



# Aquatics **in** Brief

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## Creating a Successful Community Fishing Program

By **David Beasley, Lead Fisheries Biologist**

**P**onds and lakes provide great opportunities for homeowners and their families to build relationships with neighbors in their community. The Homeowners Association (HOA) of Brookside in Warrenton, VA is one community in particular that deserves recognition for their efforts. They are committed to providing both kids and adults in their community with fishing, and other outdoor opportunities, that are making a noticeable difference in the neighborhood.



A summer fishing tournament for kids living in the neighborhood is the main attraction helping their community leaders build momentum with their fishing program. This annual event was initiated by both members within the community and the community's developer. The dedication and support from these community leaders has

been fun to watch and a joy of which to be a part of. The great thing is, what they are doing can be replicated in other communities across our country.

Providing kids with fun fishing opportunities, while also rewarding their efforts by providing prizes and small giveaways, has worked well to generate additional excitement for youth fishing.

As participants catch fish throughout the tournament, they are measured and recorded. The tournament lasts two to three hours and prizes are given out to the top five contestants of each age category. In addition to prizes, the HOA of Brookside has plenty of food and drinks available during a set intermission to provide a nice break in the action. The fishing event is just long enough to catch fish and have a good time, while keeping the children's attention.

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*A Full Service  
Lake, Pond, and Fisheries  
Management Company*

## Creating a Successful Community Fishing Program

Continued from front cover

Organizers of the event also provide a great example by making the most out of their time with the kids. To help children become better stewards of the environment and nature, they hand out "Leave No Trace" fishing hangtags for the kids to take home after the tournament. The hangtags mention the seven principles of "Leave No Trace" created by the Center for Outdoor Ethics. These help everyone understand basic principles they should follow to become better stewards of the outdoors.

If you are thinking of planning similar fishing events, it can seem overwhelming if you try to get every detail perfect. The reality is, the kids are going to get out and go fishing; and, regardless of how the event is organized, they will have a good time as long as you consider these important key items:

1. Are there fish for the kids to catch? Bluegill, largemouth bass, channel catfish and trout are the most common species that work well for youth fishing events. They may occur naturally or can be purchased for stocking.
2. Do the kids own fishing gear? If they do not and are not able to purchase the gear, consider budgeting some funds to purchase basic gear that can be borrowed for the event. Sporting goods stores may sometimes be able to donate some equipment as well.
3. Do you have prizes to give out? Inexpensive fishing rods, lures and tackle box's, even gift cards, are all great prizes. As with the fishing gear, you can likely find businesses that are willing to make donations.
4. Who doesn't like a fun snack? Have food and beverages available for a nice break in fishing.

So who organizes all of this? Usually one or two volunteers are needed to share the responsibility of making the event a success. Although the event comes together easily with community and volunteer support, one of the biggest hurdles will be pinpointing individuals willing to put in the time. As the event gains momentum however, you will likely find that more people are willing to become involved. But, until that occurs, you will need to seek out those homeowners or board members who are willing to initiate the fishing program. Remember, a successful event from start to finish is meant to be fun. Have a great time creating bonds through outdoor community fishing! ■

[www.solitudelakemanagement.com/communityfishing](http://www.solitudelakemanagement.com/communityfishing)

## Hydrilla is on the Move

By Shannon Junior, Aquatic Ecologist

If you live anywhere in the Chesapeake Bay watershed or the southeastern United States, you have probably heard of the invasive weed hydrilla (*Hydrilla verticillata*). Hydrilla is native to Asia, but has spread to every continent except Antarctica. It was originally found in the U.S. in Florida in 1959, and has been continually spreading northward and westward throughout the country. Hydrilla has now been found in 31 states, including all four corners of the U.S. (Florida, Maine, Washington, and California).

Until very recently, hydrilla was not an issue for most of the northeastern United States. However, in the past few years it has been found in several locations in New York, Connecticut, Massachusetts and Maine. Because the use of herbicides is very strictly regulated in these states, pond and lake owners and managers are extremely concerned about the threat of more extensive invasion. Hydrilla is becoming a "household name" throughout the U.S., even for people outside of the lake management industry.

Hydrilla plants are highly adapted to colonizing new areas, and rapidly form a monoculture that replaces native plants. Hydrilla's unique physiological and reproductive traits have earned it the dubious titles, "The Perfect Aquatic Weed" and "The Kudzu of Water." In waterbodies where hydrilla becomes established, it causes ecological damage, economic hardships, and impaired water use. Hydrilla can interfere with drainage and irrigation canals, reduce recreational activities such as fishing, boating and swimming, and interfere with public water supplies.

There are two different strains, or "biotypes" of hydrilla with somewhat different characteristics and reproductive strategies. The dioecious biotype is found primarily in the warmer, southern states, while most of the more northern populations are monoecious. Regardless of which biotype is present, the plants produce very hardy reproductive structures known as tubers. These tubers remain viable in the sediment and can cause reinfestation for several years after herbicide treatments or other management strategies. For this reason, it may take up to 10 years to eradicate hydrilla from a waterbody once it has become established, even with the most aggressive management plan.

If you own a pond or lake, please become familiar with the appearance of hydrilla and keep a close eye out for it. We sincerely hope that you will never see it, but it is on the move and could be headed your way!! ■

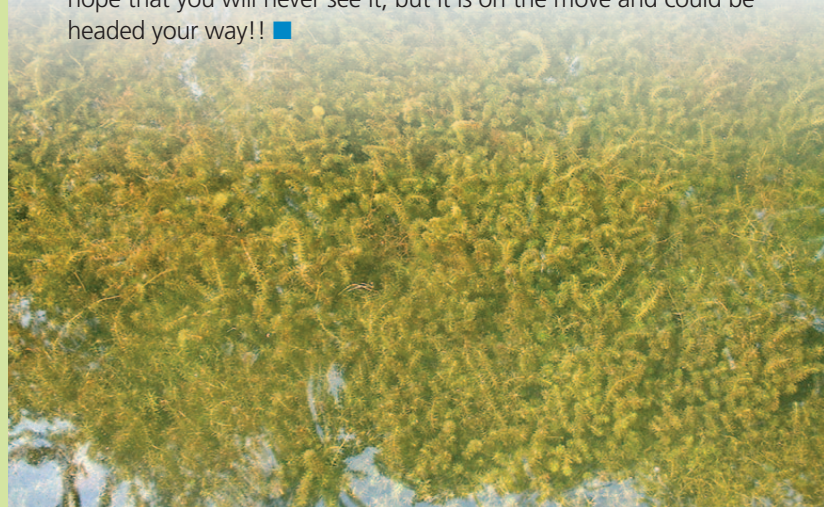




Photo Credit: Pinnell Studios

# Getting Ready For Not One, But Two PGA Tour Tournaments

By **Brad Harris, Forest Biologist and Aquatic Specialist**

If you have ever been to a PGA tour tournament, whether on the regular tour or the Web.com tour, you become instantly aware that it is a multi-million dollar production. The synergy is electrifying and you can feel that the massive greenside sponsor seating, neatly manicured clubhouse, TV production personnel and equipment, concession stands, thousands of fans, tightly mown fairways, and lightning fast greens are part of something big. It's hard to imagine how something like this can come together so quickly and everything seems to have its place. It's a spectacle whether you play or simply watch.

The amount of work involved in getting a course ready to host one of these events is mind boggling. The superintendents of these courses are in the top tier of their industry and rightfully so. Tour players' expectations are really high. Trying to meet these expectations combined with some unpredictable weather patterns prior to the tournament would make most folks run for the hills, but these guys are tough, experienced, and smart. They know what it takes to get the job done and will do what is necessary to get it done. SOLitude Lake Management was able to do what we do best and help a couple of these superintendents get their ponds ready for two very large tournaments last summer: the Wyndham Championship at Sedgefield Country Club in Greensboro, NC and the Chiquita Classic at River Run in Davidson, NC.

We were hired in early 2013 to implement maintenance programs for the ponds on these two courses hosting PGA tournaments later that summer. We believe they chose us because we are also in the top tier of our industry and that they could count on us like the players, members, and fans who count on them every year. Our biggest challenge was no different than theirs — making the ponds balanced and looking good prior to and during the tournaments. Some ponds were easier to get into shape than others, which was mainly due to the type of nuisance vegetation each pond had when we started the maintenance program.

We were up against several species of algae and multiple invasive aquatic weeds, including a multi-acre pond that was 100 percent covered with watermeal. Those of you who have dealt with watermeal on your own pond know how stubborn, problematic, and expensive this aquatic weed can be to control.

No doubt the pressure was on, but our confidence was not shaken. The superintendents trusted and implemented our recommendations and, as expected, we cleared their ponds well before the tournaments, including the one infested with watermeal. Unfortunately, the one pond had a planktonic algae bloom appear Tuesday before the Thursday start, so I was out on my boat until 8:30pm treating the pond to ensure the algae would be controlled for the tournament. Fortunately, we were able to control the algae and meet the expectations of the superintendent, despite nature's last minute slice. The rest of the ponds were more cooperative and both courses had balanced and sharp looking ponds during the tournaments.

Further water quality methods and techniques are being implemented and considered at both courses for 2014 and we look forward to another year at both sites. We feel this year and subsequent years should prove to be less problematic as we continue to improve water quality and obtain substantial control of the nuisance vegetation. Although, as with any pond, we need to continue to be hyper-vigilant during our maintenance visits so we are aware and can react when nature becomes unpredictable. We greatly appreciate the opportunity to work with such high caliber clients throughout the region. We are excited about the 2014 golf season and hope to see you at the PGA events in North Carolina this year. ■



*“We used to struggle with many different issues in Freeman Pond on holes 15,16,17 at Sedgefield Country Club. It was not uncommon for us to see algae blooms appear out of nowhere along one of the most important focal points of the course. Since Brad Harris and SOLitude Lake Management have been taking care of the pond for us, we have had very little issues with the aesthetic qualities of our pond. SOLitude has taken a huge burden off of my shoulders and now I don't even have to worry about the appearance of our pond.” — Keith Wood, Golf Course Superintendent, Sedgefield Country Club, Greensboro, NC*

# LOVE YOUR MOTHER



In support of Earth Day (April 22) and Arbor Day (April 25), join us in being part of The SOLution. Become a new fan and follower of any of our informative social media pages or blog through May 15 and we will plant a new tree for you!



[www.solitudelakemanagement.com/blog](http://www.solitudelakemanagement.com/blog)



## Win a FREE Lake Makeover!

Is your non-profit's lake or pond unhealthy and in dire need of ecological restoration? Are recreational activities limited due to nuisance algae and aquatic weeds? Submit your photos and story to [info@solitudelake.com](mailto:info@solitudelake.com) for the chance to win a FREE Lake Makeover!

# LOVE YOUR LAKE



## Volunteer of the Year Embodies SOLitude's Core Values



Through our community outreach program, The SOLution, Shannon Junior, Aquatic Ecologist was named Volunteer of the Quarter for the Fourth Quarter of 2013 and Volunteer of the Year for 2013!

Shannon received the Volunteer of the Year award for her year-round commitment to her philanthropic passions and her enthusiasm for seeking out new opportunities for SOLitude to help others. In 2013, Shannon spent **over 288 hours** helping organizations such as the Madison County Animal Shelter with adoption events and at their fundraisers to include Canine and Wine, Dog Dayz Chili Fest, Lake of the Woods Dogfest, and Dogapalooza. She also encouraged her colleagues to join her in "creating a better world" by attending several team volunteering events including the Family and Youth Casting Call, Heritage Day and Watershed Day at Graves Mountain Lodge, and Food for Others.

In 2013, Shannon also spearheaded the restoration of the swimming and fishing lake at Camp Holiday Trails, a camp for children with special and chronic health needs, in Charlottesville, Virginia. As project manager for the lake restoration, she coordinated the effort for SOLitude, and also organized donations from AquaMaster Fountains and Aerators and Valent Professional Products.

Shannon was excited to be named Volunteer of the Year and directed a donation of \$1,475, on behalf of SOLitude Lake Management and The SOLution, to the Madison-Greene Humane Society.

For 2014, Shannon has already organized monthly team volunteer events with Food for Others, scheduled her team to participate in the annual Family and Youth Casting Call in Washington, D.C., and will continue to frequently invite and secure other team members to join her at Madison County Animal Shelter events.

Congratulations on all of your successes and for being a huge part of The SOLution, Shannon! To join Shannon and the rest of the SOLitude Lake Management team at future events or to suggest a non-profit for consideration in The SOLution, please reach out to us at [www.solitudelakemanagement.com/contact](http://www.solitudelakemanagement.com/contact). ■



# New SOL

In each issue, staff members from SOLitude are highlighted. It is our pleasure to introduce the incredibly talented members of our team and give you insight into the vast array of knowledge and experience they offer.

**Q At what point of your life did you decide that you wanted to pursue an Environmental Science degree?**

**A** I have always enjoyed the outdoors. I worked for the Youth Conservation Corps and then with DNREC Division of Parks and Recreation from the age of 15. With my work and personal experiences of hiking, hunting, and exploring, along with a very passionate Environmental Science department head at Gettysburg College, I was compelled to switch majors from History to Environmental Science after my sophomore year of college and haven't looked back.

**Q Where did you grow up and what kept you in the same location your entire life?**

**A** I grew up in a small town called Milford, and those who know me well know how proud I am of my Delaware roots. I love my family and friends and Milford is a spot where I can get away from the hustle and bustle, go to the farm and hunt and fish with friends, but still get to the beach in 15 minutes and to a major city within hours. I also enjoy that my professional work helps improve the land and water I love so much.

**Q What are you most proud of throughout your career?**

**A** It is my thirteenth year working in the stormwater and environmental consulting industry. I have worked on huge commercial and residential development projects doing everything from permitting, wetland delineation, wetland mitigation,



**J. Wesley (Wes) Allen,**  
*Environmental Scientist*

stormwater design and maintenance, and green infrastructure, to low-impact design. I have also worked with private land owners, HOAs, local and state governments, and community managers on stormwater and wetland projects both large and small. I am very proud of my wide experience. I think this allows me to see projects from many different approaches and find creative solutions to problems. Recently, I got to work with a municipality and a private community to design then construct several rain gardens. These utilized only native plantings and were very successful.

**Q What most excites you about your work & the contributions you make?**

**A** This industry is about relationships. I love working with people and educating

them. It is extremely rewarding to see a stormwater pond that was not properly managed turn into a beautiful focal point for a community.

**Q What is the most challenging part of your job?**

**A** The most challenging part of my job is juggling client goals with environmentally sound and regulatory approved processes. It is often difficult for a client to understand, but once they are educated and aware, they are usually the first ones to jump on board.

**Q What would be impossible for you to give up?**

**A** Professionally, I could not give up the relationships that come from successful partnerships on stormwater and environmental projects. Personally, I could not give up the Philadelphia Eagles or waterfowl hunting!

**Q Where can we find you when you're not working?**

**A** In the fall and winter, you will find me chasing ducks and geese with my Labrador Retriever, friends and family. Other times, you will find me hiking and exploring. In the words of Scorchy Tawes, a local TV legend, I am out "wandering this Delmarvalous land." I enjoy reading and watching sports when I cannot get there in person. I also like to volunteer for Ducks Unlimited, Habitat for Humanity and Delaware State Parks, where I am looking to "adopt-a-trail" to monitor and maintain. ■

## SOLitude Lake Management Named As One of the 2014 Best Places to Work in Virginia

We currently serve amazing clients throughout the Eastern United States, but are thrilled with this distinct honor in the state of Virginia. SOLitude's management team believes our positive approach and focus on culture has impacted the quality of our staff, helping us to create a work environment that is conducive to providing our clients with a quality experience.

The 2014 Best Places to Work in Virginia list is made up of 100 companies and was created by Virginia Business and Best Companies Group. For more information on the Best Places to Work in Virginia program, visit [www.BestPlacesToWorkVA.com](http://www.BestPlacesToWorkVA.com).



*SOLitude was honored at an awards ceremony at the Williamsburg Lodge in Williamsburg, VA.*

# Pond Inspections and Bathymetric Studies

By **Brad Harris, Forest Biologist and Aquatic Specialist**

Stormwater pond inspection and maintenance requirements vary from state to state and municipality to municipality. When a pond was constructed may also play a role in which stormwater regulations apply. The objective of these inspections, maintenance, and regulatory requirements are to ensure that stormwater ponds are functioning as designed, which is to collect pollutants, such as sediment, nutrients, debris, and trash, among others. These stormwater BMP (Best Management Practice) ponds are constructed to capture these pollutants and prevent them from being released into into downstream water resources (streams, rivers, lakes and oceans).

The inspection and maintenance items required by many municipalities can be applied to any pond or lake, regardless if it was designed as a stormwater BMP or subject to regulation. An annual inspection of the structural components of a pond can save a pond owner thousands of dollars. Whether the pond is owned by a private landowner, business, municipality, golf course, or an HOA, a thorough pond inspection should be a part of any annual budget. Having a professional inspect the structural make up of a pond can prepare a pond owner for unexpected expenses prior to there being a need. Structural repairs of a pond are generally very expensive and having inspections annually will help the owner or community understand the current status of their pond and budget accordingly. A pond inspection is essentially a budgeting tool and without it, an owner is increasing their financial risk.

We recently performed an inspection for a community that owns over 65 ponds that are currently not under any regulation requiring maintenance or inspections. The ponds are located in an upscale mixed development community with the oldest ponds being around 25 years old and the most recently completed ponds being only several months old. The Property Owners Association Board of Directors wanted a comprehensive report of their pond structures including all embankments and dams (erosion, undesirable vegetation, and animal activity), influent and effluent structures, dissipators and spillways, nuisance aquatic vegetation, aeration equipment (fountains and submersed aerators), and a bathymetric study (pond or lake depths) to determine if sedimentation was an issue and if sediment removal or dredging would be required for any of their ponds.

The ponds located in the community are susceptible to high sedimentation rates as community ponds are typically designed to capture stormwater runoff during development and post construction phases. Knowing how much sediment is entering a community's system of stormwater ponds is extremely difficult, if not impossible, without a baseline. Being able to accurately measure pond and lake depths can provide a baseline for a community's ponds, and also confirm what the existing depths are and if further sediment analysis is required to see how it is affecting the health and function of a pond.

We had presumed the older ponds were going to be the most problematic with nuisance aquatic vegetation and high sediment



loads due to their age. We also speculated that we were going to notice a direct correlation between age and problematic ponds. The ponds were numbered chronologically and we began with the older tier. As expected, the sediment issues were apparent. We were convinced after mapping and inspecting the first several ponds that there were going to be many shallow readings as the project progressed. As we continued to the middle-aged ponds, the majority of them had adequate depths and sediment removal was only going to be recommended for a few ponds.

We did notice the correlation between the age of the ponds and sediment accumulation, but it was minimal, a lot less than what we had originally envisioned. However, we found that the condition of structural components was improving as the age of the ponds decreased. Surprisingly, we saw a lot of erosion issues and, in turn, sedimentation occurring around the newest ponds. This was happening because the newer ponds did not have acceptable stabilization on the embankments and dam areas after pond construction. Whether it was minimal to no turfgrass or inadequate and improperly installed riprap, the newly constructed ponds were potentially going to prove costly if the community didn't address these issues.

The inspection we carried out for this community was above what some of the strictest municipalities require of their stormwater ponds annually. The report findings led to a few areas of urgent concern, but overall it identified problematic areas and trends that can be repaired and reversed over many years. The association can now formulate a timeline to repair and maintain the ponds to fit their budget. The association will now also understand the issues they have with their ponds and will be able to minimize the chances of having extremely expensive dredging projects or repairs sneak up on them. Yes, it will take some reallocation of funds and possibly an assessment in the future, but the inspection and bathymetric data collected will allow for those allocations to be accurate and sustainable. If you haven't considered an inspection and bathymetric study for your pond(s), then we highly recommend contacting your lake and pond management professional to discuss how the results may be able to help your community, business, golf course, municipality, or private pond, formulate a budget to protect your assets. ■

## Partner Spotlight: AquaMaster Fountains

Fountains and aerators are water quality management tools for lakes and ponds that increase the dissolved oxygen level to initiate a natural clean-up process and address water quality issues such as algae build up, aquatic weeds, bottom sludge, foul odors, insect infestation, and water stagnation. Their use is a natural and environmentally sustainable strategy for maintaining an aesthetically pleasing and healthy body of water.

"The synergy between our company and SOLitude is evident in the quality of installation and service that they provide for our fountains and aerators," said Rudi Huber, Regional Sales Manager at AquaMaster Fountains and Aerators. He also noted the importance of both companies striving to be good stewards of the environment by deploying sustainable and environmentally friendly water quality solutions.

To learn more, visit [www.solitudelakemanagement.com/sustainability](http://www.solitudelakemanagement.com/sustainability).



Representatives from AquaMaster Fountains and Aerators, Rudi Huber (center, blue jacket), Regional Sales Manager, and Jason Gangaway (center, red shirt), Service Manager, present the entire SOLitude Lake Management team with their award for being the 2nd largest distributor in the United States and Internationally.

Many of our treasured clients' properties are featured in the 2014 AquaMaster Calendar. Our talented Environmental Scientists swept first second and third place, and seven total photos of our clients' dazzling waterscapes are featured throughout this year's calendar. ■



Kyle Finerfrock, Environmental Scientist, first place: AquaMaster 5HP Masters Series Lakewood fountain in a private lake in Weems, VA



Kyle Finerfrock, Environmental Scientist, second place: AquaMaster 1 HP Classic Series SHVF fountain in a residential community stormwater pond in York County, VA



Brent Weber, Environmental Scientist, third place: AquaMaster 1 HP Masters Series Lakewood fountain in a residential community in Yorktown, VA

## Check Us Out...

SOLitude Lake Management will be participating in the following events over the coming months. We encourage you to come see us! If you need information on attending any of these events, please call our office at 888-480-LAKE (5253).

**April 24**

**PA/Delaware Valley Chapter of Community Associations Institute's (CAI) Annual Conference and Expo**  
Citizen's Bank Park, Philadelphia, PA

**April 26**

**Brandywine Valley Association**  
Brandywine Creek Clean-up, West Chester, PA

**May 2-3**

**District Department of the Environment**  
Family and Youth Casting Call, Washington, DC

**May 7**

**The NJ Cooperator's Annual Co-op and Condo Expo**  
Meadowlands Expo Center, Secaucus, NJ

**May 14-17**

**Community Association Institutes' (CAI) Annual Conference and Exposition**  
Loews Royal Pacific at Universal Orlando, Orlando, FL

**June 7**

**Chesapeake Bay Foundation**  
Clean the Bay Day, Various Locations

**July 25-27**

**Virginia Leadership Retreat, Community Associations Institute (CAI)**  
The Homestead, Hot Springs, VA



**Want helpful pond and fisheries management tips all the time?**

Follow us on any of SOLitude Lake Management's social media pages or subscribe to our Blog: ([solitudelakemanagement.com/blog](http://solitudelakemanagement.com/blog))



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- **Water Quality Monitoring**
- **Annual Lake & Pond Management**
- **Bathymetric Studies**

# Aquatics in Brief

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## Ponder These Thoughts

**S**OLitude Lake Management wants your pond to be prepared for warm weather. With this in mind, we recommend that you consider the following during the spring months:

- Have your pond's water quality tested. Find out early in the season if there is a imbalance or increased nutrient load in the water.
- Be patient if you notice spring algae or green water. Once your pond has established a balance, either naturally or with assistance from the SOLitude Lake Management Annual Management Program, algae will clear up.
- Ask us about stocking your pond or retention basin with minnows to naturally and effectively control mosquito larvae.
- Examine basin inlet(s) and outlet(s) to ensure devices are obstruction free and operational.
- If your pond's vegetative buffer was not trimmed last fall, the spring is also a good time to remove dead vegetation from the buffer, setting the stage for healthy growth this year.
- Spring is also an ideal time of the year to enhance your pond or basin's buffer with supplemental plantings. Flowering plants can be added to pepper in some color.
- Be sure your pond is stocked with easy to catch fish such as bluegill, largemouth bass and channel catfish and plan a successful summer fishing event in your community.
- Anglers, don't be tempted to cast too close to the fountain! Your fishing line can get sucked up into the impellers and wrapped around the shaft causing failed seals and expensive repairs.

