



Friends of St. Sebastian River

P.O. Box 284 ❖ Roseland, Florida 32957-0284

May 2015

website: www.fssr.org email: info@fssr.org ph: 772-202-0501

The mission of the Friends of St. Sebastian River is to maintain and improve the health and beauty of the St. Sebastian River and its watershed.

NEW PERSPECTIVES ON NUTRIENT POLLUTION IN THE INDIAN RIVER LAGOON

Three years ago this month, Dr. Brian Lapointe of Harbor Branch Oceanographic Institute in Ft. Pierce was our guest speaker, talking about his latest research projects just getting underway in the Indian River Lagoon. The project uses a technique he has utilized in the Florida Keys and the Caribbean to trace sources of nutrients contributing the degradation of water quality.

Dr. Lapointe worked with a couple graduate students in testing and tracing the nutrients at various locations throughout the lagoon and the St. Sebastian River. The process allows them to determine the sources of nitrogen in the water. Marie Tarnowski is one of the students who work with Dr. Lapointe and she will be our guest to give a presentation on the findings of their work. Marie completed her Master's thesis at Florida Atlantic University on Harmful Algal Blooms, working with Brian on this project in the lagoon.

Marie graduated from the University of North Carolina, Wilmington with a degree in Marine Biology. She then served two and a half years as the Sustainable Aquaculture Program Manager at the Cape Eleuthera Institute in the Bahamas, prior to coming to FAU/Harbor Branch.

If you are unable to attend our meeting this month, you may be interested in watching a similar presentation that Brian and Marie gave at last year's Ocean Science Lecture Series at Harbor Branch. Those presentations are available on YouTube and the presentation on their Indian River Lagoon work is available to watch at <https://www.youtube.com/watch?v=xEHmhNHRq6M>.

Our meeting is **Tuesday, May 26th, 7:30 pm** at the North Indian River County Library, 1001 Sebastian Blvd in Sebastian and all are welcome to attend. For more information visit our website or call 772-202-0501.

THE FLORIDA WATER STORY

The story of Florida is the story of water. Water defines the Florida experience, powers our economy and sustains an amazing diversity of plant and animal life. To protect it, we have to understand it.

With more than 51,000 miles of rivers and streams, 7,700 lakes, and one of the largest aquifers in the world, protecting and restoring our water resources is vitally important to our state's residents, economy, environment, and tourism.

The Florida Department of Environmental Protection's Florida Coastal Office presents their new website "Florida's Water – Ours to Protect", with an online interactive story map that takes visitors on a virtual tour of the state's 41 aquatic preserves through pictures, videos and website links.

FISH RULES APP FOR SMART PHONE

Fish Rules App simplifies saltwater fishing regulations into an easy to understand format. With a glance, know if a fish is in season, how many you can keep, how big they have to be, and more.

Fish Rules App includes saltwater fishing regulations for Federal and State waters in North / South Carolina, Georgia, Florida, Louisiana, Mississippi, Alabama, and Texas.

The guide also has a fish ID guide. For more information, visit www.fishrulesapp.com.

GEORGE SCHUM MEMORIAL AWARD

George Schum was a long-time member of our Board of Directors. He passed away in 1997 and the award was started to memorialize his spirit of community service and volunteering. The award is given to a Sebastian River High School senior who has been involved in similar community service, and shown an interest in environmental issues.

The award includes a \$500 scholarship and this is the third year in a row we were able to present two awards, due to the generous donation of one of our previous recipients! Dr. Kimberley Maxwell received our Schum award in 2004 and has kept in touch with us ever since. She attended the West Point Military Academy and now serves as a pediatrician at Ft. Bragg.

Kimberley also served on our selection committee, and their selections were – Vianey Gamez and Miguel Raya. Both recipients are apparently interested in being pediatricians themselves. Congratulations to both Vianey and Miguel, and best wishes with your continuing education and future careers!

ST. SEBASTIAN RIVER CLEANUP

The Friends once again hosted another river cleanup earlier this month, as part of the American Rivers organization's "National River Cleanup" events throughout the country. The weather was picture perfect which brought out a record number of volunteers, assisted by a few from St. Elizabeth's Church in Sebastian too. In about 2 hours, we filled 27 bags of trash, including 10 bags of recyclables which we delivered to the local transfer station for recycling.

We thank Keep Indian River Beautiful for donation of supplies and the Sebastian Dunkin Donuts for their donation of doughnuts and muffins, and especially all the volunteers who helped out.

FISH KILL 'SEASON' WARMING UP WITH THE WEATHER

Low dissolved oxygen fish kills are common in summer. A number of factors can occur simultaneously to deplete dissolved oxygen in the water. Fish need oxygen from the water, in the same way people need air. A healthy lake or river has approximately 7 to 9 parts per million (ppm) of oxygen. When temperatures rise, DO levels naturally drop due to reduced solubility. If the level drops below 5 ppm, fish may start showing adverse impacts, and below 2 ppm it can be lethal, if the condition lasts too long. Some species of fish are better adapted to low DO conditions, such as bowfin or gar, but most of our freshwater sport fish (e.g., bass, bream and crappie) are less tolerant.

Aquatic plants produce most of the oxygen in lakes through photosynthesis. Additional oxygen enters the water from the atmosphere by diffusion through wind and wave action. At night or on

cloudy, rainy days, plants use oxygen and give off carbon dioxide. In addition, a major demand on oxygen comes from decomposition of dead plant and animal tissue.

Although low DO is the most common cause of fish kills, especially in summer, other factors may contribute and occur in combination, such as:

- Spawning stress – Spawning stress usually involves adults of a few species, and sores are often noticeable, resulting from spawning.
- Diseases and parasites – Viruses, bacteria and fungi may cause fish kills, typically of one species at a time. Fish parasites rarely kill fish but can make them susceptible.
- Algal blooms – Some algae are toxic, but most algae-related fish kills result indirectly from low DO. Algal blooms usually appear as a green-brown scum on the water.
- Human induced – Pesticides, herbicides or fertilizer applied on land can flush into the water and result in a kill.
- Low temperatures – Cold seldom kills native Florida fish. However, most exotic fishes came from tropical climates, so temperatures may drop enough to cause a die-off.
- Finally, occasionally, a few dead fish are observed, typically around a boat ramp that came from either commercial or recreational anglers inappropriately disposing of their catch.

To learn more about fish kills and how to report them, visit the DEP’s Fish and Wildlife Research Institute at <http://myfwc.com/research/saltwater/health/fish-kills-hotline>.

Source: Florida Fish and Wildlife Conservation Commission

FINANCIAL UPDATE

March 1, 2015 – April 30, 2015

Balance 3/1/15	\$3304.32
Receipts	847.15
Total	4151.47
Disbursements	603.92
Balance 4/30/15	\$3547.55

George Schum Memorial Award Fund

Total to date	\$372.24
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CALENDAR OF EVENTS

May 16 & 17, 2015

**Treasure Coast Lionfish Safari
and
FWC Lionfish Awareness Day**

Ft. Pierce

info:

www.treasurecoastlionfishsafari.com
and <http://reefrangers.com>



Wednesday, May 20, 5:30 PM

**Protection of our Water and
Natural Resources**

Dr. Edie Widder, Ocean
Research and

Conservation Association
Heathcote Botanical Gardens
210 Savannah Rd, Ft. Pierce
info: 772-467-1600



Thursday, May 21, 6:30 PM

Summer Yard Visits

Eugenia Chapter, FNPS
info: 772-567-1565

<http://eugenia.fnpschapters.org>



Tuesday, May 26, 7:30 PM

**Marie Tarnowski, Harbor
Branch Oceanographic
Inst.**

FSSR

North IRC Library
1001 Sebastian Blvd.
info: www.fssr.org

Please visit the “Meeting Info/
Events” page of our website for
more events!

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P.O. Box 284

Roseland, Florida 32957-0284



NOTE: The date on your mailing label is the month/year when your dues are next due. Thank you.

APPLICATION FORM

The Friends of St. Sebastian River depends on member support for programs of conservation and education.

Youth (under 18) free — Individual \$10/year

Family \$15/year — Corporate \$50/year

Name: _____

Address: _____

_____ Phone: _____

Email: _____

Special interests, concerns or expertise: _____

Please mail your completed application and dues to:
P.O. Box 284, Roseland, Florida 32957-0284

This newsletter is available on our website and delivery by email for current members. We encourage email-only delivery to save funds and paper! Email us at the address on the front to request email delivery.

Printed on 100% post-consumer recycled paper

Officers for 2015

President Tim Glover
Vice President Buzz Herrmann
Secretary Gayle Heath
Treasurer Bill Brennan

Directors for 2014

Tom Bauer Jane Schnee
Lynn Stieglitz Bruce Zingman

WELCOME NEW MEMBERS

Matthew Dodds
Maggie Perry

CORPORATE SPONSORS

Roseland Community Association
Tropical Kayak Tours