Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 4th Quarter 2006

CanalWatch 2007 Schedule

January	3rd
February	7th
March	7th
April	4th
May	2nd
June	6th
July	5th
August	1st
September	5th
October	3rd
November	7th
December	5th

In this Issue

ERD is Expanding - new staff members **1**

Environmentally Speaking - environmental topics **2**

Canalwatch Data - last quarter analysis **3**

Events **4**

Environmental Resources is Expanding

The City of Cape Coral's population is growing and with this inflow of new residents comes a greater strain on natural resources. Demands of water, land and the biotic elements (animals and plants) that inhabit these systems will become more stressed as Cape Coral escalates to build-out. Consequently, the Environmental Resources Division is expanding to meet these greater demands. For 2007 ERD has filled three new positions consisting of an additional environmental biologist, an administrative secretary and an environmental technician. With these positions filled and in conjunction with our present staff, the Cape Coral Environmental Resources Division will be able to provide and maintain the level of environmental service needed for Cape Coral's increasing number of residents.

The new environmental biologist position will be filled by Kimberly Cressman. Cherie Durante is pioneering the administrative secretary position and Bob Mondgock has taken over the environmental technician position. A warm welcome and congratulations is extended to them. Their service to the Environmental Resources Division will be greatly appreciated.

Environmentally Speaking

El Niño Southern Oscillation

El Niño refers to the ocean / atmospheric phenomenon that affects global climate change. The inception of this occurrence originates in the tropical Pacific Ocean. This is a reoccurring event every two to seven years, persist about 18 months, and has been recorded for the past 300 years.

The first reference of "El Niño" to climate fluctuations occurred around the 1880's, when Peruvian sailors named the warm northerly current "El Niño" (or *little child*, to describe Christ) because it was most noticeable around Christmas.

Trade winds in the Tropical Pacific generally blow east to west, but in an El Niño the east to west winds weaken or sometimes reverse. Widespread climatic change is the result, affecting patterns of rainfall and dryness around the world.

La Niña, often follows; this occurs when the water in the Western Pacific is warmer than usual. Again global climatic extremes persist until the climate stabilizes as equilibrium is achieved.

References:
National Oceanographic and Atmospheric Administration www.noaa.gov

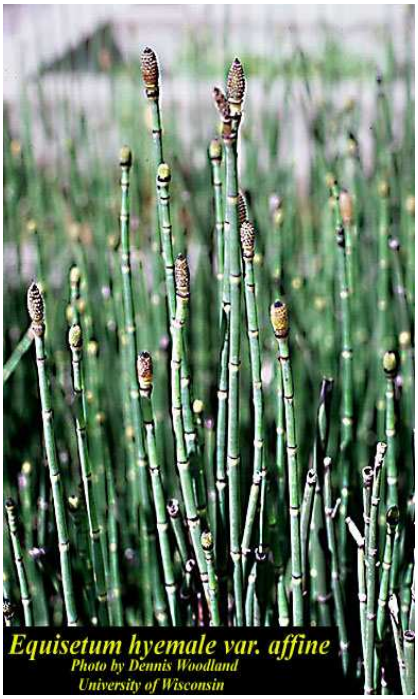
Ochoa, G., Hoffman, J. and Tin, T. (2005). Climate: The Forces That Shape Our World and the Future of Life on Earth. Rodale Books; London.

Native Plant Profile

Horsetail

Equisetum hyemale

This ancient plant (species of this plant have been in existence for 325 million years), is rush like in its appearance. Native throughout the United States it is found in the littoral zones along rivers and lakes. Horsetail grows to 4 feet in height and can tolerate a range of full sun to partial shade. Reproduction takes place through spores, but can colonize through creeping rhizomes. The spread of this plant makes it useful for erosion control along rivers and streams.



References:

Haehle, R. G., Brookwell, J. (1999). Native Florida Plants. Taylor Trade Publishing; Lanham, Maryland.

Atlas of Florida Vascular Plants
www.plantatlas.usf.edu

Canal Watch Data - Fourth Quarter 2006

	October						November						December					
STATION	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4
1A	<0.05	0.27	<.1	1.20	1.47	0.15	<0.05	0.24	0.1	0.2	0.44	0.07	<0.05	0.22	0.1	0.2	0.42	0.06
1B	<0.05	0.45	0.1	0.5	0.95	0.10	<0.05	0.26	<0.1	0.1	0.36	0.07						
1C							<0.05	0.25	0.1	0.2	0.45	<0.05	<0.05	0.26	0.1	0.1	0.36	0.05
3D	<0.05	0.27	0.2	1.00	1.27	0.13							<0.05	0.27	0.1	0.1	0.37	<0.05
3F							<0.05	0.25	0.1	0.2	0.45	0.06	<0.05	0.26	<0.1	<0.1	0.26	<0.05
4D	<0.05	0.33	0.1	0.60	0.93	0.1	<0.05	0.28	<0.1	0.1	0.38	0.05	<0.05	0.23	0.1	0.1	0.33	<0.05
6D	<0.05	0.26	<.1	0.90	1.16	0.11												
6F	<0.05	0.28	0.20	1.00	1.28	0.2	<0.05	0.25	<0.1	0.1	0.35	0.07	<0.05	0.26	0.3	0.2	0.46	0.11
9A	<0.05	0.25	0.1	0.50	0.75	0.08	<0.05	0.26	0.2	0.2	0.46	0.06						
10B	<0.05	0.33	0.1	0.5	0.83	0.07	<0.05	0.35	0.1	0.1	0.45	<0.05	<0.05	0.27	<0.1	<0.1	0.27	<0.05
11C	<0.05	0.26	0.1	0.2	0.46	0.14	<0.05	0.05	0.2	0.2	0.25	0.09	<0.05	0.25	0.1	0.1	0.35	0.07
16B	<0.05	0.21	0.1	0.20	0.41	<.05	<0.05	0.22	<0.1	0.2	0.42	<0.05	<0.05	0.26	<0.1	<0.1	0.26	<0.05
19D	<0.05	0.3	0.10	1.00	1.3	0.11	<0.05	0.29	0.1	0.1	0.39	0.07	<0.05	0.23	0.1	0.1	0.33	0.05
19E	<0.05	0.26	0.3	0.9	1.16	0.22	<0.05	0.30	0.1	0.1	0.40	0.09						
19F													<0.05	0.28	0.1	0.1	0.38	0.09
21B													<0.05	0.30	<0.1	<0.1	0.30	<0.05
21C							<0.05	0.37	0.1	0.1	0.47	0.16						
21D	<0.05	0.27	0.1	0.5	0.77	0.1	<0.05	0.28	0.1	0.2	0.48	0.07	<0.05	0.26	<0.1	0.1	0.36	<0.05
22B							<0.05	0.28	0.1	0.1	0.38	<0.05	<0.05	0.30	0.1	0.1	0.40	<0.05
22C	<0.05	0.21	<.1	<.01	0.21	<.05	<0.05	0.25	0.1	0.2	0.45	<0.05	<0.05	0.25	<0.1	0.1	0.35	0.05
22D							<0.05	0.27	0.3	0.5	0.77	0.06	<0.05	0.31	<0.1	<0.1	0.31	<0.05
22F	<0.05	0.21	<.1	0.10	0.31	<.05	<0.05	0.31	0.1	0.1	0.41	<0.05	<0.05	0.28	<0.1	0.1	0.38	<0.05
26A	<0.05	0.2	<.1	1.00	1.2	<.05							<0.05	0.24	0.1	0.1	0.34	<0.05
26C	<0.05	0.23	<.1	0.1	0.33	<.05	<0.05	0.25	0.1	0.1	0.35	<0.05	<0.05	0.23	<0.1	<0.1	0.23	<0.05
26D	<0.05	0.27	0.1	<.1	0.27	<.05	<0.05	0.13	0.1	0.1	0.23	<0.05	<0.05	0.25	<0.1	<0.1	0.25	<0.05
28D	<0.05	0.26	0.1	0.1	0.36	<.05	<0.05	0.30	0.1	0.1	0.40	0.07	<0.05	0.33	<0.1	0.5	0.83	<0.05
35A	<0.05	0.18	0.1	0.3	0.48	<.05	<0.05	0.26	0.1	<0.1	0.26	<0.05	<0.05	0.23	<0.1	<0.1	0.23	<0.05
39A	<0.05	0.24	<.1	<.1	0.24	<.05							<0.05	0.26	<0.1	<0.1	0.26	<0.05
41A	<0.05	0.2	<.1	0.1	0.3	<.05	<0.05	0.29	<0.1	<0.1	0.29	0.15	<0.05	0.22	<0.1	<0.1	0.22	<0.05
42A	<0.05	0.19	<.1	0.20	0.39	<.05	<0.05	0.25	<0.1	<0.1	0.25	<0.05	<0.05	0.33	<0.1	<0.1	0.33	<0.05
43A	<0.05	0.22	<.1	<.1	0.22	<.05	<0.05	0.23	<0.1	<0.1	0.23	<0.05	<0.05	0.16	<0.1	<0.1	0.16	<0.05
48A	<0.05	0.24	0.2	0.2	0.44	<.05	<0.05	0.22	<0.1	<0.1	0.22	<0.05						
49A	<0.05	0.27	<.1	<.1	0.27	<.05	<0.05	0.30	<0.1	0.1	0.40	<0.05	<0.05	0.23	<0.1	<0.1	0.23	<0.05
52B	<0.05	0.23	<.1	0.1	0.23	<.05	<0.05	0.26	<0.1	<0.1	0.26	0.05	<0.05	0.27	<0.1	<0.1	0.27	<0.05
58B													<0.05	0.23	<0.1	<0.1	0.23	0.07
58E	<0.05	0.23	0.1	0.9	1.13	<.05	<0.05	0.24	0.1	0.1	0.34	<0.05	<0.05	0.26	<0.1	<0.1	0.26	<0.05
58F	<0.05	0.21	<.1	0.5	0.71	<.05	<0.05	0.19	0.1	0.1	0.29	<0.05	<0.05	0.21	<0.1	<0.1	0.21	0.06
58G	<0.05	0.21	<.1	0.5	0.71	<.05	<0.05	0.20	0.1	0.1	0.30	<0.05	<0.05	0.25	<0.1	<0.1	0.25	<0.05
60A	<0.05	0.19	<.1	0.3	0.49	<.05	<0.05	0.24	0.1	0.1	0.34	<0.05	<0.05	0.23	<0.1	<0.1	0.23	<0.05
62C	<0.05	0.19	<.1	<.1	0.19	<.05	<0.05	0.24	0.1	0.1	0.34	<0.05	<0.05	0.22	<0.1	<0.1	0.22	<0.05
64B							<0.05	0.26	0.1	0.1	0.36	<0.05						
64C	<0.05	0.37	0.1	0.2	0.57	0.08	<0.05	0.28	0.1	0.1	0.38	0.06	<0.05	0.24	<0.1	<0.1	0.24	<0.05
66A							<0.05	0.27	<0.1	<0.1	0.27	<0.05						
66C	<0.05	0.31	<.01	0.20	0.51	0.09												
67A	<0.05	0.26	0.10	0.10	0.36	<.05	<0.05	0.30	<0.1	<0.1	0.30	0.06	<0.05	0.29	<0.1	<0.1	0.29	0.05
69A													<0.05	0.26	<0.1	<0.1	0.26	<0.05
70B	<0.05	0.22	0.20	0.20	0.42	<.05	<0.05	0.36	<0.1	<0.1	0.36	<0.05	<0.05	0.33	<0.1	<0.1	0.33	<0.05
70D	<0.05	0.23	<.1	0.80	1.03	0.05	<0.05	0.39	<0.1	<0.1	0.39	<0.05	<0.05	0.34	<0.1	<0.1	0.34	<0.05
72A	<0.05	0.28	<.1	0.80	1.08	<.05	<0.05	0.20	<0.1	<0.1	0.20	<0.05						
74B	<0.05	0.23	0.20	0.80	1.03	0.05							<0.05	0.23	<0.1	<0.1	0.23	<0.05
83A	<0.05	0.15	<.1	<.1	0.15	<.05	<0.05	0.21	<0.1	<0.1	0.21	<0.05	<0.05	0.21	<0.1	<0.1	0.21	<0.05
85C	<0.05	0.27	<.1	0.2	0.47	<.05	<0.05	0.22	<0.1	<0.1	0.22	<0.05	<0.05	0.31	<0.1	<0.1	0.31	<0.05
88B	<0.05	0.26	0.1	0.6	0.86	<.05	<0.05	0.24	0.1	0.1	0.34	<0.05	<0.05	0.26	<0.1	<0.1	0.26	<0.05
90A	<0.05	0.23	0.10	0.63	<0.050	0.40	<0.05	0.27	<0.1	<0.1	0.27	<0.05	<0.05	0.25	<0.1	<0.1	0.25	<0.05
WQ	1.0	1.0	≈	≈	2.0	0.46	1.0	1.0	≈	≈	2.0	0.46	1.0	1.0	≈	≈	2.0	0.46

Laboratory Analysis	FL Storm Water Quality Standard
NO2 = Nitrites	< 1.0 mg/L
NO3 =Nitrates	<1.0 mg/L
NH3 =Ammonia	= No limit set
TKN = Total Kjeldahl Nitrogen	= No limit set
TN = Total Nitrogen	<2.0 mg/L
T-PO4 = Total Phosphorus	< 0.46 mg/L

WQ = Florida State Storm Water Quality Standard

Cape Coral's freshwater canal system is our secondary line of stormwater treatment; therefore, your samples are compared to the Florida State Storm Water Quality Standards.

= No Sample Supplied.

All Units: mg/L = milligrams/liter

≈ = No Water Quality Standard set for this limit.

3

Events

February	March	April
Canalwatch 7th	Canalwatch 7th	Canalwatch 4th
St. Valentines Day 14th	FYN University Class 17th 9am – 3pm	Easter Sunday 8th
		FYN Design Class 6th, 13th, 20th 1pm – 4pm
		Rain Barrel Class 21st 9am
		Native Plant Sale At Rotary Park 22nd

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