



Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 3rd Quarter 2011

Environmental News

Native Plant Profile

Canalwatch November Social!

The November 2nd Canalwatch meeting will be held at Rotary Park. This annual social event gives Canalwatchers the opportunity to get acquainted with each other and is a chance for new volunteers to meet the seasoned veterans.

This year's guest speaker is Mike Campbell, an Environmental Specialist with Lee County Natural Resources, who is conducting research on red mangroves and mussels in Southwest Florida.

Mr. Campbell will speak about some restoration efforts he is conducting in the area. He is very interested in sharing his ideas with Cape Coral's Canalwatch volunteers.

Please RSVP for this event, as we will need to know whether to bring your empty bottle to Rotary or leave it at the usual place. You can RSVP by email to the address below or by calling 574-0785. Coffee and donuts will be provided. Hope to see you there!

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Questions? Comments? Let us know!

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Harry: hphillips@capecoral.net

Poison Ivy

Toxicodendron radicans



In the spirit of Halloween, I thought I would write about a plant not welcome in ones landscape: Poison Ivy! If you have ever had the unfortunate experience of rubbing up against this climbing vine, then you know that poison ivy is something to watch out for when enjoying outdoor activities in natural areas.

Isn't there something about "leaves of three"? Yes! "Leaves of three, let it be" is the mnemonic to help remember what to avoid. Poison ivy is a vine with three leaves on each stem, with one terminal and the other two opposite. It can be green or reddish orange in the fall. It does have berries as well.

The "poison" is found in the oils of the plant that, once in contact with skin, create a rash that can irritate for days. While scratching the itch can't spread the rash once the oils have been washed off, scratching directly after contact with the plant can spread the oils, thereby spreading the irritation. Wash your skin and clothes immediately!

Home remedies abound, e.g., rubbing alcohol, lye soap, Epsom salt and even bleach! Calamine lotion is a tried and true relief, as is cortisone. If it's a serious case, prescription drugs may be the best bet.

Nature of Cape Coral Bus Tours

The weather is becoming more pleasant, so it's time to get outside and enjoy nature. What better place to do that than right here in Cape Coral? Cape Coral is home to a diverse amount of unique wildlife waiting to be discovered. The City of Cape Coral Parks and Recreation department is offering a great way to view wildlife around the city - through a bus tour!

Take a tour around the city in an air-conditioned mini-bus. Your guide will tell you all about the wonderful wildlife that lives in Cape Coral. Possible sightings include burrowing owls, manatees, eagles, osprey, various song birds and butterflies.

There are limited seats on the bus, so **advance registration is required**. The tour departs Rotary Park at 8:00 a.m. All tours are Saturdays from 8:00 a.m. - 12:00 p.m.

The cost for the tour is \$15 for residents and \$23 for non-residents. Activity # 145333

Tour Dates: November 12, and December 10.

Rotary Park Environmental Center, 5505 Rose Garden Road, Cape Coral, Florida

Please dress appropriately for the weather and wear comfortable walking shoes.

Monofilament Madness

Monofilament fishing line and braided fishing lines (Power Braid, Fire Wire, etc.) cause problems in the environment by creating entanglement hazards for birds and other wildlife.

These fishing lines get tangled in coastal trees such as red mangroves and structures such as bridges and docks, or can become snagged on underwater structures such as reefs. Birds, dolphins, turtles and manatees are threatened by fishing line once it finds its way into the environment.

So what is the answer for preventing this from happening? Just being mindful of the environment when fishing is sometimes not a solution, as even the most eco-savvy angler gets frustrated by snags and tangles and may not be able to retrieve what broke off.

The Monofilament Recovery and Recycling Program (MRRP) supports the use of monofilament recycling bins (often seen at boat ramps and fishing piers) and encourages anglers to retain clippings or sections of fishing line on board the boat until they can be recycled. Another way to help rid the environment of this plastic menace is to hold a monofilament clean-up event in which fishing line and other harmful debris are picked up by able volunteers.

The next event will be held on October 30th at the Cape Coral Yacht Club from 8:00 am till 12:00 pm. This year's event is organized by South West Florida Naturally and Keep Lee County Beautiful. If you are interested in joining this effort, please contact Lynda at

lynda@swflnaturally.com or call 239-541-1735. Pre-registration is required. Supplies for the clean-up, as well as lunch, will be provided. To find out more about Monofilament Madness and other area clean-ups, visit the Keep Lee County Beautiful web site at klcb.org.



Canalwatch Extra Field Data

3rd Quarter 2011

| 90A | July | Aug | Sep |
|------|------|-----|-----|
| DO | 4.4 | 4.2 | 3.2 |
| pH | 8.2 | 7.6 | 7.4 |
| Temp | 29 | 32 | 27 |
| Sal | 26 | 4 | 0 |

| 80A | July | Aug | Sep |
|------|------|-----|-----|
| DO | 4.5 | 0.8 | 2.3 |
| pH | 7.2 | 7.2 | 7.2 |
| Temp | 28 | 29 | 27 |
| Sal | 4 | 1 | 1 |

| Ft. Myers RECON | | | |
|-----------------|-------|-------|------|
| | April | May | June |
| DO | 7.52 | 6.06 | - |
| Temp | 25.72 | 28.91 | - |
| Sal | 17.11 | 19.83 | - |

RECON data provided by
SCCF Marine Laboratory
recon.sccf.org

| 26D | July | Aug | Sep |
|------|------|-----|-----|
| DO | 4.7 | 3.4 | 4.4 |
| pH | 7.6 | 7.2 | 7.6 |
| Temp | 30 | 29 | 28 |
| Sal | 5 | 2 | 0 |

| 74B | July | Aug | Sep |
|------|------|-----|-----|
| DO | 6.2 | 6.2 | 5.2 |
| pH | 8.4 | 8 | 7.8 |
| Temp | 30 | 31 | 29 |
| Sal | 6 | - | - |

| 10B | July | Aug | Sep |
|------|------|------|-----|
| DO | - | 4.95 | 4.3 |
| pH | - | 7.8 | 7.7 |
| Temp | - | 31 | 28 |
| Sal | - | 5 | 4 |

| | Full Name | Units |
|------|------------------|-------|
| DO | Dissolved Oxygen | m g/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.

| 74C | July | Aug | Sep |
|------|------|-----|-----|
| DO | 7.2 | 6.4 | 4.2 |
| pH | 8.6 | 8.6 | 7.8 |
| Temp | 30 | 35 | 27 |
| Sal | 6 | 7 | 5 |

| 4E | July | Aug | Sep |
|------|------|------|-----|
| DO | 6.4 | 4.75 | 4.5 |
| pH | 8 | 8 | 8 |
| Temp | 29 | 30.5 | 27 |
| Sal | 24 | 16 | 8 |

| 64C | July | Aug | Sep |
|------|------|-----|-----|
| DO | 3.25 | - | 3.1 |
| pH | 8 | - | 7.8 |
| Temp | 30 | - | 29 |
| Sal | 28 | - | 15 |

| Shell Point RECON | | | |
|-------------------|-------|-------|------|
| | April | May | June |
| DO | 6.24 | 6.58 | - |
| Temp | 25.25 | 28.99 | - |
| Sal | 16.23 | 35.11 | - |

bd = below detection

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

| | July 2011 | | | | | | August 2011 | | | | | | September 2011 | | | | | | 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 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 | |
| 3F | bd | bd | 0.1 | 0.9 | 0.9 | 0.07 | bd | bd | 0.1 | 0.7 | 0.7 | bd | bd | bd | bd | 0.7 | 0.7 | 0.06 | 50.19 |
| 4E | bd | bd | bd | 1.0 | 1.0 | 0.09 | bd | bd | bd | 0.9 | 0.9 | 0.08 | bd | 0.07 | bd | 1.0 | 1.07 | 0.13 | 58.15 |
| 6F | bd | bd | bd | 0.7 | 0.7 | 0.11 | bd | bd | 0.2 | 1 | 1.0 | 0.14 | bd | 0.06 | bd | 1.1 | 1.16 | 0.14 | 54.89 |
| 7B | bd | bd | bd | 0.9 | 0.9 | 0.12 | bd | bd | bd | 0.7 | 0.7 | 0.09 | bd | bd | bd | 1.0 | 1.0 | 0.10 | 52.26 |
| 7C | bd | bd | bd | 0.8 | 0.8 | 0.13 | bd | bd | bd | 0.7 | 0.7 | 0.08 | bd | bd | bd | 1.3 | 1.3 | 0.10 | 48.71 |
| 7D | | | | | | | bd | bd | bd | 0.8 | 0.8 | 0.10 | bd | 0.18 | bd | 1.3 | 1.48 | 0.16 | 58.64 |
| 9E | bd | bd | bd | 0.7 | 0.7 | 0.12 | bd | bd | bd | 0.8 | 0.8 | 0.09 | bd | bd | bd | 1.0 | 1.0 | 0.06 | 54.62 |
| 10B | | | | | | | bd | bd | bd | 0.4 | 0.4 | 0.04 | bd | bd | bd | 0.7 | 0.7 | 0.15 | 47.47 |
| 11D | | | | | | | bd | bd | bd | 0.9 | 0.9 | 0.12 | bd | 0.07 | bd | 1.0 | 1.07 | 0.15 | 52.41 |
| 15D | bd | bd | bd | 1.1 | 1.1 | 0.13 | bd | bd | bd | 0.6 | 0.6 | 0.04 | bd | 0.08 | bd | 1.0 | 1.08 | 0.07 | 53.08 |
| 15E | | | | | | | | | | | | | bd | 0.08 | bd | 0.9 | 0.98 | 0.03 | 52.29 |
| 16E | bd | bd | bd | 1.0 | 1.0 | 0.04 | bd | bd | bd | 0.8 | 0.8 | 0.04 | bd | 0.08 | bd | 0.9 | 0.98 | 0.03 | 58.06 |
| 16G | bd | bd | bd | 1.0 | 1.0 | bd | bd | bd | bd | 0.8 | 0.8 | 0.06 | bd | bd | bd | 0.9 | 0.9 | 0.04 | 57.83 |
| 17B | bd | bd | bd | 0.7 | 0.7 | 0.03 | | | | | | | | | | | | | 55.87 |
| 18G | bd | bd | bd | 0.7 | 0.7 | 0.03 | bd | bd | bd | 0.8 | 0.8 | 0.03 | | | | | | | 57.35 |
| 18H | bd | bd | bd | 1.4 | 1.4 | 0.03 | bd | bd | bd | 1.1 | 1.1 | 0.03 | | | | | | | 58.85 |
| 19D | | | | | | | bd | bd | bd | 0.9 | 0.9 | 0.15 | bd | 0.10 | 0.1 | 1.3 | 1.40 | 0.10 | 60.35 |
| 21D | bd | bd | bd | 0.8 | 0.8 | 0.14 | bd | bd | bd | 0.8 | 0.8 | 0.08 | bd | 0.06 | bd | 0.9 | 0.96 | bd | 56.24 |
| 26D | bd | bd | 0.1 | 1.0 | 1.0 | bd | bd | bd | bd | 0.9 | 0.9 | 0.04 | bd | bd | 0.2 | 2.1 | 2.1 | bd | 55.08 |
| 28D | bd | bd | bd | 1.1 | 1.1 | 0.04 | bd | bd | bd | 0.8 | 0.8 | 0.02 | bd | bd | bd | 1.1 | 1.1 | 0.06 | 57.40 |
| 30A | | | | | | | bd | bd | bd | 0.5 | 0.5 | 0.03 | bd | bd | bd | 0.6 | 0.6 | 0.02 | 44.60 |
| 30C | bd | bd | bd | 0.9 | 0.9 | bd | bd | bd | bd | 0.6 | 0.6 | 0.03 | | | | | | | 49.75 |
| 35A | bd | bd | bd | 0.8 | 0.8 | 0.02 | | | | | | | bd | bd | bd | 0.5 | 0.5 | 0.02 | 38.56 |
| 41A | bd | bd | bd | 0.6 | 0.6 | 0.01 | bd | bd | bd | 0.4 | 0.4 | 0.01 | bd | bd | 0 | 0.6 | 0.65 | 0.03 | 31.68 |
| 45D | bd | 0.06 | bd | 0.6 | 0.6 | 0.03 | bd | bd | bd | 0.7 | 0.7 | 0.02 | bd | bd | bd | 0.8 | 0.8 | 0.03 | 52.32 |
| 45E | bd | bd | bd | 0.7 | 0.7 | 0.04 | | | | | | | | | | | | | 59.90 |
| 48A | | | | | | | bd | bd | bd | 0.5 | 0.5 | 0.01 | bd | bd | 0.1 | 0.8 | 0.8 | 0.02 | 30.87 |
| 52B | bd | bd | bd | 0.6 | 0.6 | 0.02 | bd | bd | bd | 0.6 | 0.6 | 0.01 | bd | bd | 0 | 0.5 | 0.5 | 0.02 | 40.06 |
| 58E | bd | bd | bd | 0.9 | 0.9 | 0.03 | | | | | | | bd | bd | bd | 0.8 | 0.8 | 0.04 | 69.88 |
| 58F | | | | | | | | | | | | | bd | bd | bd | 1.0 | 1.0 | 0.02 | 37.32 |
| 58G | bd | bd | bd | 0.9 | 0.9 | 0.03 | bd | bd | bd | 1.0 | 1.0 | 0.04 | bd | bd | bd | 0.8 | 0.8 | 0.03 | 50.96 |
| 58I | bd | bd | bd | 0.8 | 0.8 | 0.02 | bd | bd | bd | 1.0 | 1.0 | 0.03 | bd | bd | bd | 0.7 | 0.7 | 0.02 | 43.33 |

| | | | | | | | | | | | | | | | | | | | |
|---------------|-------------|-------------|-------------|-------------|-------------|------|-------------|-------------|-------------|-------------|-------------|------|-------------|-------------|-------------|-------------|-------------|--------------|-------|
| 59B | bd | bd | bd | 1.0 | 1.0 | 0.03 | bd | bd | bd | 0.8 | 0.8 | 0.02 | bd | bd | bd | 0.6 | 0.6 | 0.02 | 46.32 |
| 64B | | | | | | | bd | bd | bd | 0.7 | 0.7 | 0.07 | bd | bd | bd | 0.7 | 0.75 | 0.09 | 45.13 |
| 64C | bd | bd | bd | 0.7 | 0.7 | 0.07 | | | | | | | bd | 0.07 | bd | 0.6 | 0.67 | 0.09 | 45.71 |
| 65B | bd | bd | 0.1 | 1.1 | 1.1 | 0.09 | bd | bd | bd | 1.0 | 1.0 | 0.08 | bd | bd | bd | 0.7 | 0.7 | 0.08 | 63.21 |
| 66A | bd | bd | 0.2 | 1.8 | 1.8 | 0.03 | bd | bd | bd | 0.9 | 0.9 | 0.02 | bd | bd | bd | 0.7 | 0.7 | 0.03 | 50.02 |
| 70F | bd | bd | bd | 0.8 | 0.8 | 0.04 | bd | bd | bd | 0.9 | 0.9 | 0.03 | bd | bd | bd | 0.5 | 0.5 | 0.06 | 46.76 |
| 71A | bd | bd | bd | 0.7 | 0.7 | 0.04 | bd | 0.20 | bd | 0.6 | 0.80 | 0.02 | bd | 0.15 | bd | 0.3 | 0.45 | 0.04 | 45.98 |
| 72A | bd | bd | bd | 0.8 | 0.8 | bd | | | | | | | | | | | | | 48.29 |
| 72C | bd | bd | bd | 0.9 | 0.9 | 0.04 | bd | bd | bd | 1.0 | 1.0 | 0.04 | bd | bd | 0 | 0.8 | 0.8 | 0.06 | 55.38 |
| 74B | bd | bd | bd | 1.0 | 1.0 | 0.04 | bd | bd | bd | 1.3 | 1.3 | 0.04 | bd | bd | bd | 1.1 | 1.1 | bd | 53.64 |
| 74C | bd | bd | bd | 1.0 | 1.0 | 0.03 | bd | bd | bd | 0.9 | 0.9 | 0.04 | bd | bd | 0 | 0.8 | 0.8 | bd | 49.76 |
| 74F | | | | | | | | | | | | | bd | bd | bd | 0.9 | 0.9 | bd | 57.60 |
| 80A | bd | bd | bd | 0.2 | 0.2 | 0.01 | bd | bd | bd | 1.1 | 1.1 | 0.02 | bd | bd | 0 | 0.9 | 0.9 | 0.02 | 38.69 |
| 81A | bd | bd | bd | 5.0 | 5.0 | 0.41 | | | | | | | bd | 0.08 | bd | 3.6 | 3.68 | 0.17 | 56.71 |
| 82A | bd | bd | bd | 1.3 | 1.3 | bd | | | | | | | bd | bd | 0.1 | 0.8 | 0.8 | 0.02 | 55.23 |
| 83A | bd | bd | bd | 1.3 | 1.3 | 0.03 | bd | bd | bd | 0.9 | 0.9 | 0.01 | bd | bd | bd | 0.7 | 0.7 | 0.02 | 45.40 |
| 89A | bd | bd | bd | 1.1 | 1.1 | 0.16 | bd | bd | bd | 0.8 | 0.8 | 0.15 | bd | 0.08 | 0.1 | 0.9 | 0.98 | 0.16 | 58.66 |
| 90A | bd | bd | bd | 1.7 | 1.7 | 0.04 | bd | bd | bd | 1.4 | 1.4 | 0.03 | bd | bd | bd | 1.2 | 1.2 | 0.03 | 56.81 |
| 91A | bd | bd | bd | 0.8 | 0.8 | 0.01 | bd | bd | bd | 1.6 | 1.6 | 0.02 | bd | 0.07 | bd | 0.8 | 0.87 | 0.03 | 39.49 |
| 93B | bd | bd | bd | 0.8 | 0.8 | 0.04 | bd | bd | bd | 1.0 | 1.0 | 0.04 | bd | bd | bd | 0.8 | 0.8 | 0.09 | 56.35 |
| 97A | bd | bd | bd | 0.8 | 0.8 | 0.01 | bd | bd | bd | 0.6 | 0.6 | 0.01 | bd | bd | bd | 1.0 | 1.0 | bd | 36.22 |
| Median | 0.06 | 0.10 | 0.90 | 0.90 | 0.04 | | 0.20 | 0.15 | 0.80 | 0.80 | 0.04 | | 0.08 | 0.05 | 0.80 | 0.87 | 0.04 | 52.32 | |
| Max | 0.06 | 0.20 | 5.00 | 5.00 | 0.41 | | 0.20 | 0.20 | 1.60 | 1.60 | 0.15 | | 0.18 | 0.20 | 3.60 | 3.68 | 0.17 | 69.88 | |

| | | |
|---------------------------|---|--|
| 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. 49 sites this quarter scored as GOOD (<60). 2 sites scored FAIR (60-70), and one was very close to POOR (>70). As the summer comes to an end so does the rainy season. Secchi measurements should improve for many of you and you may find that it is visible on the bottom more often.

October

5th Canalwatch

5th Sunset Celebration
Yacht Club Pier 4-7pm

11th Friends of Wildlife
Meeting at Rotary Park
7 – 9 PM
ccfriendsofwildlife.org

15th Florida Yards and
Neighborhoods
Yard Tours 9 – 12
Tour begins at Rotary Park
Info: 549-4606

21st Mangrove Gathering
Environmental Club 7-10pm
Rotary Park
Info: 549-4606

November

2nd Canalwatch
November Social
At Rotary Park!

2nd Sunset Celebration
Yacht Club Pier 4-7pm

4th Florida Yards and
Neighborhoods Intro Class
Rotary Park
1 – 4 pm
Info: 549-4606

15th Friends of Wildlife
Meeting at Rotary Park
7 – 9 PM
ccfriendsofwildlife.org

24th / 25th Thanksgiving

30th Hurricane season ends!

December

7th Canalwatch

7th Sunset Celebration
Yacht Club Pier 4-7pm

13th Friends of Wildlife
Meeting at Rotary Park
7-9pm info: 980-2593

25th Christmas
Office will be closed on the 26th to
observe the holiday

City of Cape Coral
Environmental Resources
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