	0.08	0.1	0.5	0.58	0.05	bd	bd	bd	0.5	0.50	0.06	bd	0.12	bd	0.4	0.52	bd	55.88
35A	bd	bd	bd	0.6	0.60	bd	bd	bd	bd	0.5	0.50	bd	bd	0.07	bd	0.4	0.47	bd	45.44
41A	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.5	0.50	bd	bd	0.07	bd	0.4	0.47	bd	41.67

43A	bd	bd	bd	1.9	1.90	bd							bd	bd	bd	1.6	1.60	bd	41.47
45D	bd	bd	bd	0.7	0.70	bd	bd	bd	bd	0.5	0.50	bd	bd	0.12	bd	0.6	0.72	bd	50.47
48A	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.5	0.50	bd	bd	0.08	bd	0.5	0.58	bd	42.71
51A	bd	0.66	bd	1.2	1.86	bd	bd	bd	bd	0.5	0.50	bd							41.67
52B	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.5	0.50	bd	bd	0.05	bd	0.4	0.45	bd	41.52
57A													bd	0.05	bd	0.3	0.4	bd	38.34
58E	bd	0.07	bd	0.6	0.67	bd	bd	bd	0.1	0.5	0.50	bd	bd	0.07	bd	0.4	0.47	bd	43.07
58F	bd	bd	bd	0.5	0.50	bd	bd	bd	0.1	0.5	0.50	bd	bd	0.06	bd	0.4	0.46	0.06	41.45
58G	bd	bd	bd	0.4	0.40	bd	bd	bd	0.1	0.5	0.50	bd							44.14
58H	bd	bd	bd	0.6	0.60	bd	bd	bd	0.1	0.5	0.50	0.05	bd	0.07	bd	0.4	0.47	bd	44.42
58I	bd	bd	bd	0.5	0.50	bd	bd	bd	0.3	0.5	0.50	bd	bd	0.08	0.1	0.5	0.58	bd	44.90
59B	bd	bd	bd	0.4	0.40	bd	bd	bd	0.1	0.5	0.50	bd	bd	bd	0.1	0.5	0.50	bd	42.14
60B	bd	0.09	bd	0.5	0.59	bd	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.4	0.40	bd	45.68
64B	bd	0.12	bd	0.3	0.42	0.09	bd	bd	0.2	0.5	0.50	bd							43.01
64C	bd	0.08	0.1	0.3	0.38	0.09	bd	bd	0.2	0.5	0.50	bd							39.66
66A	bd	bd	bd	0.8	0.80	bd	bd	0.05	bd	0.8	0.85	bd	bd	bd	0.1	0.6	0.60	0.14	46.98
67A	bd	bd	bd	1.4	1.40	0.10							bd	bd	bd	0.5	0.50	bd	53.42
67C	bd	bd	0.1	0.4	0.40	0.11	bd	bd	0.2	0.5	0.50	bd	bd	bd	bd	0.4	0.40	bd	43.00
69A							bd	bd	bd	0.5	0.50	bd	bd	bd	0.1	0.4	0.40	bd	43.99
70E	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.5	0.50	bd	bd	bd	0.3	0.3	0.30	bd	45.40
72A	bd	0.06	bd	0.5	0.56	bd	bd	bd	bd	0.5	0.50	bd	bd	bd	0.1	0.2	0.20	0.23	40.71
74B	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.3	0.30	0.32	45.17
74C	bd	bd	bd	0.5	0.50	0.05	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.4	0.40	0.51	59.02
80A	bd	bd	bd	0.4	0.40	bd	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.1	0.10	0.22	29.53
82A	bd	bd	bd	0.6	0.60	bd	bd	bd	0.1	0.5	0.50	bd	bd	bd	bd	0.5	0.50	0.06	55.41
83A							bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.5	0.50	0.22	49.07
85C	bd	bd	bd	2.5	2.50	bd							bd	bd	bd	1.1	1.10	0.08	50.99
88B	bd	bd	bd	2.3	2.30	bd							bd	bd	bd	1.1	1.10	bd	42.34
90A	bd	bd	bd	0.7	0.70	bd	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.5	0.50	0.10	53.27
91A	bd	bd	bd	0.7	0.70	bd	bd	0.05	bd	0.4	0.45	0.05	bd	0.11	bd	0.3	0.41	0.05	45.30
91B	bd	bd	bd	0.7	0.70	bd	bd	bd	bd	0.5	0.50	bd	bd	0.10	bd	0.3	0.40	bd	42.24
92A							bd	bd	bd	0.5	0.50	0.05							63.59
Median			**0.10**	**0.70**	**0.70**	**0.09**		**0.05**	**0.10**	**0.50**	**0.50**	**0.09**		**0.10**	**0.10**	**0.40**	**0.50**	**0.12**	**45.17**
Max			**0.60**	**2.60**	**2.60**	**0.14**		**0.09**	**0.30**	**0.80**	**0.85**	**0.14**		**0.32**	**0.30**	**1.70**	**1.81**	**0.65**	**63.59**

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.
65 sites this quarter scored as GOOD (<60). 2 sites scored FAIR (60-70), and none were POOR (>70).

You've probably noticed that the water is clearer now, due to a lack of rainfall and associated runoff. Tidally influenced canals have also seen higher salinity, also due to a lack of rain.

January

1st New Years Day

6th Canalwatch

9th Caloosa Festival
at Eco Park
info: harchey@capecoral.net

18th Martin Luther
King Jr. Day

February

3rd Canalwatch

15th Presidents Day

27th Burrowing Owl Festival
Rotary Park 10am till 4pm

March

3rd Canalwatch

20th -21st Shrimp Festival
Fort Myers Beach

27th Canal Clean up

City of Cape Coral
Environmental Resources
P.O. BOX 150027
Cape Coral, FL 33915-0027