### South Carolina Aquatic Plant Management Society

# SCAPMSNEWS

www.scamps.org

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#### Message from the President By: Hugo Burbage, Santee Cooper



I would like to start off by expressing my gratitude to the society for allowing me to be your president. The people are what make the South Carolina Aquatic Plant Management Society. Once someone becomes a member of SCAPMS it is easy to see how the society has held together for the last forty years. The members that form SCAPMS come from competing manufactures, distributors, universities and applicator companies, but to be present at the meetings one would never know this. SCAPMS members come together to form a bond that should not have any trouble lasting at least 40 more years.

The theme of the 40<sup>th</sup> anniversary meeting was "Get Back To Our Roots". I believe this was accomplished. Ben Willis' decision to move the meeting to North Myrtle Beach did exactly that. I heard many good things about the location, venue, presentations and one of the most important things, the FOOD!

North Myrtle Beach gave the members many options within walking distance for entertainment, shops and restaurants. The staff at Ocean Drive Resort made sure we had everything needed to make our anniversary meeting one to remember. Our presenters and student presentations gave us valuable information that can be used in the classroom as well as in the field. I also would like to extend my gratitude to the sponsors; with their help we are able to continue building the scholar-ship fund.

As another application season comes to an end, our members and sponsors willingness to share information with our society is a valuable asset. Whether it is an old foe, water hyacinth on the Ashepoo River, a new invasive, salavnia on the Santee Cooper system or the continued research on Cyanotoxins in the lab, SCAPMS is as valuable as ever. The research on these and other challenges are met head on in the classroom and the lab. Our student presentations are a testament to why our scholarship fund is important, and as in the past I am sure in the near future we will see these same students become leaders in the aquatics field and lead SCAMPS for another 40 years.

Again, I would like to express my humble esteem for your confidence in me to lead this society forward in 2019. I look forward to seeing everyone at next years meeting.

### **#SCAPMS**







### 2018 Annual SCAPMS Meeting













### 2019 Call for Presentations

The Program Committee is accepting requests for presentations at the 2019 SCAPMS Annual Meeting. Papers covering all aspects of aquatic and wetland plant biology, use and control will be considered. Presentations are allotted 20 minute duration with 15 minutes for the presentation and 5 minutes for questions. Student presentations are encouraged with cash prizes. Submit - Title, author, organization, and address exactly as you want it to appear on the program. Two or three sentence abstracts are needed to ensure recertification credits for attendees. Please reply ASAP/Aug 16th

All submissions to be sent electronically to: Justin Nawrocki justin.nawrocki@upl-ltd.com



#### **Student Professional Development Meeting**

In lieu of the annual student tour the decision by the SCAPMS board opted to hold a student professional development meeting. A collection of professionals from the private industry, state and federal regulators as well as universities graciously volunteered their time. A rousing discussion was had allowing the students to both hear and ask questsions about the opportunities in the aquatics field as well as receive some valuable career advice.

A few topics discussed were how important networking is in such a small specialized field, the pros and cons that come with each professional's job and the "if I could go back in time to your age" advice. All in all it was a great discussion that will hopefully compel our students to stay in this industry. SCAPMS board would like to continue this professional development meeting for this year too.







#### Phillip M Fields Scholarship Awarded to Amanda Howard—University of Georgia

Amanda Howard is a Master's Student and a graduate research assistant at the University of Georgia in the Warnell School of Forestry and Natural Resources, under the direction of Dr. Susan Wilde. She is majoring in Fisheries and Aquatic Biology and frequently works with macrophytes, phytoplankton and the novel, neurotoxin producing cyanobacteria, Aetokthonos hydrillicola. A. hydrillicola causes the wildlife disease, Vacuolar Myelinopathy, when consumed directly by fish or waterfowl and indirectly when predators eat these herbivores. Amanda has been investigating seasonal factors that responsible for inducing toxin production by A. hydrillicola. These factors include temperate, bromine concentration and the state of the hydrilla in which A. hydrillicola is growing upon (i.e. hydrilla senescence). One important objective of Amanda's research is to help better inform managers of how and when to control hydrilla to best prevent this wildlife disease. Amanda's research coincides with her love of the outdoors and aquatic ecosystems. She's stated that, "It was truly a privilege for me to receive this award and I am honored to have been able to contribute to a field that I care so deeply about."





## 2018 Conference Sponsors

\*Biosafe Systems \*Brandt \*Alligare \*Brewer International \*Airmax \*Carolina Aquatic Management \*Clemson Extension \*Cygnet Enterprises, Inc. \*Easy Pro \*Estate Management Services \*Duke Energy

\*Foster Lake & Pond Management \* Helena \*Kev Colour \*Lonza

\* Mountain Lake and Pond \*Naturallake Biosciences \*Nutrien Solutions \*Outdoor Water Solutions\*Santee Cooper \*SePRO

\*Solutude Lake Management \*Summit Helicopters

\*Sygenta \*UPL \*Vertex Water Features





### Distinguished Service Award—Steve Hoyle North Carolina State University

Steve Hoyle was awarded the distinguished service award for his commitment not only to the SCAPMS society but also to the field of aquatic plant management. Steve's dedication was without question when for nearly a decade he was the NC

State aquatic weed expert, attended SCAPMS every year and was even the president despite the fact he was employed as a row crop technician with no responsibility to do any of this extra aquatics work. Steve's thirst for knowledge and passion for this job have influenced scores

of students during his tenure at NC State. His retirement at the beginning of 2019 went as anyone close to Steve could have foretold, six months later he is returning to his post and will continue to be a mentor to students, as source of vast amount of knowledge and most importantly, a friendly face at the SCAPMS meetings for the foreseeable future. Congratulations Steve!





### **ANNUAL MEETING OCT 2-4 2019**

41st Annual Conference at
Ocean Drive Beach and Golf Resort

The Ocean Drive Beach and Golf Resort has all the ideal amenities for a SCAPMS conference; plenty of space for meetings and vendors, delicious food, walking access to res-

taurants and bars, ocean views, beach access, pools, and of course, a lazy river for the duck race! The hotel also has a 'retro' feel that will be very fitting for the 41st annual meeting! As always, the annual meeting is a great place to accumulate the CEU's you need for your Cat 5 license. This meeting will also be packed with informative presentations and educational workshops which will be sure to bring you up to date on current topics. Socials and various gatherings will help you network and get reacquainted with colleagues. Register at: www.scapms.org



### Honorary Member Award-Ken Manuel, Duke Energy



Ken Manuel is retired as a Senior Scientist at Duke Energy Corporation. He has been a professional Aquatic Entomologist for 40 years, the past 33 years with Duke Energy. His graduate studies in aquatic entomology and aquatic botany were conducted at Auburn University.

Ken managed Duke's reservoir Aquatic Plant and Mosquito Management Services at Duke Energy. In addition he conducted biological surveys and bio-assessments on streams, rivers, and lakes that may potentially impact power production operations.

Ken serves on the Executive Boards of several professional societies. He is Past President of the national Aquatic Plant Management Society, Past President of the North Carolina Mosquito and Vector Control Society and Past President of the South Carolina Aquatic Plant Management Society. He has published in the scientific literature on insects and aquatic plants and has given presentations to many professional and civic groups.

Ken volunteers with the Boy Scouts and teaches nature study to adult scout leaders and regional school teachers. In 1986, he was presented the North Carolina Governor's Conservation Achievement Award and was named the Conservation Educator of The Year by the North Carolina Wildlife Federation.

Ken and his wife Gail make their home in Mooresville, North Carolina.







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### \*\*\*Attention\*\*\*

These Bylaws may be amended by a three-fourths vote of the members present at any an-

### **Proposed Bylaw Changes -**

#### Article XVIII Amendments

dispersed.

nual meeting or three-fourth of those voting electronically via the internet. If voting is done electronically, there shall be a 30 day window for votes to be cast. Notice of the proposed amendment must be given to the Secretary and transmitted to the membership thirty days prior to the annual meeting or the electronic voting period. The proposed amendment and voting date(s) may be transmitted via regular mail, email, posting on the Society's web site, or any other reasonable method or combination of methods as long as the members are individually notified. All votes shall be tabulated and the results announced in the same manner as the original information was





#### Ecofriendly Innovations to (Almost) Instantly Transform the Health and Appearance of a Waterbody

Kyle Finerfrock, Environmental Scientist at SOLitude Lake Management

We live in a budget driven world. With every decision we make, we strive to maximize the value of our dollar—sometimes to the point that quality becomes diminished. But when it comes to the management of lakes, stormwater ponds and irrigation sources, neither quality nor budget can be comprised without threatening water quality or turf health. Thankfully, new technologies and innovative solutions are making it faster and more cost-effective for aquatic management professionals to reclaim eroded shorelines, eradicate undesirable vegetation and maintain the beauty and function of their aquatic resources all season long.

#### Eliminate Algae

Does the waterbody have odor issues or poor water clarity? Does it produce excessive algae blooms in the hottest months of the year? These symptoms may indicate insufficient oxygenation and an overabundance of pond nutrients. The introduction of floating, decorative fountains or submersed diffused aeration systems can help circulate and oxygenate the stagnant body of water, facilitating the conversion of existing nutrients to forms that cannot sustain algae as food. Aeration also helps improve other water quality parameters to enhance the growth of healthy green phytoplankton while reducing nuisance and potentially toxic algae species like cyanobacteria and golden algae.

For long-term oxygenation benefits, nanobubble aeration technology is becoming a game-changer in the industry. Nanobubble systems pump extremely small oxygen bubbles into lakes and ponds suffering from poor water quality. These bubbles are so small that they do not escape to the surface like those created by traditional aeration solutions. After the temporary system is shut down, the oxygen remains in the water column, providing benefits for 2-3 months. Due to their unique properties, nanobubbles help eliminate nutrients and algal toxins within the water column. The speed at which nanobubbles restore the health and appearance of a waterbody can depend on a variety of environmental factors, though in many cases results can be seen within a few days—or even overnight!





No matter the aeration solution you choose, the benefits can be enhanced with the application of eco-friendly nutrient remediation products that safely and naturally remove undesirable nutrients like phosphorous and nitrogen from the water column before they can fuel nuisance algae growth. A variety of natural purification products and application styles are available for waterbodies of all types, making nutrient remediation a truly custom water quality solution.

#### Remediate Shoreline Erosion

Aquatic management professionals know that the interface of a pond and the shoreline is often a difficult area to manage. Balancing aesthetics and functionality while remaining ecofriendly can be a challenge. A pond's edge should be well vegetated with native plants to ensure no sediment is exposed. If sediment is left exposed over time, banks may become completely eroded around the shoreline, threatening aesthetics and causing dangerous conditions for the public. Shoreline erosion can also lead to an increase in sediment and nutrient-rich stormwater runoff that enters your lake or pond, reducing overall water capacity until costly dredging is the only solution to restore the water resource to its original volume.





A new cutting-edge technology for shoreline erosion control is a bioengineered living shoreline. Using a patented degradable woven mesh system, aquatic management professionals can quickly create a long-

lasting sediment containment barrier around lakes and ponds. Once in place, turf, native vegetation, and deep-rooted flowering plants can be installed directly into the mesh, creating a beautiful natural buffer. In addition to being ecologically-friendly, these erosion control systems provide a custom solution for every property, and can also be filled with local sediment or dredged materials from the project site. Bioengineered



shorelines can be walked on and mowed within a few days of installation, making them an excellent solution for properties in need of fast, long-lasting restoration.

#### Prevent Vegetation & Enhance Aesthetics

On most landscaped areas, green or muddy water detracts from the entire appearance of the property. Likewise, sites with multiple water-bodies know that pond colors can vary greatly. Whether you desire to transform or standardize undesirable colors, an instant solution is environmentally-friendly pond dye. A mix of blue and black colorants can almost immediately enhance the look of a pond. In addition to enhancing aesthetics, pond dye helps shade out the sun, thus preventing photosynthetic nuisance aquatic weeds from receiving adequate levels of sunlight. After the colorants have dispersed, dyed water is non-staining and may be used for recreation and turf irrigation. Over time, continued pond dye may help reduce the frequency of treatments needed to control unwanted vegetation.

Fast, tangible results are desirable, but they cannot replace the long-lasting, ecologically-friendly benefits produced through proactive management. Algae, bad odors, and poor water quality are often signs of a bigger issue like excess nutrient loading, imbalanced pH, chronic erosion or the presence of an invasive species. Masking the symptoms is sometimes necessary to achieve our short-term goals, but, more importantly, it's crucial to take steps that ensure the long-term health, beauty and function of the waterbody is maintained for many years to come!



#### Tommy Bowen June 2, 1954 - October 8, 2018

Tommy was born in Williamston, NC where he was raised and later graduated from Martin Community College. He was hired by Duke Energy in 1974 where he worked for 44 years as a biologist. His love for his job and fellow coworkers was incomparable; truly his second family. He was very active in everything his sons did, particularly sports, and had a passion for East Lincoln athletics where he worked in the press box every football Thursday and Friday night. Annual beach trips to Holden Beach were a special time of year for him and the family where he enjoyed fishing, beach games putt-putt, ice cream and good seafood. He truly was a water child whether it be driving the Duke Energy airboat surveying for aquatic

plants or trolling along the Holden Beach coastline fishing with his sons. Tommy bled Carolina blue and loved cheering on the Tar Heels and Panthers every game of the season. It was, and will continue to be a loud living room every week as in spirit he will be with his family as they continue to watch the games. As we all who knew Tommy, the SCAMPS family was family for him too. He will be missed for sure.



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