



Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 2nd Quarter 2008

Native Plant Profile

Firebush
Hamelia patens

Firebush is a small tree with a maximum height of 10 feet, is well suited to dry soil and will grow in full sun or partial shade. Firebush is often used in butterfly gardens because it is a key nectar plant for many species, but is also useful in other landscapes as an ornamental plant.

Shade grown firebush may attract aphids or sooty mold, easily remedied by horticultural soap or ladybugs, but it will recover quickly.



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Questions? Comments? Let us know!

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Why are Harry and Kim being so nosy?

You may have noticed that recently, we've been putting you on the spot by asking you a couple of questions when you drop off your sample. This is our way of conducting a survey without, well, mailing out a survey.

We're just asking you two questions each month when we see you. It's easier for you, because you don't have to:

- find a pen
- sit down and think about your answers
- fill out a questionnaire
- find a stamp and
- remember to mail it back.

It's easier for us, because no one can escape (imagine us doing our best evil laugh, mwahahaha) - which means we'll have a large pool of answers that will be representative of your thoughts.

The first question is lighthearted and will give us a window on your backgrounds. The second question is a little more serious, addressing your canals and your concerns about them. This will help us better address your concerns by tailoring the information we give you to your needs. If you haven't been questioned, and want to be, please give us a call at 574-0785.

We'll report the results in the 3rd quarter newsletter this October. At our November social, we'll touch on some of the topics raised by your answers. Thanks for your participation!

What can I do to help water quality?

You've no doubt heard the old cliché, "an ounce of prevention is worth a pound of cure". This is most definitely true when it comes to water quality. Water quality can degrade in ways that aren't visible – increasing nutrients don't always turn the water brown right away. By the time symptoms are visible, it's already too late. So the measures we recommend are preventative. By taking action now, and spreading the word to your friends and neighbors, you can help protect the water quality in your canal.

Here are some tips:

- ***Adopt good fertilizing practices***
 - Use less – the less stuff you put on your lawn, the less stuff will find its way into the canals to fertilize weeds and algae blooms. A good way to reduce fertilizer use is to plant native or Florida-friendly plants. You don't have to re-do your whole yard at once. But when it's time for a new plant, use one that's adapted to Florida's harsh conditions. See www.floridayards.org (or call us for info on our next Florida Yards & Neighborhoods class) for more information on this topic.
 - When you do use fertilizer, use the slow-release kind. Look on the label; it will say how much nitrogen is in the fertilizer, and how much is slow-release. We recommend at least 75% slow-release nitrogen.
 - Don't apply fertilizer within 15 feet of your canal. These 15 feet are called a "buffer zone", and this zone provides an area for extra fertilizer to get soaked up by the landscape before reaching the canal. Remember, you can plant here; it doesn't have to be grass.
 - Don't fertilize during the rainy season. Whatever you put on your yard will quickly get washed into canals by the rain. If your grass needs to be "greened up", use iron, not nitrogen and phosphorus.
- ***Don't dump yard waste into the canals.*** It can decompose and fuel algae blooms.
 - It is actually a violation of City Code to dump yard waste (or any litter) into water bodies – See Chapter 9, Section 15.
 - If you use a professional landscaping service, make sure they are licensed. You can also ask them how they dispose of yard waste. Chapter 9, Section 18 of the City Code specifically tells professionals that it is their responsibility to remove any waste from a client's yard.
- ***Clean up after your pets***
 - There can be up to a million bacteria in one gram of dog feces. It can be leached off of the waste for months, and where does it go? Into our waterways.
- ***Don't flush unused medication down the toilet***
 - Sewage treatment plants don't remove pharmaceuticals. So whatever gets flushed eventually ends up in our waterways.
 - To dispose of unused pills, grind them up, mix them with used coffee grinds or cat litter, and throw them away.
- ***Practice proper boat and automobile maintenance***
 - Make sure you don't have any fluid leaks.
 - Immediately clean up fluid spills.
 - If you change your own oil, dispose of it properly. Call the auto parts shop where you bought the oil; they should be able to take your used oil.
 - Wash your car over grass so soapy water doesn't wash directly into storm drains, as these are connected to the canal system.

- ***Remember: plants in the water are good***
 - Plants on the water's edge are another buffer; they can take up nutrients as they run into the canal. Even cattails, though some people think they're weedy and ugly, help with nutrient runoff. Please don't spray vegetation unless it's interfering with navigation.
 - If you're on freshwater, you can plant emergent vegetation like bulrush or pickerelweed.
 - If you're on saltwater, seed your rip-rap with some mangroves (you **are** allowed to trim mangroves, as long as they're between 6 and 10 feet tall and you remove <25% of the leaves at any one time; more details are at <http://dep.state.fl.us>).
- ***If you're on septic, maintain your septic tank***
 These tips are from the Charlotte Harbor National Estuary Program:
<http://www.chnep.org/projects/OSTDS/HendryCreekOSTDS.htm>
 - Get your tank pumped and inspected every 2-3 years. Problems with the system are not always visible.
 - Don't dump chemicals down the drain – they can disrupt the biological activities that break down the waste.
 - Conserve water – sending too much water through the system can cause stress and potential failure.
 - Minimize garbage disposal use.
 - Don't flush non-biodegradable trash – this includes feminine hygiene products.
 - Don't park or drive over the drain field.
 - Don't plant trees or shrubs in the drain field – their roots can cause damage to the tank.
 - Use liquid laundry soap instead of powders – powders can re-solidify inside the tank and cause problems.
- ***Communicate with your elected officials.***
 - And I don't just mean the ones in Washington – your City Council Members are the ones who make things happen on a local level. Development has a huge impact on water quality – so it's important to make your voice heard when it comes to policies relating to development, as well as policies you'd like to see that relate more directly to water quality.
 - Here's a manual by 1000 Friends of Florida that gives good advice on how to influence policy. It's specifically aimed at growth management policies, but the advice is relevant to a multitude of other topics:
<http://www.1000friendsofflorida.org/PUBS/Community%20Steward%20Handbooks/CommStewI.pdf>
 - Remember to be treat officials with respect, even if you disagree with them. Know your facts and be reasonable and succinct, and they are far more likely to consider your opinions than if you just rant and rave.
- ***Get involved***
 - The **Charlotte Harbor National Estuary Program** (CHNEP) is a regional partnership – they bring together citizens, scientists, resource users, and policy-makers to protect the waters in a 4700 square mile study area from Venice to Bonita Springs to Winter Haven. Please visit www.chnep.org or call Maran Hilgendorf at 338-2556, x240 for more information.
 - **Cape Water Action** is a local citizen group working to improve the waters of Cape Coral. See www.capewater.org for more information.
 - **Riverwatch** – <http://crca.caloosahatchee.org> – advocates for protection of the Caloosahatchee River.

bd = below detection

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

Benchmark	April 2008						May 2008						June 2008						Avg TSI
	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	
	<1.0	<1.0	none given		<2.0	<0.46	<1.0	<1.0	none given		<2.0	<0.46	<1.0	<1.0	none given		<2.0	<0.46	
1A	bd	bd	0.1	0.5	0.5	0.07	bd	bd	0.2	0.5	0.5	0.08	bd	0.19	0.4	0.5	0.69	0.08	49.48
1C	bd	bd	bd	0.5	0.50	0.09													42.28
1D	bd	bd	bd	0.2	0.2	bd	bd	bd	0.2	0.3	0.3	0.05	bd	0.19	0.3	0.4	0.59	0.06	44.22
3F	bd	bd	0.1	0.4	0.4	bd	bd	bd	0.1	0.2	0.2	bd	bd	bd	0.4	0.5	0.5	bd	35.22
4D	bd	bd	bd	0.3	0.3	bd	bd	bd	0.2	0.2	0.2	0.07	bd	0.09	0.4	0.5	0.59	0.05	44.22
4E	bd	bd	bd	0.3	0.3	bd	bd	bd	0.2	0.3	0.3	0.06							39.97
6F	bd	bd	0.1	0.5	0.50	0.07	bd	bd	0.2	0.5	0.5	0.1	bd	bd	0.3	0.4	0.4	0.09	43.51
7B	bd	bd	0.4	0.4	0.4	0.06	bd	bd	0.2	0.4	0.4	0.08							37.86
10B	bd	bd	0.4	0.4	0.40	bd	bd	bd	0.2	0.3	0.3	bd	bd	bd	0.1	0.2	0.2	bd	33.54
11C	bd	bd	0.2	0.5	0.5	0.07	bd	bd	0.2	0.4	0.4	0.1							40.07
11D	bd	bd	0.4	0.4	0.4	0.06							bd	bd	0.5	0.9	0.9	0.11	50.45
12G	bd	bd	0.3	0.5	0.50	0.06	bd	bd	0.2	0.9	0.9	0.09							50.95
13A	bd	bd	0.4	0.7	0.7	0.05	bd	bd	0.1	0.5	0.5	0.07	bd	bd	0.2	0.7	0.7	0.08	50.03
15D	bd	bd	0.3	0.5	0.5	0.06	bd	bd	0.1	0.4	0.4	0.05							43.74
17B	bd	bd	bd	0.3	0.3	bd	bd	bd	bd	0.4	0.4	bd	bd	bd	0.4	0.5	0.5	bd	39.45
19D	bd	bd	0.4	0.7	0.70	0.07	bd	bd	0.2	0.4	0.4	0.09	bd	bd	0.3	0.7	0.7	0.14	50.56
19E	bd	bd	0.4	0.7	0.70	0.10	bd	bd	0.2	0.6	0.6	0.13	bd	bd	0.4	0.9	0.9	0.11	52.04
19G	bd	bd	0.3	0.5	0.50	0.06	bd	bd	0.2	0.4	0.4	0.08	bd	bd	0.3	0.7	0.7	0.11	44.55
19H	bd	bd	0.3	0.7	0.7	0.08	bd	bd	0.2	0.7	0.7	0.09	bd	bd	0.4	0.6	0.6	0.09	47.92
19I	bd	bd	0.6	0.8	0.8	0.12	bd	bd	0.2	0.8	0.8	0.12	bd	bd	0.5	1.9	1.9	0.33	60.69
19J	bd	bd	0.4	0.7	0.7	0.11	bd	bd	0.2	0.5	0.5	0.1							51.14
20E													bd	bd	0.3	0.5	0.5	0.08	52.07
21D	bd	bd	1.2	1.3	1.30	0.05	bd	bd	0.2	0.5	0.5	0.06	bd	bd	0.2	0.5	0.5	0.06	47.45
21F													bd	bd	0.4	0.6	0.6	0.09	51.97
22B	bd	bd	0.2	1.1	1.10	0.11	bd	bd	0.1	0.9	0.9	0.1							66.08
22C	bd	bd	0.2	0.5	0.5	0.05	bd	bd	0.2	0.6	0.6	0.09	bd	bd	0.3	0.7	0.7	0.1	51.45
22D	bd	bd	0.2	0.5	0.5	0.09	bd	bd	0.2	0.7	0.7	0.08	bd	bd	0.3	1	1	0.13	56.53
22F	bd	bd	0.2	0.7	0.7	0.08	bd	bd	0.2	0.5	0.5	0.09	bd	bd	0.4	0.8	0.8	0.11	60.64
26A							bd	bd	0.2	0.3	0.3	0.05							32.16
26C	bd	bd	bd	0.4	0.4	0.05	bd	bd	0.2	0.6	0.6	0.05	bd	bd	0.7	0.9	0.9	0.05	61.08
26D	bd	bd	0.2	0.6	0.6	0.05	bd	bd	0.1	0.6	0.6	0.07	bd	bd	0.4	0.8	0.8	0.08	54.57
26F							bd	bd	0.2	0.4	0.4	bd							39.66
28D	bd	bd	bd	0.3	0.3	bd	bd	bd	bd	0.2	0.2	bd	bd	bd	0.4	0.4	0.4	bd	33.54
35A	bd	bd	bd	0.3	0.3	bd	bd	bd	bd	0.4	0.4	bd	bd	bd	bd	0.4	0.4	bd	38.71
41A	bd	bd	bd	0.3	0.3	bd	bd	bd	0.1	0.3	0.3	bd	bd	bd	0.4	0.5	0.5	bd	36.95
43A	bd	bd	bd	0.3	0.3	bd	bd	bd	0.1	0.3	0.3	bd	bd	bd	0.3	0.4	0.4	bd	37.77

48A	bd	bd	bd	0.4	0.4	bd	bd	bd	0.1	0.5	0.5	bd	bd	bd	0.2	0.6	0.6	bd	44.19
52B	bd	bd	bd	0.2	0.2	bd	bd	bd	bd	0.4	0.4	bd	bd	bd	0.2	0.4	0.4	bd	34.48
55B	bd	bd	bd	0.6	0.6	bd	bd	bd	0.1	1	1	bd							47.78
58E	bd	bd	0.2	0.4	0.40	bd	bd	bd	0.2	0.7	0.7	bd	bd	bd	0.5	0.7	0.7	bd	44.64
58F	bd	bd	0.2	0.5	0.50	0.05	bd	bd	0.2	0.6	0.6	bd							46.00
58G	bd	bd	0.2	0.3	0.3	bd	bd	bd	0.2	0.5	0.5	bd	bd	bd	0.5	0.5	0.5	0.05	43.61
59B	bd	bd	0.2	0.3	0.3	bd	bd	bd	0.2	0.5	0.5	bd	bd	bd	0.5	0.5	0.5	bd	44.95
60A	bd	bd	0.2	0.6	0.6	bd	bd	bd	0.2	0.6	0.6	0.05							50.05
60B													bd	0.05	bd	0.6	0.65	0.05	55.22
62C	bd	bd	bd	0.4	0.4	bd	bd	bd	0.2	0.4	0.4	bd	bd	bd	bd	0.4	0.4	bd	39.66
64B	bd	bd	bd	bd	bd	bd	bd	bd	0.2	0.4	0.4	0.06	bd	bd	bd	bd	bd	0.05	19.20
64C	bd	bd	bd	0.2	0.2	bd	bd	bd	0.2	0.3	0.3	0.05	bd	bd	0.1	0.2	0.2	0.05	31.30
66A							bd	bd	0.1	0.7	0.7	bd	bd	bd	0.3	0.7	0.7	bd	45.20
67A	bd	bd	bd	0.2	0.2	0.06	bd	bd	0.1	0.2	0.2	0.05	bd	bd	bd	0.1	0.1	0.05	30.90
67C	bd	bd	0.4	1.0	1.00	bd	bd	bd	bd	0.1	0.1	0.05	bd	bd	bd	0.1	0.1	bd	32.30
69A	bd	bd	0.3	0.8	0.80	bd													41.47
70E	bd	bd	0.5	0.7	0.7	bd	bd	bd	0.2	0.5	0.5	bd	bd	bd	0.2	0.7	0.7	0.05	44.54
72A	bd	bd	0.1	0.7	0.7	bd	bd	bd	0.1	0.6	0.6	bd							39.34
74B	bd	bd	0.6	0.6	0.6	bd	bd	bd	0.1	0.5	0.5	bd	bd	bd	0.1	0.5	0.5	bd	42.47
74C	bd	bd	0.2	0.6	0.60	bd							bd	bd	0.5	0.5	0.5	bd	41.45
80A													bd	bd	bd	0.1	0.1	bd	21.22
83A	bd	bd	0.2	0.6	0.6	bd							bd	bd	0.4	0.6	0.6	bd	52.15
85C	bd	bd	bd	0.3	0.30	bd	bd	bd	0.2	0.2	0.2	bd	bd	bd	bd	0.2	0.2	bd	28.36
88B	bd	bd	bd	0.4	0.40	bd	bd	bd	bd	0.3	0.3	bd	bd	bd	0.1	0.2	0.2	bd	40.19
90A	bd	bd	0.9	0.6	0.6	bd	bd	bd	0.2	0.7	0.7	bd	bd	bd	0.3	0.4	0.4	bd	46.58
Median	bd	bd	0.30	0.50	0.50	0.065	bd	bd	0.20	0.50	0.50	0.08	bd	0.14	0.35	0.50	0.50	0.08	44.22
Max	bd	bd	1.20	1.30	1.30	0.12	bd	bd	0.20	1.00	1.00	0.13	bd	0.19	0.70	1.90	1.90	0.33	66.08

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)	TPO4 = Total Phosphate	

All nutrient concentrations shown in mg/L

TSI = Trophic State Index, a quick indicator of canal health. Most sites this quarter scored as GOOD (<60). Four sites were FAIR (60-70), and none were POOR (>70).

TKN is back down, and there are not any obvious problems this quarter.

As we go into the rainy season, look for turbidity to be higher, meaning secchi depth will be shallower. The water will not be as clear due to increasing runoff from the daily rains. This is a normal seasonal change, and nothing to worry about - it will clear up again this winter!

July

2nd

Sunset Celebration

Cape Coral
Yacht Club Pier 4-7pm
Info: 574-0806

4th

Red, White and Boom

Downtown Cape
Cape Coral PKWY
3pm-10pm
Info: 574-0806

11th

Mangrove Gathering

@ Eco Café
Eco Living Center
7:30pm- 10pm
Info: 432-2163

26th

Native Plant Sale

Rotary Park Environmental
Center
9am- 2pm
Info: 549-4606

August

6th

Canalwatch

September

3rd

Canalwatch

20th

Wetwalks for National Estuaries Day

Six Mile Cypress Slough
10am- noon
Info: 533-7556

20th

Coastal Cleanup Events County Wide

27th

National Estuaries Day

City of Cape Coral
Environmental Resources Division
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