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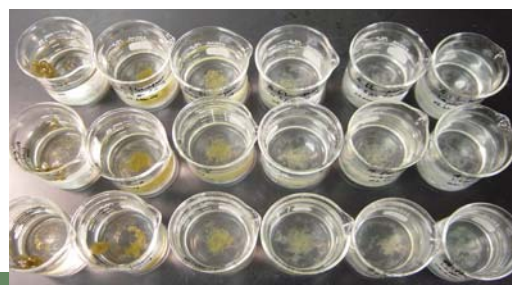
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Duck Race and more, see page 16



Red root floater, see page 7

## Contents

- 4** Lake Cannon: Evolving Techniques for Treating Hydrilla  
BY CRAIG JOHNSON
- 7** Red root floater *Phyllanthus fluitans* (Euphorbiaceae): Another Aquatic Invader for Florida  
BY MICHAEL P. SOWINSKI
- 11** Improving Water Quality Using Aquatic Vegetation  
BY JACKY KELLER
- 12** High School Student Presentation: Efforts to Eradicate Air Potato  
BY TINA BOND
- 13** Applicator Accolades: Jerry Atterson
- 15** FAPMS Annual Meeting Update

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The infamous “frowdis.” Photo by Craig Johnson

# Lake Cannon:

## Evolving Techniques for Treating Hydrilla

By Craig Johnson

### Introduction

Let me start off by saying that I am honored to have been awarded the 2011 Applicator Paper of the year by the Florida Aquatic Plant Management Society. In my opinion, all the applicator papers were very good and all deserved to be winning papers. I’m not much of a writer so when I was asked to write a summary of my paper I agreed before I even gave it a thought. As my daughter would say, “*Oh Coconuts!*” What did I get myself into this time?

My fellow coworkers and I at Polk County Invasive Plant Management pride ourselves for being in the forefront of invasive plant management, both in application and new and innovative techniques. For this reason I decided to title my paper “Lake Cannon: Evolving Techniques for Treating Hydrilla.”



Lake Cannon map courtesy of Polk County

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## Lake Cannon and its History with Hydrilla

Lake Cannon is a 337 acre natural lake located on the South Winter Haven Chain of Lakes between Winter Haven and Auburndale, Florida. Hydrilla in this lake has a history of fluridone resistance, which is why we must continue to evaluate new application techniques and products for its control.

In 2007, something triggered an explosion of hydrilla growth from the littoral zone out to 9 to 10 feet of water. We decided to apply 3.0 ppm of Aquathol K (endothall) in a 140 acre treatment on the mass of hydrilla. The application resulted in a 0.50 ppm concentration, full lake endothall treatment. This single application produced good control for close to a year after treatment. The treatment turned out to be very successful and allowed more desirable plants such as naiad, eel grass, chara, and Illinois pondweed to flourish.

We have been able to keep the hydrilla under maintenance control and did not have to treat more than 40 acres at a time during growing seasons since 2007. That was until this past spring.

## Rediscovering Hydrilla

In early April 2011 hydrilla was observed in deep water where it had been seen previously; however the hydrilla in the littoral zone remained under good control. Jason Woodard and I met with Kelle Sullivan (Florida Fish & Wildlife Conservation Commission), Dr. Michael Netherland (U.S. Army Corps of Engineers), and Dean Jones (Osceola County) to survey the hydrilla around the lake. We talked about possible treatments and decided that an endothall treatment would be best. With that we began to conduct a more in-depth survey of hydrilla to find out how much vegetation was in the lake and where it was located.

There were several methods used for locating and determining how much hydrilla was present. We used sounding units and a search rake, better known as a "frow dis," to locate the hydrilla. We determined that there were approximately 90 acres of hydrilla in the lake from the littoral zone out to 10 ½ feet of water (see map).

## Treatment and Application Plan

Once we reviewed all the information we decided on an area treatment using Aquathol K at a rate of 4ppm, which was calculated as 13.40 gallons per acre at an average depth of 5.25 feet, or a total of 1,206 gallons of Aquathol K. We also decided to use two different application methods for this one treatment. One treatment called for a 4 ppm concentration of Aquathol K, which is higher than our standard 3 ppm treatment. This was to obtain a higher initial concentration due to the higher water temperatures which decrease the effectiveness of the product. We used four boats for this treatment to ensure proper coverage. Two of the boats treated from the shoreline to open water. The other boats began treatment at the edge of the hydrilla in deeper water and worked their way towards the shoreline until meeting the other two boats in about 5 ½ feet of water. We felt that we achieved the best coverage for this treatment using these two different methods together.

## Logistics and Spray Conditions

The logistics that went into planning the Lake Cannon treatment were the easiest part of the whole treatment process. We decided to use Aquathol K due to the fluridone resistant hydrilla in the lake. We use Aquathol K on a daily basis and know the required PPE is a long-sleeve shirt and long pants, rubber chemical-resistant gloves, shoes and socks, a respirator for the person loading the product on the boats, and of course, safety glasses. We used the same method for loading the product to the boats as we do on a day-to-day basis; we used a gravity fed system with a 75 foot by 1 ½ inch hose to move the product from the 250 gallon tote into our 100 gallon spray tank. We calibrated the spray systems on all four boats. The two boats with drop hoses had 3 #6 orifices and we set our pumps to 100 psi so it would take approximately 40 minutes to apply 100 gallons at 2 to 3 mph. The two single hoses also had #6 orifices, and the pumps were calibrated to 125 psi so it would take about 50 minutes to apply 100 gallons at 4 to 5 mph.



We performed the treatment on June 21, 2011. The wind was calm, about 4 mph out of the south/south east. The air temperature was 83° F, but rose to 96° F. Water temperature was 82.1° F at 6:45 am, increasing to 85.5° F at 11:50 am at the end of treatment. The treatment went off as planned with no problems.

## The Native Plants

We achieved the intended goal of managing the majority of the hydrilla with very little collateral damage to native plants. After a routine survey of the lake 3 ½ months post treatment, we found that the native plants that had some damage were still doing well from the littoral zone out to about 6 feet of water throughout the entire lake.

At the time of my presentation during the second week of October, Lake Cannon was pretty much devoid of hydrilla in open water areas as well as along the vast majority of the littoral zone. The native populations of eel grass, nitella, southern naiad and now baby's tears are thriving in the lake.

## End Results

The end result is that once again we have an ever evolving lake. There are a few strands of hydrilla just now showing up in the very shallow areas. In the open water areas that once held the largest volume of hydrilla we now have recovery of nitella and other native plants. Who knows what the future has in store for Lake Cannon but we will certainly adapt and press forward with the ever changing lake while trying new techniques and honing our skills.

## Acknowledgements

I feel very fortunate to work for Polk County and to be surrounded by many talented people that give the truest meaning to the word "applicator" with their professionalism and devotion to treat non-native invasive plants in Polk County.

*Craig Johnson is an Environmental Technician in Invasive Plant Management with Polk County Natural Resources. Craig can be reached at (863) 899-3640.*

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# Red root floater

*Phyllanthus fluitans* (Euphorbiaceae):

## Another Aquatic Invader for Florida

Photo by Michael Sowinski

By Michael P. Sowinski

### Introduction

The genus *Phyllanthus* contains between 750 and 800 species (Mabberley, 2008), with all but two species (*P. fluitans* and *P. leonardianus*) being terrestrial (Cook, 1996). *Phyllanthus fluitans* or red root floater (also called floating spurge) is a small, free-floating aquatic plant from Central and South America (Wallach, 2003). The species is known to create dense floating mats that can shade out rooted plants growing below. Red root floater had never been identified in the United States prior to its discovery in Florida in 2010 (Wilder and Sowinski, 2010).

### Chronology of Florida Events

On August 27<sup>th</sup> 2010, Dr. George Wilder, botanist and herbarium curator at the Naples Botanical Garden in Naples, Florida, discovered red root floater growing in a canal attached to the Peace River in Desoto County west of Fort Ogden. After returning to Naples, Dr. Wilder contacted the Florida Fish and Wildlife Conservation Commission (FWC), Invasive Plant Management Section, to report his finding.

Over the next two months, FWC biologist Michael Sowinski, along with Brian Nelson and Ronnie Crosby of the Southwest Florida Water Management District (SWFWMD), found scattered populations of the floating weed in roughly twenty-six river miles of the Peace River from just south of the initial discovery point to approximately five miles north of the Town of Arcadia. A large infestation was discovered in a channel located just north of the junction of Horse Creek with the Peace River. In October and November, SWFWMD staff, funded by the FWC, sprayed all red root floater plants observed in the river (including the channel) with Knockout™ which is aquatic labeled diquat dibromide. Dr. Wilder prepared specimens for the Herbarium of Southwestern





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Florida (located at the Naples Botanical Garden) and voucher specimens were taken to the University of South Florida Herbarium for cataloging and distribution to other locations.

No new sightings were reported during the winter of 2010 or spring of 2011. In April 2011, Crosby and Sowinski surveyed much of the lower river and only found two very small populations in a stagnant area off the main river. These populations were treated later that month with hopes that red root floater might be eradicated due to early detection and rapid response efforts.

While surveying the lower Peace River on July 28<sup>th</sup>, 2011, single plants and small bunches of red root floater were observed in floating debris and floating down the river. More intensive surveys over the next few months identified this floating weed in a number of locations along the original twenty-six river mile stretch of river. Due to numerous rain events over the summer, a few large populations of red root floater were observed in forested wetlands adjacent to the river and in the mouth of a small tributary. These populations were probably flushed from their original habitat by flood waters. SWFWMD staff was not able to treat some of these new infestations due to lack of airboat access. The populations were probably partially flushed down the river to Charlotte Harbor and deeper into the wetlands and pastures that make up the Peace River watershed.

### Introduction to Florida

Red root floater is a popular aquarium and aquatic garden species due to its easy propagation, small size, unique shape, dark red roots, and reddish leaves that occur when exposed to periods of intense light (personal observation). This species may have entered the Peace River system accidentally (for example, if plants escaped from a pond during heavy rains) or intentionally (possibly through

an aquarium dump). Some people purposely dump aquatic plant species to either dispose of unwanted plants or to cultivate them in a backwater area to collect and sell at a later date. Numerous nurseries (USDA DACS, personal communication) are located in DeSoto and Hardee counties, but investigations have failed to turn up solid evidence to identify the source of red root floater's introduction.

### Identification and Misidentification

The foliage leaves of red root floater are arranged in two vertical



rows, as leaves on opposite sides of a stem. Leaves are 1 to 2 cm long, typically lie on the surface of the water and range in color from blue-green (plants in shade/broken sunlight) to pink or red (plants in high light) (personal observation).

Each leaf has a large pocket on each side of the leaf median. The flowers are minute (ca. 2 to 4 mm wide) and whitish (Wilder and Sowinski, 2010).

*Continued - next page*

*Phyllanthus fluitans* (red root floater). Photo by Kelle Sullivan

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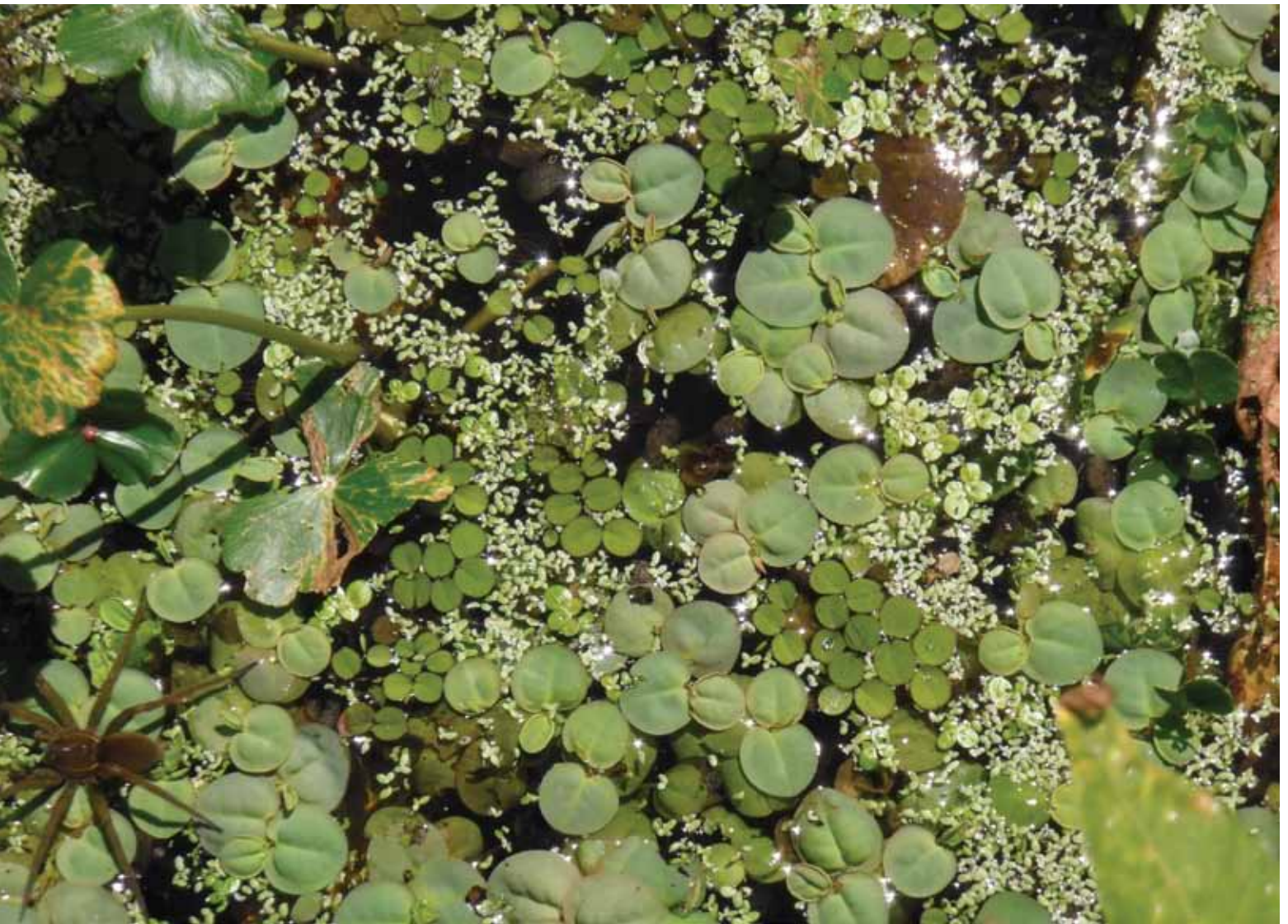
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*Phyllanthus fluitans* (red root floater). Photo by Michael Sowinski

Red root floater may initially be confused with other free-floating aquatic plant species including water fern (*Salvinia minima*), duckweed (*Lemna valdiviana*, *Spirodela polyrhiza*, and *Landoltia punctata*), and immature water lettuce (*Pistia stratiotes*).

## Environmental Concerns

If red root floater is not successfully controlled, it has the potential to become a problematic species comparable to water fern, water lettuce, and water hyacinth (*Eichhornia crassipes*). By covering large swaths of stagnant backwater areas, this noxious species may limit or totally block all ambient light penetration to the bottom of the system, which can stunt and potentially kill submersed plants growing below.

It is not known whether the seeds produced by red root floater each fall are viable. Fragments of red root floater are sometimes found rooted in floating organic material that is pinned against bridge pilings by water currents (personal observation). This suggests the plant may be able to survive in damp soil when it is pushed into wetland areas during high water events, especially during the summer growing season. After the water recedes, these

wetland areas may act as nurseries until the next high water event releases plants into the main river, effectively re-inoculating the river. For these reasons, it is highly unlikely that this floating weed will ever be totally eradicated from the Peace River system. FWC and SWFWMD personnel will continue to monitor and treat red root floater populations in an effort to prevent the spread of this species to nearby private and public waters.

## Acknowledgements

The author wishes to acknowledge the assistance of Dr. George Wilder (Naples Botanical Garden), Brian Nelson and Ronnie Crosby (SWFWMD), Dr. Lyn Gettys (University of Florida –IFAS Center for Aquatic and Invasive Plants), Danielle Schobl (FWC), Charles Cook (Department of Environmental Protection, Bureau of Mining and Minerals Regulation), and Dr. Richard Wunderlin (University of South Florida).

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# Improving Water Quality Using Aquatic Vegetation

By Jacky Keller

Lake Worth Drainage District (LWDD) was originally created in 1915 to reclaim lands within its boundaries to provide water control and supply for settlement and agriculture. Today, in order to provide water supply and stormwater protection, LWDD is responsible for maintaining canals in a 212 square mile area of central and southern Palm Beach County.

Concerned about water quality, I researched ways to filter the water in our system without impeding the flow. In an ideal situation, Stormwater Treatment Areas would be built and maintained. Since LWDD canals are designed for drainage and water supply, I thought the most natural and eco-friendly way of utilizing the environment to help filter the water would be to create an aquatic shelf using plants as natural filters.

While researching which plants were available in the LWDD system, I found native vegetation that would be beneficial for filtering water.

I decided to use native duck potato (*Sagittaria lancifolia*), pickerelweed (*Pontederia cordata*), spikerush (*Eleocharis* spp.) and cattails

(*Typha* spp.) in the aquatic shelf. The plants were harvested by the LWDD Aquatics Crew who then relocated them to aquatic shelves in three of our larger intersecting canals. The locations were chosen based on their proximity to both residential and agricultural communities.

Equal amounts of the duck potato, pickerelweed and spikerush plants were used to establish the aquatic shelves. A lesser amount of cattail was planted due to its ability to flourish. The plants were planted in rows along the water's edge. After the planting, the area entered a severe drought period. Therefore, the water level receded



Above: Native vegetation plots in drainage canal. Right: Planting natives. Photos by Jacky Keller



instead of submerging the plants, thereby inhibiting growth.

At one of the canal intersections I used Styrofoam planter trays to act as

a floating sand-bar. The trays were fastened to poles along the water line to allow them to rise and fall as needed. Again,

drought conditions caused the water level to substantially drop which left the trays lying on the bank. All of these plants died; therefore, this part of the experiment proved to be unsuccessful.

Unfortunately, when the rain started to fall and water levels began to rise, our transplanted plants did not survive. The combination of drought conditions and subsequent rain proved to be too much for them. A small percentage of plants weathered the storms (or lack thereof) and survived; however, I am unsure of their effectiveness in filtering water since there were too few to greatly impact the test results.

In some areas throughout the District there are established stands of tape grass (*Vallisneria americana*) and clusters of cattails. As part of this experiment the cattails and tape grass were left in place and closely monitored and maintained. Since the cattails were there already we figured we might as well put them to work!

In the future, I would suggest not planting on the heels of a tropical storm or before record-breaking drought conditions. Then again, Mother Nature is unpredictable and it is almost impossible to plan for these effects. This was, after all, an experiment and I learned a lot that will be taken into consideration when LWDD attempts this again.

## Acknowledgements:

I would like to thank Ryan Murphy, Mike Trammell, Oscar Garcia, Travis Crosby and Johnny Saldivar for all their efforts in helping set up the research plots. I could not have done this without you.

Jacky Keller is a licensed applicator for Lake Worth Drainage District. She can be reached at 561-498-5363.



## High School Student Presentation:

# Efforts to Eradicate Air Potato

By Tina Bond

The Florida Aquatic Plant Management Society was delighted to have **Casey Reardon**, a Jupiter High School Junior, present a paper at the annual meeting. Casey is part of the Jupiter Environmental Research and Field Studies Academy and was required to choose a research project. She decided to work with Elroy Timmer (her neighbor and long time aquatic plant manager) on better methods to eradicate air potato (*Dioscorea bulbifera*).

The objectives of this project were to find cost effective and non-harmful methods to eradicate air potato, but more importantly she needed to get a good grade! Before getting started, Casey had to research the biology of air potato, where it came from, and how it reproduces and spreads. Casey also compiled a list of current control methods and costs per acre for air potato control.

Casey set up twenty 4 foot research plots containing 29 tubers in her own backyard. The plots were treated with maximum rates of 15 herbicides and were evaluated over 4 months to determine the effect on sprouting. Casey and Elroy treated the air potato vines in June, 10 feet up into the canopy. She also looked into cultural control methods by covering tubers with sand, pine needles and

top soil to evaluate resprouting.

Casey found that burying air potato tubers

results were Arsenal, Escort (metsulfuron) and Rodeo. She determined that the Arsenal and Rodeo performed better together without the added Escort. She also determined that the Arsenal/Rodeo

*The objectives of this project were to find cost effective and non-harmful methods to eradicate air potato, but more importantly she needed to get a good grade!*

combination was beneficial because each chemical targets 3 different amino acids. Elroy taught Casey that rotating modes of action is a great way to prevent

herbicide resistance in plants. During this project, Casey also discovered something interesting on the air potato leaves. Something was actually eating them. While the perpetrator was never found and did not have too great an impact on the leaves, she was amazed to find an organism that was eating an exotic plant.

was not a good control method as all of the tubers resprouted. For the vines, she had 16 plots each roughly 436

square feet in size. In this trial, Casey determined the best control for air potato was Arsenal Powerline (imazapyr) combined with Rodeo (glyphosate). The second best

Casey, you did an excellent job on your project. We're very proud of your research and for getting up in front of the FAPMS

membership to present this research!



Casey Reardon. Photo by Don Doggett



Casey and Elroy. Photo by David Reardon



## APPLICATOR *Accolades*

### JERRY ATTERSON

Jerry Atterson is featured in this issue's Applicator Accolades. Jerry is originally from Terre Haute, Indiana and moved to Winter Haven with his parents in 1952. Jerry's father was in the transportation business and began hauling goods in and out of Florida, so the Atterson family decided it was time to get out of the cold and into the sunshine!

After serving in the United States Air Force, Jerry started searching for his next endeavor. The Florida Game and Freshwater Fish Commission (GFC; now the Florida Fish and Wildlife Conservation Commission) hired Jerry in 1965 as a hyacinth control technician. While at the GFC, he worked as part of a 2-man crew to treat water hyacinth via airboat. The airboat had what he called a "loveseat"—a bench seat shared by the driver and the spray technician. The airboat was made of plywood and only had half a cage—just enough so you couldn't reach around and get your hands chopped off by the prop.

Jerry spent 15 years with the Commission and during that time, hyacinth populations were thick in the rivers and lakes. Jerry saw hyacinths push up onto bridges and completely clog waterways in the Withlacoochee and Kissimmee Rivers, West and East Lake Tohopekaliga, and Lake Kissimmee down to Highway 60 and Fort Basinger. At that time the Kissimmee River was not channelized so when he'd go out to spray he'd often spend the night along the river, catching his own fish for dinner and camping out at the Avon Park Bombing Range at the old game warden's house.

Jerry pulled double duty in his job with the GFC. In the weed growing months he would spray hyacinths. In the fall and winter months he worked as a GFC law



enforcement officer. He attended law enforcement school in Tallahassee, then carried a gun and issued tickets for illegal duck hunting and other violations.

When the state ended its hyacinth control program, Jerry was again wondering what to do next. Paul Myers (former FAPMS President) hired Jerry as the foreman of the Aquatic Weed Control Section for Polk County Environmental Services. For 15 years he was responsible for treating 70 lakes and other waterbodies in Polk County.

After working for Polk County, Jerry retired in 1995 and moved to Ocala with his wife of 47 years, Linda, to build a home. He once again started looking for something to do, and began working for Aquatic Vegetation Control (AVC) out of Riviera Beach. Jerry worked for AVC on St. Johns River Water Management District contracts spraying canals. When the contracts ran out, Paul Myers contacted him again to see if he'd come work at Applied Aquatic. Jerry worked in the Fellsmere, Stick Marsh and Vero Beach areas while working for Applied Aquatic.

In 2005, Jerry and Linda moved to Georgia. Once again, Applied Aquatic had an opening in North Florida/Southern Georgia and asked Jerry if he wanted to do some part time work. Currently in North Florida, Jerry maintains water lettuce, water hyacinth, hydrilla and other problematic aquatic weeds in lakes and rivers, including the St. Marks and Wakulla Rivers. Jerry has worked all over the state of Florida managing aquatic plants, but says North Florida has been "the prettiest area to work in the state."

Jerry's favorite part of working in aquatics is being outdoors and "just being out in it." The most challenging aspect of his job is trying to keep up with all the vegetation and trying to stay ahead of the growth. "Old Dinosaur" is a nickname Jerry has been given because he's been in the industry for such a long time (since 1965 to be exact). We all appreciate the hard work he has put in to protect our waterways from aquatic invasive plants.

To recommend someone for Applicator Accolades, contact Tina Bond ([Tina.Bond@rrsi.com](mailto:Tina.Bond@rrsi.com)).



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# FAPMS Annual Meeting Update



Don Doggett leads the duck races.  
Photo by Keith Mangus

*The Florida Aquatic Plant Management Society Annual Meeting was held in St. Augustine at the Renaissance Resort at World Golf Village this year and more than 300 people attended! In addition, there were 27 sponsors at the event.*

The 35th Annual FAPMS meeting began on a very positive note with Keynote Speaker Colonel Alfred A. Pantano from the U.S. Army Corps of Engineers, Jacksonville District. The Colonel's presentation set a great, motivational tone for the entire meeting. The FAPMS members and friends wish the Colonel well as his tenure in Jacksonville comes to an end and he travels to Afghanistan for his next assignment.

This year's "Best Applicator Presentation" was truly hard to pick because all of the submissions were excellent. Congratulations to Mr. Craig Johnson with his paper titled, "Lake Cannon: Evolving Techniques for Treating Hydrilla" for winning this year's applicator presentation contest. Read his paper on page 4 of this issue. Second and third place went to Jacky Keller of Lake Worth Drainage District (see page 11), and Spencer Winepol at Allstate Resource Management, Inc.

field work under the supervision of Mr. Elroy Timmer. FAPMS President Vernon Vandiver presented Miss Reardon with the "Presidential Award" for her tremendous efforts. Everyone at FAPMS hopes to see Miss Reardon again as she hopefully continues studies in the field of aquatics or upland plant management research.

FAPMS would also like to thank Mr. Tim Harris for the service he has given the society for so many years. Tim is moving up in the world and is now President Elect for FAPMS. Tim's future presidential duties will require him to relinquish responsibilities on the program committee. The program committee will miss him tremendously.

There were six papers submitted before the June 30 deadline for FAPMS presentations. Those "early birds" received a free duck for the Annual Rubber Duck Race. While none of those ducks won the race, each contestant seemed to appreciate their free chance to win the shotgun and/or the iPad tablet. Good job once again to Mr. Don Doggett for all his efforts with this very exciting and highly anticipated event.

While we're on the subject of papers, let's go ahead and make this the "First Call for Papers" for the 36th FAPMS Annual Meeting to be held at the same location in St. Augustine. As incentive, the society will award all field applicators who present a paper with a plaque of recognition. In addition, field applicators presenting the top three papers will receive a plaque and cash award: \$300 for first place, \$200 for second place, and \$100 for third place. We look forward to an even better meeting next year and we truly hope you can and will be part of it.

We were honored to have a special guest presenter at this year's meeting, Miss Casey Reardon from Jupiter High School. She made us proud with her presentation on treating air potato (see Casey's article on page 12). Miss Reardon is part of our future and we really appreciate her and her great



Bob Greene (left) wins the shotgun donated by Jim Vaughn (center) with Texas Aquatic Harvesting. Photo by Keith Mangus



*The 35<sup>th</sup> Annual FAPMS Banquet included the presentation of many awards to FAPMS members and other individuals selected by the FAPMS Board of Directors for special recognition. Categories included Presidential Awards, Applicator Papers, the Vic Ramey Photo Contest and raffle drawings to support the FAPMS Scholarship and Research Foundation. In case you missed it, here are the award winners.*

## **FAPMS President's Award for Service to Florida's Aquatic Plant Management Program**

**Honorary Lifetime Member  
– William H. Moore**



Bill Moore. Photo by Karen Brown

Bill Moore is a Charter Member of the Florida Aquatic Plant Management Society and has attended every annual meeting since 1979. He has held the following positions in the society: Chairman of Local Arrangements Committee, Chairman of By-Laws Committee, Board of Directors, Secretary, Newsletter Editor, and two terms as President. He also served on the Board of Directors of the FAPMS Scholarship and Research Foundation. He received the Max McCowen Friendship Award from the Aquatic Plant Management Society in 2006. Bill retired from Cerexagri in 2005.

## **Presidential Awards - Richard Cromwell and Jeff Schardt**

### **Richard Cromwell**

Richard is a retired faculty member of the University of Florida – Institute of Food and Agricultural Sciences, Agricultural and Biological Engineering Department. In addition to his other extension, teaching, and research assignments, he has been extensively involved with Florida's pesticide applicator training program since its inception. Richard has traveled throughout Florida conducting training programs for all major agricultural commodity groups. For example, in training pesticide applicators seeking licensure in the Aquatic Pest Control Category, Richard has conducted numerous training programs at the state's five water management districts: Northwest Florida, Suwannee River, Saint Johns River, South Florida and Southwest Florida. Additionally, Richard has participated in innumerable programs focused on various aspects of pesticide applicator training at Florida's county Cooperative Extension Service offices.

### **Jeff Schardt**

For the past 2½ years Jeff has attended 42 meetings with the Florida Department of Environmental Protection (DEP), the Florida Department of Agriculture and Consumer Services (DACs), and the U.S. Environmental Protection Agency (EPA) to develop implementation strategies for National Pollutant Discharge Elimination System (NPDES) permitting in U.S. and Florida waters. These meetings included teleconferences, field trips, public work-

shops, and planning sessions with environmental and agriculture representatives from more than 25 states. Information presented by Jeff convinced EPA and DEP that the Florida Fish and Wildlife Conservation Commission's (FWC) aquatic plant control regulations and reporting requirements already in place in Florida meet or exceed EPA's expectations for reducing pesticide use as well as monitoring and documenting herbicide applications. Consequently, DEP will focus on the activities of large operators in Florida, requiring Notices of Intent and corresponding management plans from the 10 agencies that are responsible for authorizing or funding the vast majority of aquatic herbicide applications in Florida waters. Under DEP's current NPDES generic permit, individual applicators and private businesses in Florida will have little to no additional requirements beyond those that have been in place for decades in Florida.

## **Presidential Award - Casey Reardon**

Casey is a high school Junior enrolled at Jupiter High School, Jupiter, Florida and a member of the Jupiter Environmental Research and Field Studies Academy. At the meeting she presented her findings on a herbicide study that was conducted under the direction of C. Elroy Timmer, Biologist with Aquatic Vegetation Control, Inc. For her early interest in weed science and for the thoroughness of her science project, the FAPMS Program Committee nominated Casey for the FAPMS Presidential Award.



## Applicator Paper Awards

A great deal of hard work goes into writing papers and presenting the information at the annual meeting. Many times applicators get the best images while being out in the field, catching things that normally we would not get to see. Applicator paper and photo contest winners are presented in *Aquatics* in order to showcase the hard work and dedication involved. We hope this will inspire others to submit papers and photos for the meeting next year.

**1<sup>st</sup> Place** Craig Johnson with Polk County Environmental Services

Title: *Lake Cannon: Evolving Techniques for Treating Hydrilla*

**2<sup>nd</sup> Place** Jacky Keller with Lake Worth Drainage District



President Vernon Vandiver (left) presents plaques to Applicator Paper Winners Spencer Winepol (award accepted by Steve Weinsier), Jacky Keller and Craig Johnson. Photo by Don Doggett

Title: *Clean Water Practices Planting Project*

**3<sup>rd</sup> Place** Spencer Winepol who interned with Allstate Resource Management

Title: *Overcoming Public Aversion to Pesticide and Herbicide Use*

You can read Spencer's paper in the *Hydrophyte*, the official publication of the South Florida Aquatic Plant Management Society ([www.sfapms.org](http://www.sfapms.org)).

## Vic Ramey Photo Contest Winners

### Aquatic Scene

**1<sup>st</sup> Place** Mackenzie Lewis with Applied Aquatic Management, Inc.

**2<sup>nd</sup> Place** Mike Netherland with the U.S. Army Corps of Engineers

**3<sup>rd</sup> Place** Leonard Malecki with Orange County Environmental Protection Division

### Aquatic Operation

**1<sup>st</sup> Place** Tina Bond with Red River Specialties, Inc.

**2<sup>nd</sup> Place** Robert Terrill with Weed-busters, Inc.

**3<sup>rd</sup> Place** Robert Terrill with Weed-busters, Inc.

## Thank You Sponsors

A BIG THANK YOU goes out to all the FAPMS Scholarship Foundation Sponsors who donated items for the raffle prizes. Your donations and support help fund scholarships and research that contribute to the advancement of aquatic plant management and help make our meeting a success.

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# 2011 Vic Ramey Photo Contest Winners



Aquatic Scene 2<sup>nd</sup> Place Photo by Mike Netherland, U.S. Army Corps of Engineers. Dean Jones on Lake Tohopekaliga in Kissimmee.



Aquatic Scene 3<sup>rd</sup> Place Photo by Leonard Malecki, Orange County Environmental Protection Division. Snowy egret and alligator share the shoreline. Leonard calls this photo, "Hello Breakfast."





Aquatic Operation First Place Photo by Tina Bond, Red River Specialties, Inc. Luis Garcia on the City of Kissimmee Spray Rig.



Aquatic Operation 2<sup>nd</sup> Place, Photo by Robert Terrill, Weedbusters, Inc. Early-morning aquatic plant harvesters at work.



Aquatic Operation 3<sup>rd</sup> Place Photo by Robert Terrill, Weedbusters, Inc. Rear-view mirror image of aquatic plant harvester.

## Letter to the Editor

Dear Editor

Tina, it gives me great pleasure to write this note about the new addition of Applicator Accolades in the *Aquatics Magazine*. As you know I was very skeptical about being the first applicator to be interviewed. The interview was like pulling teeth but you stuck to it and got a decent article out of me. I was very much honored that you chose me to be the first applicator to be interviewed; even though I thought it was painful. This will be very good for all the applicators that go out in the field everyday to be highlighted in an edition of *Aquatics Magazine*. It's not often that we get good press; it's usually the other way around.

This is an excellent idea you have come up with to highlight the applicators in the field and I take my hat off to you for doing so. I for one would like to thank you for all the hard work and time you put into the *Aquatics* magazine and the genius idea about highlighting Applicator Accolades for all the guys and gals in the aquatic field. Thank you for your dedication and valuable time you put into *Aquatics Magazine*.

Sincerely,  
James V. Hines

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## FAPMS Volunteers

THANK YOU to all the volunteers for helping at the registration desk, selling ducks and raffle tickets, assisting with the A/V equipment and for helping keep the annual meeting running smoothly. We very much appreciate your help!

## New Board Members

FAPMS welcomes our new members to the Board of Directors! Tim Harris is the new FAPMS President-Elect, with Vernon Vandiver beginning his service as Past President. New directors are Clark Boyd with Nufarm Americas, Inc., John Gardner with Aquatic Systems, Inc., and Stacia Hetrick with Osceola County Extension. Scott Glasscock with Disney Pest Management was also elected to fill a vacant position on the board. We look forward to their participation on the board!

FAPMS would also like to thank the outgoing directors for their hard work and dedication to the society during their tenure on the BOD. Thanks to Don Doggett, Steve Montgomery and Dharmen Setaram. While they no longer serve on the BOD, they will still be working behind the scenes on various committees and contributing to the society in other capacities.

## Movers and Shakers

Dr. Lyn Gettys will assume the position of Assistant Professor - Aquatic and Wetland Plants at the University of Florida's Ft. Lauderdale Research and Education Center on January 1, 2012. She will serve as the point person for aquatic weed control and lake restoration in south Florida and will also provide leadership for UF's Aquatic Weed Control Short Course, held every May in Coral Springs. Dr. Gettys returns to south Florida after spending 4 ½ years as a Research Assistant Scientist at the UF Center for Aquatic and Invasive Plants in Gainesville under the direction of Dr. Bill Haller. Dr. Gettys can be reached by email at [lgettys@ufl.edu](mailto:lgettys@ufl.edu).

David Tarver retired from SePro Corporation on October 1, 2011. David provided strong leadership in the U.S. aquatics industry, having worked in many capacities, including serving as President of the Aquatic Plant Management Society (APMS) in 2002, and President of the Florida Aquatic Plant Management Society (FAPMS) in 1986. He is a charter member of FAPMS. David served as Editor of *Aquatics* magazine and, along with his wife Debra, published the magazine for over twenty years. He has numerous scientific publications and co-authored *Aquatic and Wetland Plants of Florida* (1979, 1988).

## FWC Research and Outreach Newsletter

The Florida Fish and Wildlife Conservation Commission (FWC) Invasive Plant Management Section's Research and Outreach Newsletter helps inform resource managers in Florida and elsewhere about current FWC contracted research and outreach in invasive plant management.

New this year – The newsletter has been expanded and now includes summaries of non-FWC funded invasive plant management research in Florida to help keep readers

apprised of the latest findings. In addition, because there is no current venue for invasive animal management research in Florida, the latest research for this topic is now included in the newsletter. We hope to have additional summaries of invasive animal management research next year.

The newsletter is published once per year and disseminated through email as a PDF document. If you are interested in receiving the newsletter, please contact Don C. Schmitz at [Don.schmitz@myfwc.com](mailto:Don.schmitz@myfwc.com) or 850-617-9422. You can also find archives of the newsletter on the FWC website: <http://myfwc.com/wildlifehabitats/invasive-plants/research/>

## FAPMS Photographer

FAPMS has a new photographer taking over the task of capturing FAPMS functions. This post has been held by Don Doggett since 1991 when he became the secretary of FAPMS. We thank Don for all his efforts and showing most of us in our best light! Keshav Setaram will be the new official-unofficial photographer. Keshav, we hope you are up to the task!



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## Invasive Plant Management Association (IPMA)

The IPMA is a newly formed alliance of herbicide applicators, distributors, and manufacturers whose livelihood depends on publicly funded vegetation management projects in natural areas. Invasive plants are an environmental problem; their management is a public necessity and an economic imperative. As financial battles get tougher in Florida's capitol, budgets for natural areas vegetation management are at risk. Although there has been very effective lobbying in Florida supporting the public funding of aquatic plant control, there has not been a

concerted effort by the natural areas invasive plant management community. In response to the financial crisis in Tallahassee and its direct influence on our livelihoods, our intent is to contract a lobbying group to help direct us and present our message to legislators. We hope to join forces with existing lobbying efforts on behalf of the aquatic plant management community.

Please take time to seriously consider joining other members of our industry to ensure our collective futures. Please contact me for details.

Jim Burney, Steering Committee Chair,  
jburney@avcaquatic.com



## Calendar of Events 2012

**January 17-19**

**Northeast APMS**  
13<sup>th</sup> Annual Conference  
New Castle, NH  
[www.neapms.net/](http://www.neapms.net/)

**February 6-9**

**Weed Science Society of America**  
52<sup>nd</sup> Annual Meeting  
Big Island, Hawaii  
[www.wssa.net/](http://www.wssa.net/)

**February 26-29**

**Midwest APMS**  
32<sup>nd</sup> Annual Conference  
Milwaukee, WI  
[www.mapms.org/](http://www.mapms.org/)

**March 29, July 26 and October 25**

**South Florida APMS**  
Quarterly Meeting  
[www.sfapms.org/](http://www.sfapms.org/)

**April 2-4**

**Western APMS**  
31<sup>st</sup> Annual Meeting  
San Diego, CA  
[www.wapms.org](http://www.wapms.org)

**May 7-10**

**University of Florida/IFAS**  
Aquatic Weed Control Short Course  
Coral Springs, FL  
<http://conference.ifas.ufl.edu/aw/>

**June 18-21**

**Florida Lake Management Society**  
23<sup>rd</sup> Annual Conference  
Gainesville, Florida  
<http://flms.net/>

**July 22-25**

**Aquatic Plant Management Society**  
52<sup>nd</sup> Annual Meeting  
Salt Lake City, UT  
[www.apms.org/](http://www.apms.org/)

**October 8-11**

**Florida APMS**  
35<sup>th</sup> Annual Conference  
St. Augustine, FL  
[www.fapms.org/index.html](http://www.fapms.org/index.html)

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