

Rainbow River Conservation, Inc.

Fall Newsletter 2018

Annual Meeting and Membership Renewal

Rainbow River Conservation will hold its annual meeting the morning of December 8th starting at 9 AM at the Rainbow Rivers Club at 2000 San Jose Blvd in Dunnellon. A special presentation will be made by Mark Fulkerson, a scientist at the Southwest Florida Water Management District, on the status of water quality and flow in the Withlacoochee River basin and the contribution of the Rainbow River to the high water level on Lake Rousseau. He will discuss the control systems along the river to manage river and lake levels and deal with this year's high water.

This is membership renewal time. Enclosed are a 2019 membership renewal form and a return envelope. Please send your membership fee and completed form as soon as possible. An up-to-date email address is necessary to get quarterly newsletters and other informative correspondence throughout the year. Rainbow River Conservation works hard to support their mission of Conservation, Education, Stewardship and Advocacy. During the last year RRC supported:

- The Annual River Cleanup which removed a trailer of debris from the river
 - Maintenance and repair of 50 Wood duck boxes which have over 95% breeding success
 - Springs education program for fourth graders at Rainbow Springs State Park
 - Monthly water sampling at 10 stations along the river in coordination with the Florida Springs Institute
 - Reprinting of the Rainbow River Recreation Guide which details public access and river etiquette
 - Support for improvements for Blue Run of Dunnellon Park including a new planned restroom
 - Advocacy at public meetings for Rainbow River water quality and maintenance of flow levels
- We have had significant success in these efforts and your membership will help us continue to advance these goals.

River Flow and Water Quality

Due to the extraordinary rainfall this year the river water level is very high. This has had varied secondary affects. With high water there are fewer engine propeller scars form power boats trolling in shallow water. However, one also sees fewer water bird feeding at the edge of the river since the water is too deep. Dissolved nitrogen continues to grow and encourages algae growth and the presence of Spirogyra, a light green mat that covers vegetation and the river bottom is now present year-round.



Spirogyra on river bottom – Photo John Moran

Dissolved Oxygen is one of the parameters measured by the RRC water sampling team on a monthly schedule. A YSI ProODO handheld dissolved oxygen meter is used at 10 different stations over a mile section of the river. One of the other tests is a Secchi Disk measurement of water visibility. Dissolved oxygen is present in the water when it comes out of the springs vent and is also produced by submerged vegetation in the river. The portion that is generated by the vegetation is impacted by the amount of sunlight that reaches the submerged plants. This is impacted not only by cloudy days but also but the turbidity and particulate in the river which is measured with the Secchi disk from a diver behind the boat. Averaging the monthly data over the last year we find that water clarity is reduced by approximately 54% from Station 1 (upriver) to Station 10. Over this same distance the dissolved oxygen has been reduced by 10.1% Since all living creatures in the water need oxygen to live, it is important to monitor

dissolved oxygen and create management practices which protect the vegetation and minimize negative recreational impact.

Blue Run of Dunnellon Park

Rainbow River Conservation was a founding partner in the acquisition of Dunnellon Park. A recent survey by the Department of Greenways and Trails has shown that the trail use alone the river (measured at the Withlacoochee River Trail Bridge) has grown from 5,300 a year in 2014, 49,800 in 2016 and now 64,600 in 2018. Along with kayak and float traffic at the kayak ramp and people enjoying the loop trails, Blue Run Park has become a busy place. Marion County Parks and Recreation has found match money to build a full function restroom at the CR 484 Trailhead. With the encouragement of RRC and the City of Dunnellon it is hoped that the restroom will be operational by the spring.

River Otters

River Otters continue to entertain visitors when they paddle the Rainbow River at low use times. Several families live and forage on the river. River otters eat mostly aquatic organisms, including fish, frogs, crayfish, turtles, insects and some small mammals. In the Rainbow they are often seen munching on a mussels or clams. Since the mussels and clams are filter feeders they will taste bad if they live in polluted waters so river otters gravitate to water bodies that are not polluted. In September RRC and the Florida Springs Institute hosted an interpretive nature paddle up the Rainbow River from KP Hole Park and down to Blue Run of Dunnellon Park. Although it was a busy Saturday the otters were out in force. These moments on the river are magical and underscore the necessity to protect our springs, rivers and lakes.



Two otters cruising the Rainbow River



Otter eating a crayfish

Rainbow River Conservation was recently recognized for our transparency with a 2018 Gold Seal on our GuideStar Nonprofit Profile! GuideStar is the world's largest source of information on nonprofit organizations. More than 8 million visitors per year and a network of 200+ partners use GuideStar data to grow support for nonprofits. In order to get the 2018 Gold Seal, Rainbow River Conservation shared important information with the public using our profile on www.guidestar.org. Now our community members and potential donors can find in-depth information about our goals, strategies, capabilities, and progress. We're shining a spotlight on the difference we help make in the world.

