



www.FLMS.net Summer 2016

Florida Lake Management Society
Managing Florida's Water Resources

President's Message



FLMS President Ron Hart

Fellow colleagues,

After a successful symposium, I'm excited to be starting my year as FLMS president on a high note. Each year not only do I look forward to listening to all of the interesting and high-quality presentations but also catching up with my friends and colleagues. I am sure you do as well.

I would like to welcome several new members to the board, **Gloria Eby, Rob Burnes, Steve Montgomery & Niles Czyzcki**. We are also saying farewell this year to several long time hard-working, board members: **Jim Griffin, Sam Arden and Todd Olson**. Folks like these who put in years of service are the key to a successful society.

A few times a year, our local chapters host workshops which not only provides us some networking time in between conferences, but also exposure to potential new members. Membership in our society continues to remain steady but I would like to see us expand and reach areas we have not in the past.

In order for our society to continue moving forward, your input is essential. Many of us are involved in more than one organization, so if there's something that you would like to see us do, please let us know. At the same time if there something we're doing right and you want to make sure we keep doing that, let us know that too!

The door to the Oval Office is always open and I welcome your comments,

Ron Hart

Citizen Scientists Create DIY Floating Islands by Ernesto Lasso de la Vega

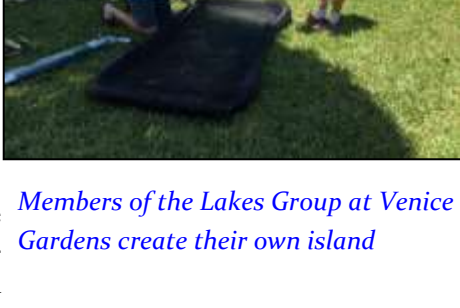


Completed DIY floating island

Citizens of the Venice Garden Civic Association Lakes Group (aka The Lakes Group) have taken upon themselves to beautify the stormwater pond in their Southwest Florida neighborhood. With the help of a FLMS [Love Your Lakes Shoreline Grant Program](#), the residents were able to purchase plants to protect the shoreline in places where erosion and lack of vegetation has jeopardized their shore properties.

In addition, plants and materials were also used to construct a prototype "do-it-yourself" floating island. This island will work as a filtration unit for the excess nutrients present in the water and will generate more plants as they overpopulate the island. These plants will then find their place as new shoreline plantings where homeowners have accepted the responsibility and desire to enhance their littoral zone.

The civic association has invested over 63 hours of work, showing other communities that their efforts have paid off. Birds have been spotted nesting in these areas, flowering plants have beautified the shore and the community is expecting the water quality to improve. Citizen scientists will continue to monitor the pond with measurements of turbidity in the water using a Secchi disc.



Members of the Lakes Group at Venice Gardens create their own island

Editor's note: Ernesto Lasso de la Vega of Lee County continues to work with the homeowners providing education and guidance for their project. He will be creating a short video at the end of the project. Stay tuned!

Save the Date! FLMS 28th Annual Technical Symposium & Workshops



**SOUTH SEAS
ISLAND RESORT**
CAPTIVA ISLAND, FLORIDA



Join FLMS in Captiva!

Mark your calendars for June 6—9, 2017 as FLMS heads to the beautiful island of Captiva! Next year's annual symposium will be held at the South Seas Island Resort. Pre-symposium workshops will be held on Tuesday, June 6 and the general session will run from June 7 to 9, 2017. The hotel rate is \$169/night and the symposium 3 day rate will remain the same at \$260.



The Symposium Committee is currently entertaining suggestions for the overall theme. If you have a suggestion, please send it to the Committee at flmshome@aol.com.

The Call for Abstracts will go out later this fall. The Program Chair will be looking for oral as well as poster presentations.

The most current symposium information can be obtained during the year on our website at www.flms.net.

Meet the 2016 Edward Deevey, Jr & Richard Coleman Aquatic Resources Award Winners



FLMS Treasurer Lance Lumbard presents Dr. Ann Shortelle with the Edward Deevey, Jr. Award

Each year the Awards Committee seeks to honor individuals or organizations that have made great contributions to the field of lake and watershed management. This year's awards were presented during the annual symposium in Daytona Beach Shores.

Dr. Ann Shortelle received the *Edward Deevey, Jr. Award*. This award is given to an individual for contributing to our scientific understanding of Florida's water bodies. Edward Deevey was an internationally recognized limnologist and affiliated with the State Museum of Florida at the time of his death. Dr. Shortelle is the executive director of the St. Johns River Water Management District, where she began work June 1, 2015. Dr. Shortelle has more than 25 years of professional experience in lake, riverine and reservoir management for water quantity and quality. Her experience also includes surface water/wetlands restoration, surface water modeling, permitting and environmental assessments. She holds a doctorate degree in limnology from the University of Notre Dame and a bachelor of science degree in biology from Mercer University. She has authored/co-authored more than 40 publications and presentations on environmental topics.



Bob Kolinger, seated, blue shirt, receives the Richard Coleman Aquatic Resources Award from Hans Zarbock, standing, during "lunch with the guys".

The *Richard Coleman Aquatic Resources Award* was presented to **Robert Kollinger**. This award is given to a professional who has worked to restore, protect and/or advance our understanding of Florida's aquatic resources. Bob, a long-time Polk County resident, holds a Bachelor of Science in Environmental Engineering from the University of Florida and is a Florida Registered Engineer. Up until his retirement earlier this year, Bob had worked with Polk County for 25 years, 11 of those as Water Resources Manager. He headed up Polk County's NPDES Stormwater permit when initiated in the mid-1990s, a permit which included the County plus 19 co-permittees! Bob implemented 20 surface water quality projects and played a lead role in adoption of the county Fertilizer Ordinance and Municipal Service Taxing Unit (MSTU) for stormwater funding. Bob has been and continues to be an advocate for the county's water resources. His friends and co-workers say that he is a really good poker player but won't take too much advantage of you, if he likes you!

Former FLMS Student Studies Nitrogen Mineralization by Mriganka De



Collecting soil samples (pre-planting) from the manured field using hand auger



Mriganka performs KCl extraction of those soil samples collected above. After KCl extraction, samples will be further analyzed for KCl extractable NH₄-N and NO₃-N.

In December when I moved to Twin Falls, Idaho, I had NO idea how to deal with 2-3 inches of snow covering my car, pavements and roads. It may sound funny but it was hard for me to get acclimatized with the new environment as I hail from a tropical country (India) and moved to sunshine state, Florida, a semitropical region, to pursue my doctoral program. It seemed that changing climate trends of the places I lived in challenged me to embrace the changing pattern of my career path; however, in a positive way. Thus, my new position as a Post-doctoral Fellow at the Department of Plant, Soil and Entomological Sciences, University of Idaho under Dr. Amber Moore's direction offered me a great opportunity to work on monitoring and predicting nitrogen mineralization related to long term dairy manure applications to calcareous Idaho soils. This postdoctoral position spiked my interest me as I was excited to learn about the scope and potential to extend my understanding and knowledge on nitrogen from dairy manure to resolve questions on maximizing the availability of nitrogen to crops from dairy manure applications and minimize the losses of nitrogen to environment (e.g., nitrate leaching, runoff).

In the past two to three decades, the dairy industry of Idaho has experienced significant growth and the state has been marked as the third largest milk producer in the nation. The herds of Southern Idaho, where my study area is, constitute 5.6% of the U.S. total cattle and produce about 1.11 million Mg of manure annually. The overlap between crop production (common crops include potato, dry beans, barley, sugar beet, corn, alfalfa and wheat) and dairy industry in this region has created a new dimension for growers to use dairy manure as a rich source of plant nutrients (e.g., nitrogen, phosphorous, potassium). The use of dairy manure as a beneficial soil amendment may also increase soil organic matter, improve nutrient and water retention and soil structure, buffer soil temperatures from extreme highs and lows, increase acidity in alkaline soils and reduce the need for fertilizers.

As a Post-doctoral Fellow, my major focus is on nitrogen which is mostly present as an organic form in manure and becomes only available to crops due to a microbially mediated process called mineralization. I want to continue the existing project, building on the work of David Graybill and Kate Casidy-Duffey, to monitor nitrogen mineralization patterns via *in-situ* buried bag studies and lab-based incubation studies to make progress towards the project goals which may aid the project's overall success. For example, quantification of rate and extent of nitrogen mineralization due to the effect of temperature, soil moisture content, and different rates of manure application (16 ton/acre annual, 16 ton/acre biennial, 32 ton/acre annual, 32 ton/acre biennial, 48 ton/acre annual, and 48 ton/acre biennial) may help to determine the manure application timings (fall versus spring) and appropriate rate of manure application for a particular texture (silt loam soils typically found) and crop rotation to improve crop yield and soil health. As a part of this project, I am also trying to design a new study where my goal would be to characterize different soil physical properties (both soil strength and water transmission) at two soil depths (0-6" and 6-12") in response to long term manure application (after 3 years of manure application) at different rates as described above.

I am confident that both field and laboratory-based experience will help me to successfully carry out the proposed research goals. Moreover, I strongly believe that collaboration with my co-workers will help me to improve my ability to work productively in a team and quickly adapt to a new research environment. Having said all this, I must say that I may come to Idaho for my job but I will go back to Florida again and again. I miss Florida and miss my FLMS family most. I wish all the success and accomplishment for FLMS.

Mriganka De can be reached via email at mriganka32@gmail.com

FLMS 2016 Student Presentation Awards



FLMS Board Member April Verpoorten chats with student Chao Xiong during the Student Meet & Greet

Think back to your early days in lake management. The thought of giving a public presentation was probably not a happy one and a talk in front of your peers was terrifying. With that in mind, the FLMS Board of Directors hosts a Student Meet & Greet at the beginning of each symposium. This small informal gathering of some current and past FLMS board members and that year's student attendees offers each student an opportunity to get to know a few people before getting thrown into the larger group. It is the hope of the Board that the students will feel more comfortable interacting with each of you during the symposium, thereby gaining a feeling of confidence prior to their presentation. This year's Student Meet & Greet was sponsored by Eureka Water Probes & Ferguson Waterworks.

Three FLMS members are chosen to judge both the oral and poster presentations given by the students. This year's winners are:

1st Place Oral Presentation: **Mark Lucius**, Florida Gulf Coast University

2nd Place Oral Presentation: **Sara Miller**, University of Florida

Poster Presentation: **Chao Xiong**, University of Florida

Each student received a monetary award in addition to their recognition.

NALMS Certification Program Gets New Provisional Lake Manager & Professional Distinctions



NALMS is pleased to announce the addition of the Provisional Lake Manager (PLM) and Provisional Lake Professional (PLP) distinctions to its Certification Program.

NALMS' mission is to forge partnerships among citizens, scientists, and professionals to foster the management and protection of lakes and reservoirs. NALMS created the Certification Program to aid this mission by identifying professionals who have exceptional training and experience in lake management.

Until now certification was only open to professionals. The PLM and PLP distinctions now offer a path to certification for undergraduate and graduate students who may not have enough professional experience to meet the requirements of full certification. This allows NALMS to identify upcoming students as they work to gain experience and training in lake management.

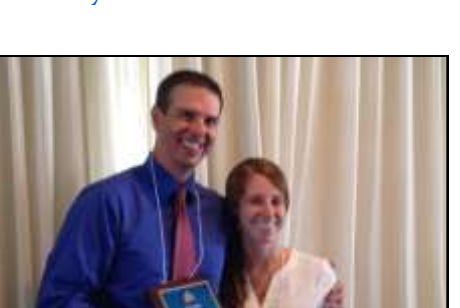
NALMS currently has 88 fully certified Lake Managers (CLM) and Lake Professionals (CLP). These individuals play a critical role in providing lake and reservoir management guidance to public and private organizations throughout North America. With the initiation of the PLM and PLP distinctions, NALMS hopes to add ten new certified individuals per year and expand the reach of the Certification Program.

For more information on any of the NALMS Certification Programs, contact **Greg Arenz** at garenz@nalms.org

Two New Categories Added to Annual Awards



Mark Hoyer & Dan Willis represent the LAKEWATCH program during the awards ceremony.

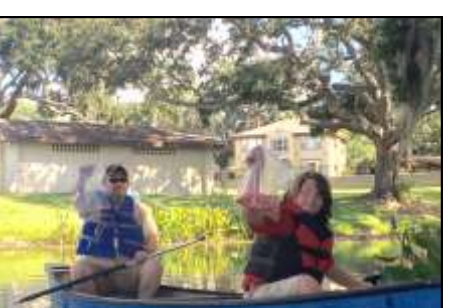


Dr. Dana Stephens is presented the first FLMS Young Professional Award by Lance Lumbard, Awards Committee Chair

Last year's symposium was themed around the great work our volunteers do all over Florida. The Board of Directors felt it fitting that they be recognized for their contributions to lake and watershed protection and restoration. Therefore, the *Dr. Daniel E. Canfield, Jr. Volunteerism Award* was created. The award is named after **Dr. Daniel Canfield**, founder of Florida LAKEWATCH, the pioneering citizen-volunteer water monitoring program involving over 1,200 lakes statewide, and now being emulated across the United States. The award is given to a volunteer organization or outstanding volunteer for significant contributions to the research, restoration and/or preservation of our water resources. The Awards Committee felt it very appropriate that the winner of the first award be Florida LAKEWATCH. Florida LAKEWATCH is a successful example of a long-term volunteer water quality monitoring program that started in 1986. Working with thousands of volunteers, these dedicated citizen scientists have collected reliable long-term water quality data for over 1200 lakes, 175 coastal sites, 120 rivers, and 5 springs. These data encompass water resources in 57 Florida counties. **Mark Hoyer** and **Dan Willis** accepted the award on behalf of the program.

We have many extremely talented young professionals in our midst and FLMS would be remiss if it didn't recognize them. In creating the new FLMS Young Professional Award, the Board wishes to call attention to their contributions and new ideas. *The FLMS Young Professional Award* is presented to a young lake management professional who exhibits exemplary professional accomplishments and a commitment to water resource protection and management of our lakes and watersheds. The winner of the inaugural award is **Dr. Dana Bigham Stephens**. Dana has been a member of FLMS since 2007 and has served on its Board as well as on the NALMS Board. She is the Director of the Mattie M. Kelly Environmental Institute at Northwest Florida State College. Her research examines temporal and spatial shifts in aquatic ecosystems with focus on anthropogenic and natural drivers of change. Through sharing her research and teaching a variety of courses in the natural resource sciences in academia and within the community, Dana strives to engage individuals as environmental stewards. Dana received her B.S. from University of Wisconsin-Madison and M.S. and Ph.D. from University of Florida. She completed a postdoc in science education and currently holds a courtesy faculty appointment at University of Florida.

July is Lakes Appreciation Month



Volunteers enjoy canoeing on Lake Harris in Leesburg while joining the effort to remove invasive apple snail eggs.

We encourage citizens to enjoy their lakes throughout the year but especially in July – as July is Lakes Appreciation Month. The North American Lake Management Society (NALMS) sponsors Lakes Appreciation Month each July to draw attention to the value and importance of lakes and reservoirs. NALMS also sponsors The Secchi Dip-In each July.

Americans love to spend July, especially the Fourth, on the water, at the beaches, and on lakeshores. Boating, fishing, and swimming are favorite recreational uses of American lakes and reservoirs. Lakes and reservoirs also play other vital, and often hidden, roles. They provide drinking water and irrigation water for agricultural fields and are a source of electricity and power generation. They also serve the important function of absorbing rainfall and runoff from the land, help to prevent floods, and provide homes for precious wildlife.



Derby Lake before kids' fishing clinic attendees arrive in Tenoroc Fish Management Area, Lakeland.

It is clear that as we enjoy and use lakes, we have to protect them. Because lake pollution is caused by so many different activities, no one regulation will suffice to prevent it. Education and outreach aimed at changing individual behavior are key components to any successful lake protection effort.

[Visit the NALMS Lakes Appreciation Month page to see what NALMS is doing this year.](#)

FLMS Would Like to Recognize Our Non-Profit & Corporate Members

 <p>Non-Profits</p> <p>Lake Powell Community Alliance & Friends of Erin Park Canals & Little Lake Jackson</p>	 <p>BSA ENVIRONMENTAL SERVICES, INC.</p> <p>23400 Mercantile Road Suite 8 Beachwood, OH 44122</p> <p>TEL: 216-765-0582 j.beaver@bsaenv.com</p>	<p>Beautiful Ponds</p> <p>140 Triple Diamond Blvd Suite G, Nokomis, FL 34275</p> <p>TEL: 941-488-1942</p> <p>Email: Russ@BeautifulPonds.com</p>
<p>BIOSPHERE CONSULTING, INC.</p> <p>14908 Tilden Road Winter Garden, FL 34787</p> <p>TEL: 407-656-8277</p> <p>TEL: 407-656-2889</p> <p>E-MAIL: BIOSPHERE@BioSphereNursery.com</p> 	 <p>Bio-Tech Consulting Inc.</p> <p>Environmental and Permitting Services</p> <p>2002 East Robinson Street Orlando Florida 32803</p> <p>Main Office 407.894.5969 Toll Free 877.894.5969</p> <p>info@bio-techconsulting.com www.bio-techconsulting.com</p> <p>Orlando • Vero Beach • Key West • Jacksonville • Tampa</p>	 <p>Geosyntec</p> <p>consultants</p> <p>engineers scientists innovators</p> <p>www.geosyntec.com</p>

Our Mission

The mission of the Florida Lake Management Society is to promote protection, enhancement, conservation, restoration and management of Florida's aquatic resources; provide a forum for education and information exchange; and advocate environmentally sound and economically feasible lake and aquatic resource management for the citizens of Florida.

2 Golf Tourneys & a Raffle Support FLMS Students at Symposium



Golf Tourney Winners Colin Kirk, Chris Fagerstrom & Jeff Smith



Tom James may have another profession to fall back on in case this lake management stuff doesn't work out.

The seventh annual golf tournament was held at the Daytona Beach Golf Club and raised \$600! The winning team was **Chris Fagerstrom, Colin Kirk, Jeff Smith**. The team received a freshly 3-D printed trophy created by FLMS Treasurer **Lance Lombard**.

Those of us who don't have the golf gene enjoyed an evening of Putt Putt at Hawaiian Falls Golf, raising nearly \$400. The scores were very close, as evidenced by Maryann's post-putt-putt charts and graphs. But, in the end, the winners were **Ron Hart, Colin Kirk, Rob Burnes** and **Nia Wellendorf**. This is Ron's second time coming in 1st at Putt Putt. We suggest you all practice so someone can give Ron a run for his money!

And, in case you had to leave before the raffle tickets were drawn... **Jodi Slater** won the two night stay donated by South Seas Island Resort and **John Walkinshaw** won the \$150 Amazon gift card donated by Chemical Containers, Inc.

The fund is named in honor of long-time FLMS member and past board member **Kevin McCann** who, up until his death, was a great supporter of young lake management students and professionals. Overall, FLMS raised over \$1,400 for the scholarship fund this year!



Putt Putt Winners Colin Kirk, Rob



No pressure Sergio! No one is watching...



Thank you to everyone who came out to support our students this year!

Notes from the FLMS Office



The FLMS Business Office will be closed from July 1 to July 25!

Membership Renewal Time!

Our Society's membership year runs from June 1 to May 31 each year. Members who attend the full annual symposium automatically have their membership renewed. Maryann will be sending out renewal notices when she gets back in the country at the end of July. The annual dues are \$50 per individual and can be paid via check, credit card or PayPal. Following the main renewal period, a new member directory will be sent out so if any of your contact info has changed in the past year, please let us know.

Job Opportunities

New listings have been added to our [job postings page](#). Check back often for updates. If you have an opening, please send it to flmshome@aol.com!

Use AmazonSmile and support FLMS!

What is the AmazonSmile Foundation?

The AmazonSmile Foundation is a 501(c)(3) private foundation created by Amazon to administer the AmazonSmile program. All donation amounts generated by the AmazonSmile program are remitted to the AmazonSmile Foundation. In turn, the AmazonSmile Foundation donates those amounts to the charitable organizations selected by Amazon customers. Amazon pays all expenses of the Amazon Smile Foundation; they are not deducted from the donation amounts generated by purchases on AmazonSmile.

How does AmazonSmile work?

When first visiting AmazonSmile, customers are prompted to select a charitable organization from almost one million eligible organizations. In order to browse or shop at AmazonSmile, customers must first select a charitable organization. For eligible purchases at AmazonSmile, the AmazonSmile Foundation will donate 0.5% of the purchase price to the customer's selected charitable organization.



Click on the picture to visit AmazonSmile.



From the 2016 Annual Symposium



Richard Bryan discusses his poster with Todd Olson and Ron Hart



Fish Identification Workshop



Ron Hart presents John Walkinshaw with the Outgoing President's Gavel



Mini Golfers Rob Burnes, Diane Lauritsen and Ernesto Lasso



Student Meet & Greet Sara Miller & Sean McGlynn in foreground



DEP Measures of Floral Health Workshop



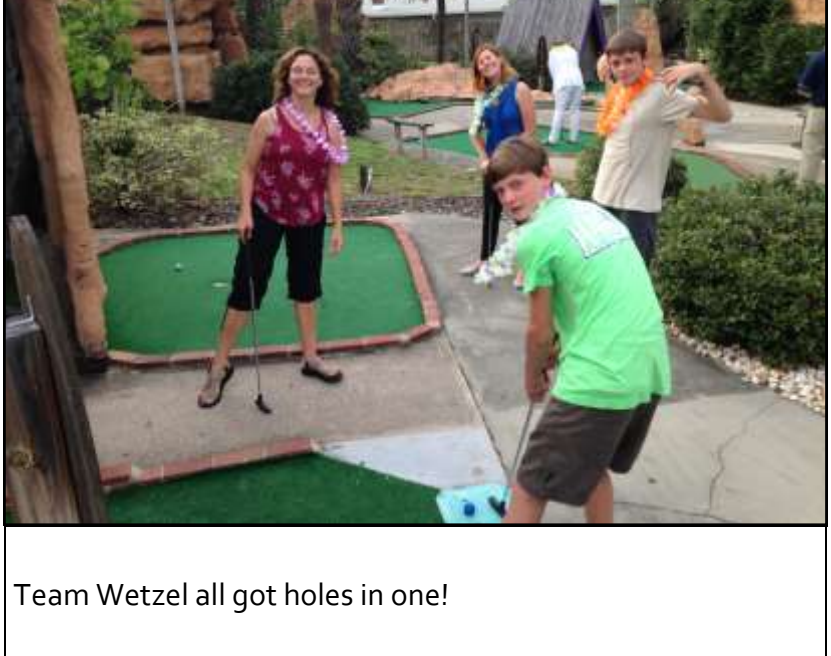
Todd Olson receives the President's Award for 2016



Fish ID Workshop Attendees



Nutrient Budget Workshop



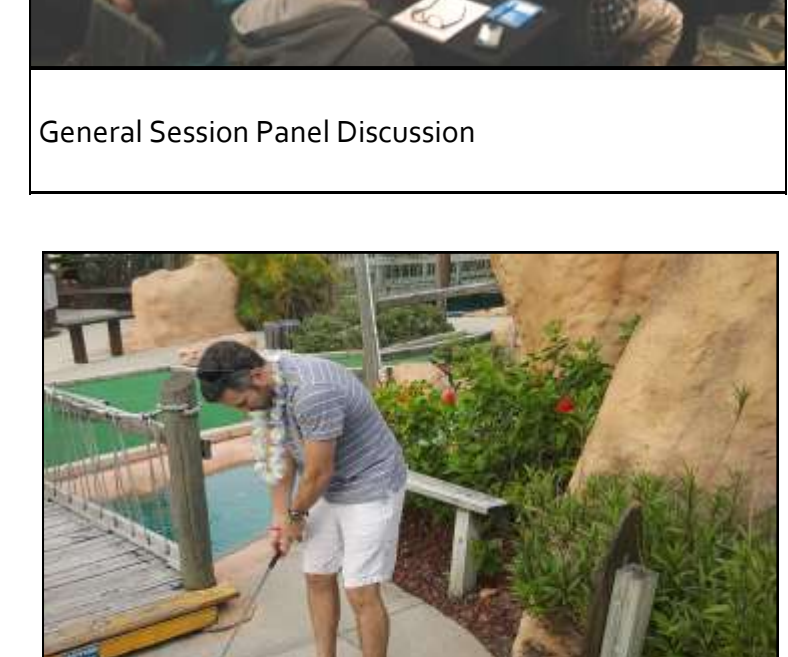
Team Wetzel all got holes in one!



General Session Panel Discussion



Sergio Duarte discusses the Love Your Lake grant program.



Kevin's best swing yet!



Lakes Volunteer Ernie Franke presents his data on providing habitat for wildlife in urban settings.

Thank you for reading all the way to the bottom! Happy Independence Day!

