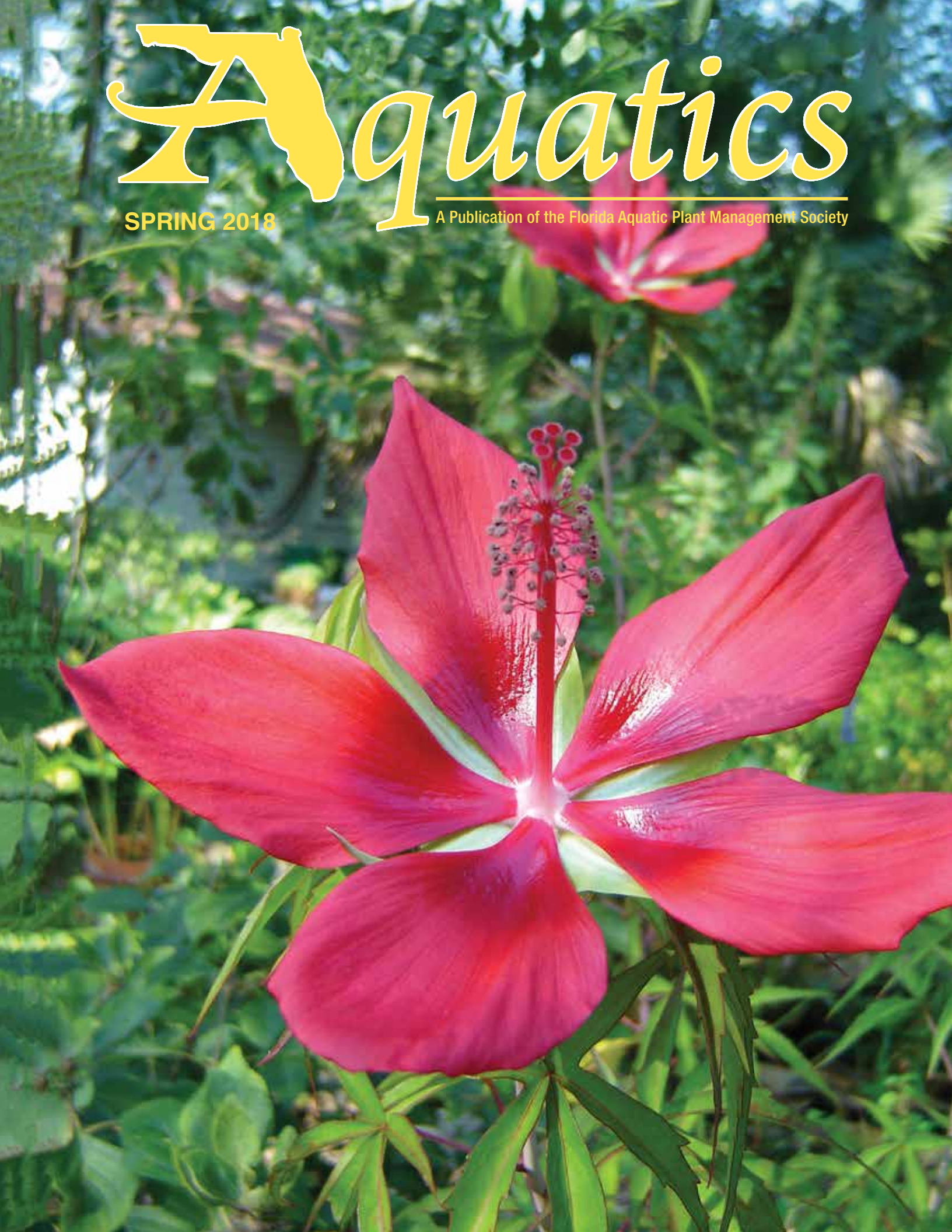

Aquatics

SPRING 2018

A Publication of the Florida Aquatic Plant Management Society

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Aquatics

SPRING 2018 Volume 40, Number 1

COVER: Marsh hibiscus (*Hibiscus coccineus*). This spectacular native shrub with large scarlet flowers is a butterfly-attractor. In Florida, it is found growing in swamps from the peninsula to the central panhandle. It blooms in the summer. Photo by Karen Brown.

Contents

To become a member of FAPMS and receive *Aquatics* magazine, please visit the website at: www.fapms.org

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In Memorium Wayne Corbin 1948 – 2018

David Wayne Corbin passed away January 4, 2018 following an extended illness. Wayne started his career in aquatic plant management with the Florida Game and Freshwater Fish Commission and moved to the St. Johns River Water Management District in 1985. He worked at the District for 20 years, retiring in 2005 as head of the Aquatic Plant Management Program.

Who You Gonna Call? Wayne Corbin on left.

Wayne was elected to the Board of Directors of the Florida Aquatic Plant Management Society and later became Vice President. He was elected President of the Society in 1993 and remained an active member until his death. Wayne also served on the Interlachen Town Council in Putnam County for three terms.

Besides a passion for the aquatic plant industry, Wayne also had a real passion and talent for music. He played with several bands before and after retirement; two of them were "The Weeds" and "Fat and Sassy." He also enjoyed fishing and hunting with his beagles. He was a kind man with a great sense of humor.

Left to right: Wayne Corbin, David Girardin, and Brad Purcell

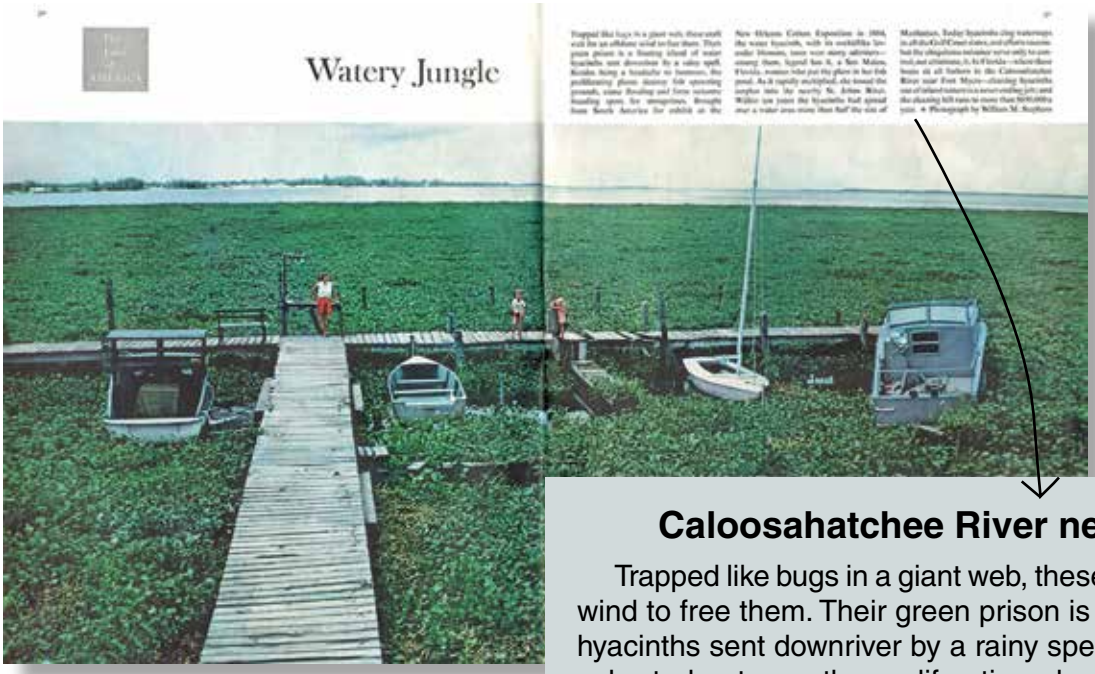
In lieu of flowers, donations can be made to the Florida Aquatic Plant Management Society Scholarship Fund, PO Box 560700, Orlando Florida 32856-0700; the Putnam First Cancer Fund, Inc., 600 Zeagler Drive, Palatka, FL 32177; or the American Diabetes Association, 2301 Maitland Center Parkway, Suite 126, Maitland, Florida, 32751.

Obituary courtesy of David Girardin, Retired, SJRWMD, dlbg75@yahoo.com

Left to right: Bill Haller and Wayne Corbin

SJRWMD Spray Crew Feb 1989; Wayne in driver's seat.

Aquatic Plant Management in Florida – Five Decades of Development



The Face of America: Watery Jungle was printed in The Saturday Evening Post in Volume 233, Issue 21, pp. 30-31, November 19, 1960. Photograph and text by W.M. Stephens.

Caloosahatchee River near Fort Myers

Trapped like bugs in a giant web, these craft wait for an offshore wind to free them. Their green prison is a floating island of water hyacinths sent downriver by a rainy spell. Besides being a headache to boatmen, the proliferating plants destroy fish spawning grounds, cause flooding and form noisome breeding spots for mosquitoes. Brought from South America for exhibit at the New Orleans Cotton Exposition in 1884, the water hyacinth, with its orchid like lavender blossom, soon won many admirers—among them, legend has it, a San Mateo, Florida, woman who put the plant in her fish pond. As it rapidly multiplied, she tossed the surplus into the nearby St. Johns River. Within ten years the hyacinths had spread over a water area more than half the size of Manhattan. Today hyacinths clog waterways in all of the Gulf Coast states, and efforts to combat the ubiquitous nuisance serve only to control, not eliminate, it. In Florida—where these boats sit all forlorn in the Caloosahatchee River near Fort Myers—cleaning hyacinths out of inland waters is a never-ending job; and the cleaning bill runs to more than $650,000 a year. Photograph by William M. Stephens

By Bill Haller

Florida has a long history of aquatic weed problems and spends more public funds for management and research than any other state. How did this dubious distinction come about? Florida has over 2 million acres of fresh water in relatively shallow and naturally nutrient rich lakes. It also has a large and valuable horticulture industry as well as a climate range of temperate to tropical conditions favorable for growth of most plant species.

The first aquatic related events that are relevant to the past 50 years actually occurred in the late 1800s. The waterhyacinth was introduced from South America in the 1880s and the federal government passed the Rivers and Harbors Act of 1899, the oldest federal environmental law in the U.S. It charged the US Army Corps of Engineers with maintaining navigation on navigable waterways. This has allowed the Corps to undertake aquatic weed control research and operations to the present time.

As the population of Florida increased following WWII, the formation of mosquito control and drainage districts also took place and their operations soon involved various types of aquatic weed control. The Florida Game and Fresh Water Fish Commission (GFC) was formed in 1946 and 2,4-D was discovered at about the same time. GFC began a "noxious vegetation control program" in 1951 as a result of "numerous complaints from sportsmen and citizens concerned about their lakes being covered with hyacinths." The 1952 program was funded with $40,048 from the Corps of Engineers and matched with $13,349 from the State Game Trust Fund. The GFC program was based upon "crisis" management by treating hyacinths with 2,4-D only when they were covering large areas of a water body. Funds were insufficient to practice maintenance control of hyacinths like we do today. In 1955, the Florida legislature provided GFC with $276,500 for the biennial budget for 1956-57 and continued this level of funding through 1970. Finally, the 1969 legislature amended the "Motorboat Revolving Trust

Water hyacinths and water lettuce on the Withlacoochee River in Dunnellon, 1963.

Fund" to annually transfer $2 from vessel registration fees into the new "Aquatic Plant Control Trust Fund".

1970s

Hydrilla was introduced into Florida in the late 1950s and spread rapidly into urban lakes throughout the state, likely from aquaria hobbyists discarding unwanted fish and plants. Hydrilla was much more expensive to control than hyacinths and both plants were out of control, causing more complaints to Florida officials. In 1970, the legislature created the "Florida Aquatic Weed Control Act" which gave the Department of Natural Resources (DNR) control of the Aquatic Plant Control Trust Fund. DNR formed the Bureau of Invasive Plant Research and Control and hired Dr. Alva Burkhalter as Bureau Chief.

The annual budget at this time was about $2.5 million and DNR covered the expenses of about 20 hyacinth spray crews employed by GFC. Burkhalter recognized that research was critical to the Bureau's mission and funded research on control methods at several universities in the state and the USDA. This was quite unusual since state agencies in general had not funded research outside their organizations to this point.

Soon conflict arose between the GFC and DNR when the Bureau started issuing permits for use of grass carp for aquatic weed control. Briefly, DNR was given responsibility for aquatic weed control by the legislature and GFC was responsible for permitting the introduction of any fish into the waters of the state under the Florida constitution. Thus, in 1974, GFC filed a lawsuit against the DNR over the intent of DNR to stock Deerpoint Lake with grass carp. To make a long story short, leaders of the legislature and the executive office were not pleased about one agency suing another and both were told to "get it together." As a result, the GFC moved their spray crews into water management districts and were given responsibility for the permitting of grass carp.

Many significant accomplishments were made in the 1970s despite the growing pains experienced in the early years of program development. The Florida Aquatic Plant Management Society was formed in 1976 by Les Bitting (Old Plantation Water Control District) and others since the Environmental Protection Agency (EPA) indicated that all aquatic herbicide applicators would have to be trained and licensed to apply aquatic herbicides. Under Florida Statute 403.088, aquatic weed control operations were exempted from permitting by the Department of Environmental Protection. By the end of the decade, the Aquatic Plant Control Trust Fund was up to about $6 million/year. These funds came from a percentage of the state gas tax collections and were needed due to the high costs associated with hydrilla control. The UF/IFAS Center for Aquatic Weeds was funded by the 1978 Florida legislature with strong support from DNR and other aquatic stakeholders. Meanwhile, the high costs of registration of aquatic herbicides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) resulted in the loss of registrations for many aquatic herbicides. However, glyphosate was registered for aquatic use in 1978 and provided an alternative to the previous use of dalapon which required 10-20 lbs/acre to control cattails, torpedograss and other grassy weeds.

1980s

Fluridone was being evaluated in Florida under an experimental use permit whose label allowed use of up to 150 ppb for control of hydrilla (and other submersed weeds) but also stipulated that no more than 10% of the area of a lake was to be treated. Other hydrilla herbicides in common use were endothall and a combination of diquat and copper. Initially, we expected fluridone to behave like a contact herbicide but experience soon changed that belief when 10% of a lake was treated with 150 ppb (e.g., 150 acres in a 1,500 acre lake). Applicators noted that in 4-6 months, all the hydrilla in the lake was controlled. Then lake-wide treatments of 15 ppb were made and we soon learned that fluridone could be used at low doses (12-15 ppb) but required weeks of contact time for effective hydrilla control. These treatments often resulted in 2 or more years of control at the reduced cost of $100-150 per acre per year of control. It was fully labelled in 1986 and was widely used in Florida for its excellent selectivity towards native species, ease of application and reduced cost per acre treated.

Grass carp research was continued with cross breeding grass carp with silver carp to obtain sterile hybrids that would hopefully eat vascular plants. Survival of hybrids was very low and not effective. Fortunately, commercial fish dealers in Arkansas developed sterile triploid grass carp. The development of sterile grass carp alleviated the fear that reproducing populations would denude Florida lakes and rivers of all aquatic vegetation. They became widely used under GFC permits in small contained ponds such as retention ponds and golf course ponds.

In the late 1980s, hydrilla had spread into both the Harris Chain of Lakes and later the Kissimmee Chain and required additional funding to treat these large systems. The Aquatic Plant Control Trust

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Fund reached $9.5 million by the end of the decade.

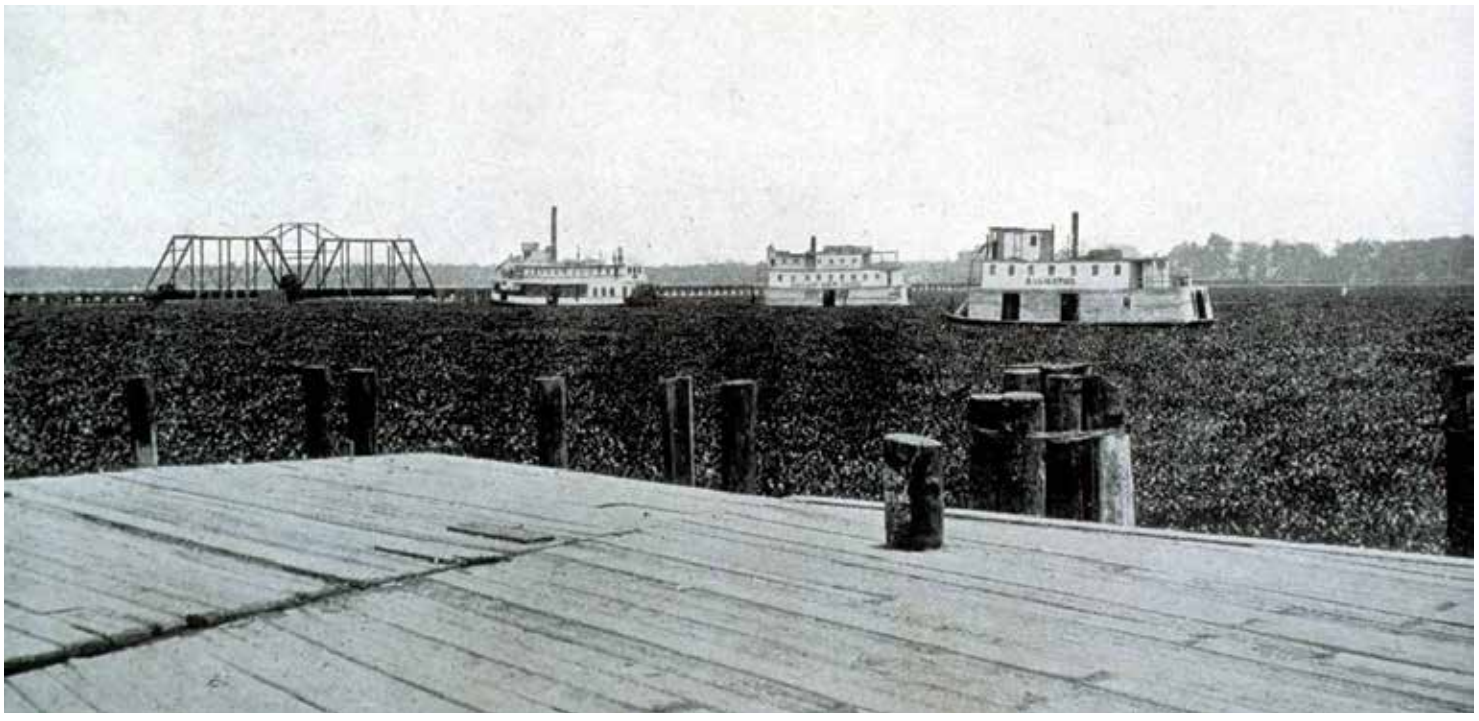
Harbor on the St. Johns River in Jacksonville.

1990s

These ten years might well be considered the quiet decade in aquatic plant management. Only 6 aquatic herbicides were regularly used in Florida since no other herbicides had aquatic registrations. Fluridone was widely used on hydrilla, diquat on duckweed and water lettuce, and 2,4-D on water hyacinths. Copper was no longer used in public waters due to concerns over endangered species but it was widely used for algae control in private ponds. Glyphosate was used to control torpedograss and other emergent grasses. Hydrilla continued to spread and more funds were placed into the Aquatic Plant Control Trust Fund. The Invasive Plant Section, then under State Lands in DEP, added invasive plant control in upland areas to their responsibilities. The state was purchasing large tracts of land under the Florida Forever and Save Our Rivers programs. The South Florida Water Management District, with DEP and the Corps, started the melaleuca control program which was ultimately very successful. The Center for Aquatic Weeds changed their name to the Center for Aquatic and Invasive Plants and several IFAS faculty were working on melaleuca, lygodium, tropical soda apple, cogongrass, wetland nightshade, ruellia and ardisia among others. With these additional natural area weeds, DEP funding was increased to over $30 million annually.

2000s

Looking back, the first sign of trouble for hydrilla control was noted in the late 1990s when typical control was not being achieved due to what we thought was high water exchange or some other phenomenon. It was soon confirmed that hydrilla populations in several Florida lakes had developed resistance to fluridone. Resistant populations of duckweed to diquat and, later, of hydrilla to endothall were discovered. This caused great concern



Early steamboats stuck in water hyacinths in the St. Johns River near Palatka.

among management agencies since there were few alternatives to the 5 organic based herbicides noted above.

The Invasive Plant Section of DEP was transferred to the Florida Fish and Wildlife Conservation Commission (FWC) in 2008. They, along with the South Florida Water Management District, funded research at UFL and with the Army Corps of Engineers to screen new herbicides and evaluate their selectivity in aquatic systems for potential registration of new compounds and modes of action. Osceola County received federal funds in support of this effort since uncontrolled hydrilla in the Kissimmee Chain of Lakes would cause a very serious loss of income from lake user groups.

Herbicides that were registered for aquatic use from these and agri-chemical industry studies during this decade were carfentrazone (2004), penoxsulam (2007) and imazamox (2008). Large area applications of endothall had shown that lower application rates (1.5 – 2.0 ppm) in large areas in cooler late winter temperatures could provide excellent hydrilla control compared to small, summertime treatments.

In 2006, the first UF/IFAS – FWC Plant Camp was held to provide secondary school science teachers with an appreciation for the problems caused by invasive plants, and an understanding of the need for their management. The program also provided approved curricula for teaching this topic to students.

Meanwhile, crested floating heart, giant salvinia, rotala, luziola and ludwigia species were among the new invasive plants that arrived.

2010s

The search and development of new herbicides continues and additional registrations during this decade include flumioxazin (2011), bispyribac (2012) and topramezone (2013). Sethoxydim, a grass specific herbicide, obtained a 24C (special local need) label in Florida in 2016. This year, SePro has registered florpyrauxifen-benzyl (Procellacor) for aquatic use.

With regard to pesticides, one thing never changes. With all pesticides, read and carefully follow all label directions.

Biocontrol research remains very active but it takes time to discover, rear, study and receive federal approval to safely introduce new agents. Insects introduced over the past couple of decades target alligatorweed, Brazilian pepper, hydrilla, melaleuca, air potato, tropical soda apple, water hyacinth, water lettuce and salvinia.

The invasive plant management program in Florida has been very successful largely due to the cooperative efforts of, and close working relationships between, management and research personnel. The problem continues in our inability to stop the introduction of additional invasive weeds, and our continued reliance on a single mode of action to manage a few difficult to control species.

Dr. Bill Haller, Professor Emeritus, UF/IFAS Center for Aquatic and Invasive Plants, (352) 392-9615, whaller@ufl.edu

Glove Selection for Working with Pesticides

By Frederick M. Fishel

"They're too hot!"
"They're uncomfortable!"
"I lose my grip!"

Do you or any of your employees make any of these excuses about wearing gloves while handling pesticides? If so, reading this article may convince you that gloves, the simplest of protective gear, have been shown to reduce pesticide exposure drastically.

Introduction

Pesticides can enter the body in four main ways: by mouth, by inhalation, or by contact with the skin or eyes. In most pesticide handling situations, the skin is the part of the body most likely to receive exposure. About 97% of human exposure to pesticides during application of liquid sprays occurs through contact with the skin. To prevent exposure, pesticide applicators should wear protective clothing and personal protective equipment (PPE). For general information on PPE, refer to EDIS Document PI-28, Personal Protective Equipment for Handling Pesticides https://edis.ifas.ufl.edu/pi061. The use of gloves while handling pesticides can go a long way in reducing dermal exposure.

Specific information

Every pesticide product label contains specific information about necessary clothing and equipment to be worn while mixing, loading, and applying that product. The information may be found in the "Precautionary Statements" section of the label. Remember, the label is the law. Read it and wear the appropriate equipment. More detailed information about chemical and physical hazards associated with a specific pesticide may be found by reading the product's Safety Data Sheet (SDS). The SDS is available from the pesticide dealer. For guidance in understanding the SDS, refer to EDIS Document PI-35, Understanding Safety Data Sheet Language http://edis.ifas.ufl.edu/pi072.

Pesticide labels frequently specify use of either waterproof or chemical-resistant gloves. Keep in mind that waterproof materials are not necessarily chemical-resistant. Gloves used for handling pesticides should be unlined and not made of cotton, leather, canvas, or other absorbent materials.

Polymers used for chemical-resistant gloves include barrier laminate (Figure 1), butyl rubber (Figure 2), nitrile rubber (Figure 3), neoprene rubber (Figure 4), natural rubber (Figure 5), polyethylene plastics, polyvinyl chloride (Figure 6), and Viton®. These materials are used either individually or in various combinations in commercially available gloves.

Refer to Table 1 when the PPE section of the pesticide label specifies chemical-resistance categories A through H. The table refers you to several PPE materials from which to choose for each category. It also tells how long you can expect the material to be resistant to the pesticide you are using. For example, the label may state: "If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart." This means gloves made of either barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton® would be the better choice compared to natural rubber or polyethylene. Since those 6 materials are rated as "High" in their level of chemical resistance, they would be expected to maintain their integrity for the entire day while working with that product.

Glove construction

Chemical-resistant gloves are fabricated in two forms. One is that of the hand silhouette. This glove is made by die cutting a two-dimensional outline of a hand from a plastic film. Two of these flat hand forms are sealed around the edges to form a glove. Most gloves made from polyethylene are

Barrier laminate gloves.

Butyl rubber gloves.

Nitrile rubber gloves.

Neoprene rubber gloves in two styles - the upper has a textured-surface for better gripping.

Natural rubber gloves.

Polyvinyl chloride gloves.

Table 1. EPA chemical resistance* categories.

Category	Barrier laminate	Butyl rubber	Nitrile rubber	Neoprene rubber	Natural rubber	Polyethylene	Polyvinyl chloride	Viton® > 14 mils
A	High	High	High	High	High	High	High	High
B	High	High	Slight	Slight	None	Slight	Slight	Slight
C	High	High	High	High	Moderate	Moderate	High	High
D	High	High	Moderate	Moderate	None	None	None	Slight
E	High	Slight	High	High	Slight	None	Moderate	High
F	High	High	High	Moderate	Slight	None	Slight	High
G	High	Slight	Slight	Slight	None	None	None	High
H	High	Slight	Slight	Slight	None	None	None	High

***Chemical Resistance Categories:**
High: Highly chemical-resistant. Clean or replace PPE at end of each daily work period. Rinse off pesticides at rest breaks.
Moderate: Moderately chemical-resistant. Clean or replace PPE within an hour or two of contact.
Slight: Slightly chemical-resistant. Clean or replace PPE within 10 minutes of contact.
None: Not chemical-resistant. Do not wear this type of material as PPE when contact is possible.

constructed in this manner. The hand silhouette gloves may be undesirable because of poor fit, loss of dexterity, and difficulty in keeping the gloves on the hand. The second and more common type of chemical-resistant glove is made by dip molding, that is, by dipping a hand mold into a polymer-containing liquid. Dipped gloves are right- and left-handed and are sized. These gloves provide both a better fit and improved dexterity. Some of the dipped gloves come with curved fingers, which provide additional comfort.

Glove thickness

Glove thickness is described in units of mils (1 mil = 0.001 inch). In general, barrier effectiveness and resistance to tear and puncture increases with thickness. Commercially available gloves range in thickness from 1 to 60 mils. The most commonly used chemical-resistant gloves range from 12 to 22 mils.

Sizing gloves

Gloves are sized either numerically or qualitatively. A numerical scale ranges from mens sizes 7 to 12. The size designation refers to the circumference of the hand, in inches, measured around the palm and below the knuckles. Gloves sized qualitatively may carry labels such as "large," "men's size," or "one size fits all." Gloves are manufactured in a variety of lengths, measured from the tip of the middle finger to the edge of the cuff. Longer gloves that extend to the upper arm area are available.

Glove liners

Separable glove liners are separate glove-like hand coverings, made of lightweight material, with or without fingers. Work gloves made from lightweight cotton or poly-type material are considered to be glove liners, if worn beneath chemical-resistant gloves. Unless the pesticide product labeling specifically prohibits their use, separable glove liners may be worn beneath chemical-resistant gloves, provided the liners do not extend outside the chemical-resistant gloves that are worn over them. The liners must be replaced immediately if they come into direct contact with pesticides.

Dr. Fred Fishel, Professor, Agronomy, and Director, UF/IFAS Pesticide Information Office, University of Florida, Gainesville, (352) 392-4721; weeddr@ufl.edu

TVA Releases New Website for Fishermen Focused on Aquatic Plants

By Brett Hartis

Across the country, they go by different names. Tennessee Valley anglers often refer to them collectively as "weeds," "grass," or "moss." Whatever you call them, aquatic plants are an integral part of the Tennessee River's ecosystem, whether providing food for the species at the bottom of the food chain, or cover and ambush areas for largemouth bass.

While many aquatic plants look the same, understanding the differences can make you a better bass fisherman. Whether you prefer to punch a jig, burn a lipless crankbait or fish a frog, TVA's "Angler's Aquatic Plant ID" can help you be the best angler you can be.

TVA's new website, developed by fishermen for fishermen, gives you all the information you need to understand when these plants are most productive, where they grow and—most importantly—how to fish them. Whether you are a seasoned tournament angler, weekend warrior or new to fishing altogether, we invite you to learn more about aquatic plants and improve your catch.

In addition to Floating and Floating Leaf Plants, the website includes similar information on Shoreline Plants, and Submersed Plants. Clicking on any plant photo takes you to additional information about that plant including Seasonal [Fishing] Techniques, Habitat Value for both fish and waterfowl, Identifying Features (including similar plants), and Drawbacks of the plant.

Managing Aquatic Plants

Invasive plant species like hydrilla and milfoil can make for great edge fishing, but when found smack dab in front of your favorite boat ramp, can keep you and others from even being able to enjoy the reservoir at all! A "drawbacks" section within each plant species page highlights the need to manage these plants in certain situations, and provides a relative cost scale from low ($) to high ($$$$$). TVA manages aquatic plants on an as-needed basis to improve public access to its reservoirs

To explore this website, visit tva.com/aquaticplants

For more information on aquatic plants on Guntersville Reservoir—or in general—visit the website to read two stories by Bassmaster columnist and program manager of TVA Aquatic Plant Management, Brett Hartis: "*Bass and Grass on Guntersville*" and "*Where Has All the Grass Gone?*" You can send questions or comments to Hartis at bmhartis@tva.gov.

Brett M. Hartis, Ph.D., Program Manager, Aquatic Plant Management Program , Tennessee Valley Authority, (256)-891-6607, bmhartis@tva.gov

Angler's Aquatic Plant ID

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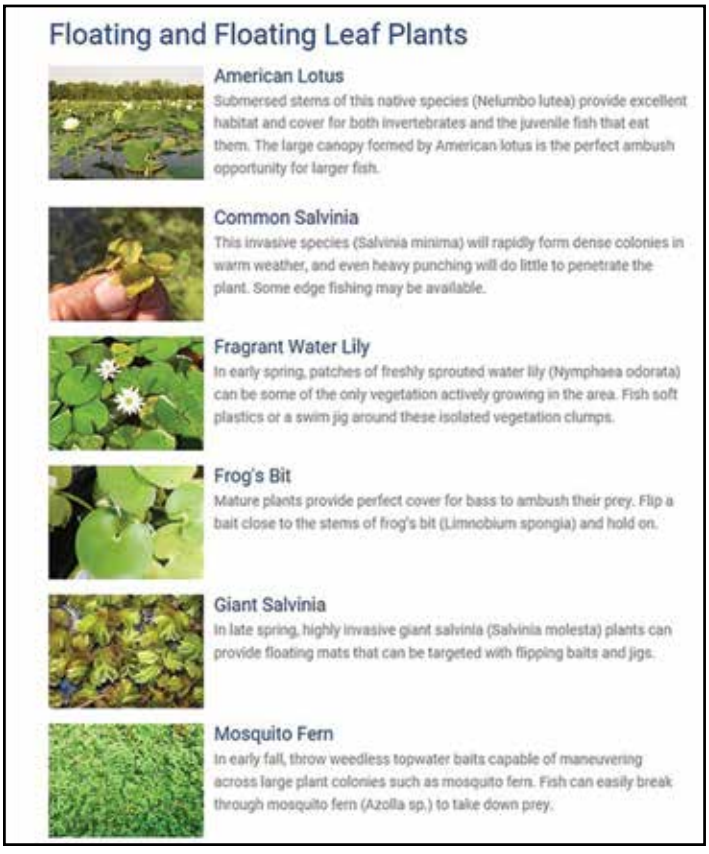

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APMS 58th Annual Meeting
July 15-18, 2018 – Buffalo, New York

Make your reservations now to attend the 58th Annual Meeting of the Aquatic Plant Management Society to be held July 15-18, 2018 at the Hyatt Regency Buffalo Hotel and Conference Center. In addition to aquatic plant research and operational updates from across the country, the Program Committee is scheduling special sessions on starry stonewort and harmful algae bloom problems and management. Please take advantage of the $159 group rate for the conference available three days before and after the conference.

Only thirty minutes from the Hyatt is beautiful Niagara Falls, attracting curious travelers and adventurous honeymooners from around the world. You can also enjoy the Hyatt downtown Buffalo presence, with over 20 restaurants within a 10- minute walk and many attractions close to the hotel.

Go to the Annual Meeting page on the APMS web site for details on conference registration and hotel reservations as well as information on Exhibiting or Sponsoring at the 58th APMS Annual Meeting.

www.apms.org

Florida Aquatic Plant Management Society

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October 15-18, 2018

Hilton Daytona Beach Oceanfront Resort

Daytona Beach, Florida

Would you like to assist in the 42nd Annual Florida Aquatic Pant Management Society Training Conference by conducting an informative equipment demonstration for the educational, scientific, and operational advancement of aquatic plant management? We are accepting Equipment Demonstrators for the FAPMS Training Conference October 15-18, 2018 Daytona Beach, FL. We are looking for examples of equipment commonly used in the field of vegetation management for display and demonstration.

The equipment demonstration offers you the opportunity to exhibit your equipment for aquatic plant managers, researchers, state and federal agencies, educational institutions, and others involved in aquatic plant management.

http://www.fapms.org/

FOR INFORMATION PLEASE CONTACT:

Dharmen Setaram
Winfield United
2601 West Orange Blossom Trail
Apopka, FL 32712
dsetaram@landolakes.com

What's Happening at FAPMS

COMING UP AT FAPMS

Florida Aquatic Plant Management Society Scholarship & Research Foundation, Inc

Paul C. Myers Applicator Dependent Scholarship Application – FY 2018-2019

Application should be completed jointly by FAPMS member and their dependent (applicant)

The deadline to apply for the Paul Myers Scholarship for applicator dependents is June 1, 2018.

Go to the Scholarships tab on the FAPMS website and click on Myers Scholarship (fapms.org/scholar/myers_scholar)

NEW AT FAPMS

There's a new tab on the FAPMS website called **Applicator's Corner**. Check it out for some useful resources.

Under **Resources**, there are two short (2 minutes) videos produced by the University of Florida Center for Aquatic and Invasive Plants (UF/CAIP) from the *Why Manage Plants* section of their website. Each video has a one page fact sheet that can be downloaded, too. There is also information about business card sized web cards that you can request in bundles of 25 for free. They fit easily into your wallet or pocket and can be given to citizens asking questions about how or why you do your job. The cards direct people to the UF/CAIP website for information from researchers and Extension specialists.

You can also sign up for the popular **Aquatics List-Serve** under Applicator's Corner. Receive periodic emails about job openings, new publications on aquatic plant management, conferences and workshops where you can earn CEUs, and more. No junk and posts usually occur no more than once per week. To subscribe, click on the email link on the Aquatics list-serv tab under Applicator's Corner.

IT'S NEVER TOO EARLY …

The **42nd Florida Aquatic Plant Management Society Annual Training Conference** takes place October 15-18, 2018 at the Daytona Beach Hilton. You can already make room reservations from the link under **Conference**. There is also a call for abstracts from students and applicators in addition to the researchers who generally give presentations. The deadline to submit your abstract for the general program is July 31st, 2018. Visit the website for details.

DON'T FORGET THE PHOTO CONTEST

Now is the time to start taking photos for the **Vic Ramey Annual Photo Contest.** Winners receive a cash prize and are printed in *Aquatics* magazine. They may even be featured on the cover! Remember to download your best shots onto your computer or a travel drive at full resolution. If you "send them" from your phone, they are automatically compressed and may not print adequately. If you're not familiar with this, ask someone younger than yourself or Google it. Don't believe what they say about old dogs!

FAPMS Strategic Plan 2017/2018

The board of directors and past presidents are working hard to make FAPMS the best it can be to serve its members. A strategic planning session was held last October and moderated by Dr. Ed Osborne from the University of Florida's Agricultural Education and Communication Department. This was our beginning effort to plan for the future. The result of this work was an updated vision and mission statement to guide our efforts into the future. As always, we welcome ideas, questions and comments. Please feel free to contact anyone on the board of directors listed on page 3.

FAPMS VISION STATEMENT

The vision of FAPMS is to be a leading resource for promoting excellence in the stewardship of Florida's aquatic ecosystems.

- Professionals in aquatic habitat management
- Protecting and preserving our waterways
- Educating our members on new technologies
- Sharing of information to support our applicators
- Education and outreach for stakeholders

FAPMS MISSION STATEMENT

The mission of FAPMS is to provide the education and resources necessary to support responsible stewardship of Florida's aquatic ecosystems through comprehensive plant management.

- University of Florida/IFAS education/ outreach through Plant Camp
- Florida Exotic Pest Plant Council (FLEPPC) cooperation
- CISMAs aquatic workshops through support and presentations

FAPMS President Speaks at FLEPPC

FAPMS President Keith Mangus attended the recent Florida Exotic Pest Plant Council conference in Melbourne to inform attendees about the Florida Aquatic Plant Management Society. Although he claims this was his first speech *ever*, Keith gave an excellent and articulate presentation. He covered the new FAPMS vision and mission statements resulting from the October 2017 Strategic Planning Session, FAPMS history (42 years strong) and membership (470 current members), publications (the FAPMS newsletter and *Aquatics* magazine), the Scholarship Foundation from which over $120,000 has been awarded since 1986, the Annual Training Conferences, and future cooperation with FLEPPC by having dedicated sessions at each other's annual conferences. Keith's presentation opened the FLEPPC AQUATICS session for that morning with presentations by Kelli Gladding of SePro, Dr. Lyn Gettys and Dr. Fred Fishel of UFL, Michael Sowinski of FWC, and Ashley O'Neal of DEP's Aquatic Ecology and Quality Assurance Section.

Calendar of Events 2018

July 15 – 18
Aquatic Plant Management Society (www.apms.org)
Buffalo, NY

August 19 – 23
American Fisheries Society (https://fisheries.org/)
Atlantic City, NJ

October 15 – 18
Florida Aquatic Plant Management Society (www.fapms.org)
Daytona Beach, FL

October 30 – November 2
North American Lake Management Society (www.nalms.org)
Cincinnati, OH

Burmese python captured in the Everglades by employees at Florida Best Inc. of Haines City, FL

Call for Aquatic Plant Manager of the Year Nominations

PURPOSE:

- To recognize outstanding performance or achievements in aquatic plant management field activities.
- To enhance professionalism in aquatic plant management in Florida.

ELIGIBILITY:

Award nominees must be:

- A current member of FAPMS
- Directly involved in aquatic plant management field activities.

Nominees must NOT be:

- Involved exclusively in an administrative capacity
- Employed in the chemical or equipment manufacturing and distribution industries.

NOMINATION PROCESS:

Any active FAPMS member may nominate an individual or a team for the award. Team nominations require a separate form for each team member, stapled together, with TEAM written on a cover sheet.

Nominations must be made using the **Official Nomination Form** within the space provided to allow for uniform evaluations of all nominees. Download the form from fapms.org/awards/manager.html or from the website under the Awards tab, then Plant Manager of the Year.

NOMINATION DEADLINE:

September 30th, 2018

AWARD:

The winner will be announced at the FAPMS Annual Training Conference Awards Banquet and will receive an engraved plaque and $500. In the event of a team winner, the monetary award will be split equally among the nominated team members.

Submit completed nomination forms to:

Scott Glasscock, Awards
Committee Chair
2200 South Service Lane
Lake Buena Vista, FL 32830
Fax: 407-824-7054
Scott.Glasscock@Disney.com

It Pays to Advertise

- *Aquatics* is circulated to approximately 2000 environmental managers, landscape managers, governmental resource managers, and commercial applicators.
- *Aquatics* is a resource for the people who buy and use aquatic products and services.
- Compared to other magazines, advertising in *Aquatics* is a profitable investment.
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