

Aquatics **in** Brief

FALL 2013



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The Key to a Successful Shade Garden: *Plan Before You Plant*

By **Sandy Phelps, Garden Design Consultant**

Nothing spruces up the property adjacent to a tranquil lake or pond more than a beautifully landscaped garden. It is a common misconception that it is not possible to have a lovely, colorful, low maintenance garden in a shady yard. Some of the most memorable gardens I have visited have been in partial or complete shade. The most important thing to keep in mind before you begin to create your dream garden is to plan before you start. A few basic steps are all it will take to create a shady nook that will take your breath away.

When I first moved into my current house the "garden" was a small forest with no shape or color and overtaken by invasive plants. The first winter I observed the yard and noted certain things. Where were the sunny areas, wet spots and shady nooks? What animals and birds visited my yard? Where was the best and worst soil? Only after I took these factors into consideration

did I make a plan – a plan that I have worked on bit by bit over thirteen years.

My initial step was adding a deer fence around a portion of my yard that I wanted to plant. I then had a soil test done by the local Cooperative Extension Service to see what amendments I needed to add to my

A few basic steps are all it will take to create a shady nook that will take your breath away.

soil. Next, I thought about where I wanted to place the hardscape such as a patio, walkway and pond. I looked at the yard from different angles to see where I needed to place large trees and shrubs to screen out my neighbors and create a sense of privacy.

Since much of my yard is in full or part shade, I had to determine how much shade
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Successful Shade Garden *Continued from front cover*

each area would get over the course of a day. **Filtered or light shade** is the brightest category of shade. Light is filtered through fine leaves or spaced trees. **Medium shade** occurs when the sunlight is shaded by the shadow cast by a house, wall, fence or branches and additional foliage. The sunlight is irregular throughout the day. **Deep or dense shade** occurs when there are low branching trees or evergreens. Sunlight cannot penetrate all the way to the ground except through reflected light. Once I determined the type of shade different areas in my yard would be receiving, I then selected those plants that would thrive in that particular type of shade.

The backbone of a beautiful garden lies in the woody plants that are carefully placed to add year round interest. I selected a variety of small trees and shrubs that would create four season color, added plants to attract birds and beneficial insects, and included evergreens for winter interest and privacy. A few ornamental trees that could be a focal point of a well-planned shade garden



are Japanese Maple, Serviceberry, Eastern Redbud, Fringe Tree, Dogwood, Witchazel, Saucer Magnolia, Stewartia and Japanese Snowbell. These flowering small trees will create structure as well as bring color and height to a shade garden.

Once the trees were selected for my garden I determined the shrubs that would bring structure, color and year round interest. My favorite shade loving shrubs are Carolina Allspice, Clethra, Red or Yellow Twig Dogwood, Daphne, Hydrangea, Holly, Summersweet, Leucothoe, Andromeda, Cherry Laurel, Rhododendron, Azalea, Skimmia and Viburnum. Most of these shrubs have a softly scented flower. Hydrangeas come in a variety of colors from blues to pinks as well as many leaf shapes such as the Oakleaf Hydrangea and small tree-like Pee Gee Hydrangea with huge flower clusters.

Generally shade loving plants with more colorful flowers need a filtered shade garden. Some perennial plants with blue or purple flowers are Amsonia, Liriope, Iris, Lobelia, Bleeding Heart, Hardy Geranium, Phlox and Primrose. Shade gardens with all white flowering perennials are often called "Moon Gardens" as they create a silvery effect at night. White perennial flowers for the shade

are Goatsbeard, Astilbe, Campanula, Hellebore, Phlox and Toad Lily. There are even perennials with yellow flowers that love the shade and brighten up the garden. Some yellow flowering plants are Corydalis, Leopard's Bane and Daylily.

Not to be forgotten are the bulbs. In early spring before the leaves appear on trees and shrubs, bulbs poke their way up through the soil to announce that winter is over. Crocus, Winter Aconite, Snowdrops, Grape Muscari, Scilla, Bluebells and Daffodils are the first to brighten up a shade garden in spring, while Lilies appear later in the summer. Easy to grow, bulbs multiply year after year with little care and in time will fill a shady nook with color.

Armed with all this information on the type of shade in my garden, where hardscape and privacy screening should be placed and what trees, shrubs and perennials would bring color and interest to my garden, I created an overall plan for the placement of each item. I divided my yard into zones and tackled only one or two projects a year. The ambitious plan was less daunting in small pieces and also more cost friendly.

The final step to put into place was to create a maintenance plan to keep my garden looking its best. I researched how to prune, feed and water each plant. I approached my garden maintenance just like keeping up my house or car. The key is regular maintenance. I don't try to do it all at once or put it off until it is a jumble of weeds. In the spring a clean-up and mulch is needed to keep weeds from getting an early start. In the summer, I take a weekly walk around the garden with a bucket to weed and deadhead. In the autumn, I cut back dying plants and add leaf mulch. It doesn't take much time if it is done on a regular basis.



A shade garden, like your lake or pond, can be a retreat where you sit and relax on a hot, summer day. It can be the first to welcome you to spring with early flowering bulbs, trees and shrubs. Armed with knowledge about the type of shade, soil and the right plants for your yard, you can plan, plant and maintain a beautiful garden. If you want the garden of your dreams but have no time to create it, hire a knowledgeable garden consultant to access your space and design a workable plan. Then hire a qualified, certified and well recommended landscaper to do all the work for you. Take the time to plan first and then enjoy your garden for many years. ■

Sandy Phelps is a Master Gardener and Garden Design Consultant with ten years of experience in the industry, partnering with lake and pond management companies, professional landscapers and homeowners to enhance the beauty of residential, community and commercial properties throughout the mid-Atlantic region.

Liming Ponds

By **Bob Lusk, Fisheries Biologist and Editor of Pond Boss Magazine**

Water is the lifeblood of every pond...every one. Clean, vibrant, healthy water yields healthy environments, which play significant roles in surrounding ecosystems.

Managing water quality is a key part of prudent pond management. What exactly does that mean? Remember that scientists call water the "universal solvent." Anything that can dissolve into water, will. That means minerals, metals, acids, bases, tree leaves, cotton socks, parts of old cars...lots of different things can dissolve. When something dissolves into water, the chemistry, and often the quality, changes. Water has other amazing qualities, too. As some organic stuff dissolves, water composts it. Fertilizer coming off fields, organic matter washed in from near shore, waste from the creatures beneath the surface... water processes this stuff and releases as much of it as it can.

When water tilts toward the acid side of the pH scale, normally due to surrounding soils and plant life, corrective action is needed.

Liming. You've heard of it. Biologists recommend liming for ponds and lakes that reside in acidic areas. Typically, acidic water is surrounded by sandy soils and pine trees. Odds are, if your pasture soil needs lime, so does your pond. Don't just run down to the farm store, snag a bag of lime and toss it in the water. There's some science behind it.



I'll always remember a story about a local golf course superintendent who got fired because he killed the greens on six holes of the course. His replacement, a brash guy, did the same thing. It took too long to figure out the water they were using to irrigate the greens had way too much lime in it. They had to dig up the old turf, replace much of the dirt and then change the way they watered the new grass. It was a tough lesson.

What about your pond? If the pH is in the low 6's or lower, consider liming. Do your due diligence. There are lots of different types of lime. There's quicklime, hydrated lime, dolomitic lime, aglime...lime this, lime that. Each type has its purpose. You have a specific purpose.

Lime, in proper amounts, acts like Nature's Roloids. Lime dissolved into water buffers the wet stuff. Lime absorbs those acids, doing its part to stabilize your water chemistry. Stable water can take a lot of punches from nature. For example, just the simple, day to day biological activities of photosynthesis and respiration via aquatic plant life can send pH wildly up and down through the course of 24 hours. Lime, calcium carbonate, mitigates those changes, keeping pH within a safe range.

Biologists measure the amount of lime in your water at any given moment by checking the alkalinity. Alkalinity at least 20 parts per million is the benchmark to decide if, and how much, lime needs to be added. By the way, recommendations typically are made by "tons per acre," based on what exists in your water.

Quantify, seek advice and then choose your liming path. It's a fairly simple, easy decision to make, given the proper knowledge and advice. ■

Bob Lusk, the "Pond Boss," is in his 34th year as a fisheries biologist. He is the editor of Pond Boss magazine and has written three books on fisheries management. You can read more at www.pondboss.com.



The Importance of Selective Harvest

By **David Beasley, Lead Fisheries Biologist**

Fisherman and fisherwoman alike, almost always prefer to catch specific types and sizes of fish each time they go fishing. Few people are lucky enough to have a waterbody that serves as their "ideal" fishing experience. Those who have the good fortune to own a single waterbody with great fishing often do not realize that the fishery will not stay that way forever.

Many variables lead to why a fishery changes over time, but usually it is a change in either the habitat or the predator to prey ratio. Once a fishery no longer meets your goals, it can be very difficult to change it back. Man-made lakes and ponds often times do not naturally maintain a balanced predator to prey ratio, so without the proper management strategy, it is highly unlikely that even a great fishery will stay the same over the years.

Many anglers still practice Catch and Release, which is the term for returning all caught fish back into the water. Catch and Release tactics may be counterproductive and as a result, may prevent you from reaching your long-term goals. When managing private lakes and ponds for fishing, it is important to adopt a Selective Harvest management strategy. Strategically removing certain fish species and sizes, while releasing others, is one of the most important steps to improving your fishery.

Prior to determining creel limits and adopting a long-term management strategy, it is important to determine the goals for the fishery. A few examples of goals are to: catch big bass, catch big bluegill, or offer good fishing for kids. Once goals are determined, it is important to assess the current condition of the fishery. This can be done by having a fisheries biologist look through angling records provided by the fisherman or by performing an electrofishing survey. Once the goals are outlined and the current state of the fishery is determined, Selective Harvest rules can be implemented.

So next time you catch one of those one pound bass that seem to be overpopulated, take a second to think about the impact that releasing it may have on the fishery. Whether your fishery is doing great or is in very poor shape, it is important that you adopt a Selective Harvest management program. Poor fisheries can always improve, but great fisheries will not stay great forever, if managed poorly. ■

A Special Camp in Need of “The SOLution”

As part of The SOLution initiative, SOLitude Lake Management recently teamed up with two major industry manufacturers to help a camp for children with special needs. The mission of Camp Holiday Trails in Charlottesville, Virginia is to provide outdoor experiences for kids with chronic illnesses in a supportive and medically supervised environment. Most of the children who attend the camp require financial assistance, and the camp operates on a limited budget funded primarily through private donations.

Unfortunately, the fishing lake at the camp experienced severe sedimentation and nutrient enrichment problems, which led to water quality impairment, and an infestation with an invasive plant called watermeal. The children’s recreational use of the lake became severely limited.

SOLitude Lake Management got involved with the project in the fall of 2012, and committed several volunteer labor hours



towards helping the camp restore the health of the lake as part of The SOLution. SOLitude installed a submersed diffused air aeration system donated by AquaMaster Fountains and Aerators, a world leader in fountain and aerator engineering and sales. The aerator helps to increase the dissolved oxygen level in the water column, thus improving the overall health of the lake and improving the habitat for fish and other aquatic organisms.

SOLitude also requested the help of Valent Professional Products, a manufacturer of herbicides for effective aquatic plant management. Valent donated a portion of the herbicides used to treat the lake for watermeal.

The lake had a severe infestation of the plants, and at times was 100 percent covered with the nuisance aquatic vegetation. After two treatments during the summer of 2013, the lake is finally free of the plants and in good shape for the campers to continue fishing and enjoying of the lake.

A special thanks to our partners,  and , for joining us in being part of The SOLution!



The **SOLution**
creating a better world



The SOLitude installation team with Camp Holiday Trails representatives, Pete Syme (Volunteer Extraordinaire) and Tina LaRoche (Executive Director).



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 Where did you grow up and what brought you to where you are today?

A I grew up in the far northwest suburbs of Chicago, in Cary, Illinois. I was about as far away from the city as you can get while still being able to tell out-of-towners, "I'm from Chicago." I've always been fascinated with the water and fish in general. I started fishing at a young age and after my first catch as a kid, the road to becoming a fisheries biologist began. I started off as a general Water Resources major at the University of Wisconsin – Stevens Point, but after the first year I narrowed my focus to Fisheries Management. I interned for a lake and pond management company servicing southeastern Wisconsin and made the move to Virginia Beach after receiving the opportunity to work for SOLitude. I'm enjoying the challenges and rewards that come with the job and I'm also taking part in a variety of outdoor volunteer opportunities on the weekends.

Q What most excites you about your work and the contribution you can make?

A I like to solve problems while on the job. Being in the lake and pond management industry gives me this opportunity several times a day. Every pond is different. Each one is even different every time it gets visited. You never know what to expect



Marc Harris,
Fisheries Biologist

when you drive up to a pond. Some techniques work great for certain ponds and just OK on others, so the challenge is getting to know each and every pond and finding the right way to approach managing it. I love having the opportunity to improve the aesthetics and biological health of a pond.

Q What was the most interesting thing you have seen or done throughout your schooling or career?

A I had the opportunity to take a day trip with a professor to a nearby lake that was being commercially harvested

for buffalo, a fish similar to carp but much more valuable in the Asian food market. The fishermen used mile-long seine nets to corral thousands of fish and the nets caught every fish big enough to not swim through the net. We worked with the Wisconsin Department of Natural Resources to sort out the game fish, measure them, tag them, and release them back into the lake. The lake system we were on has the largest self-sustaining population of Lake Sturgeon, so it was amazing to handle a couple hundred fish that were each close to 100 years old and near 200 pounds!

Q What was your best catch?

A A 44 inch, 20 pound Muskellunge caught in Hayward, Wisconsin, the muskie fishing capital of the world. It hit a topwater lure at night, put up a great fight, and hopefully has grown a bit and is still swimming around the lake.

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

A Whether it's in my kayak or on the beach, I'm always around the water, and usually have a fishing pole along for the ride. When I'm not on the water, I'm in front of the TV flipping through the science-y channels like Nat-Geo, Discovery, or the History Channel. ■

Congratulations to our Volunteer of the Second Quarter, Aaron Cushing!

Aaron has shown his love of nature and the water while working to enrich the lives of others through aquatic education and preservation. He was the lead coordinator of a team volunteer event at Graves Mountain Lodge in Syria, Virginia and was instrumental in obtaining a large fish tank and conceptualizing a Shad Spawning Obstacle Course game and educational lessons to teach children more about fish habits and nature. He is constantly seeking additional environmental and educational volunteer opportunities for The SOLution as well as pursuing his own philanthropic passions. Aaron has fully embraced SOLitude's company culture and The SOLution program. Congratulations and well done, Aaron! ■



2013 Before & After Showcase

Successful Aquatic Weed and Algae Treatments

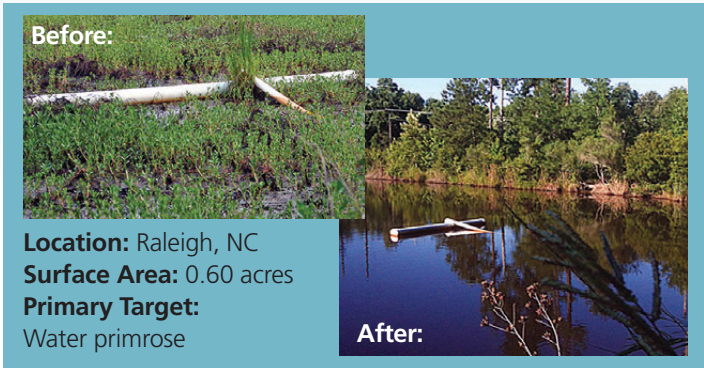
A sustainable, annual management plan is always recommended to ensure your lakes and ponds are both healthy and looking their best year round. Sometimes we come across new lakes and ponds in need of some major TLC. Other times, Mother Nature presents us with a new problem on the waterbodies we already manage, and corrective action is required.

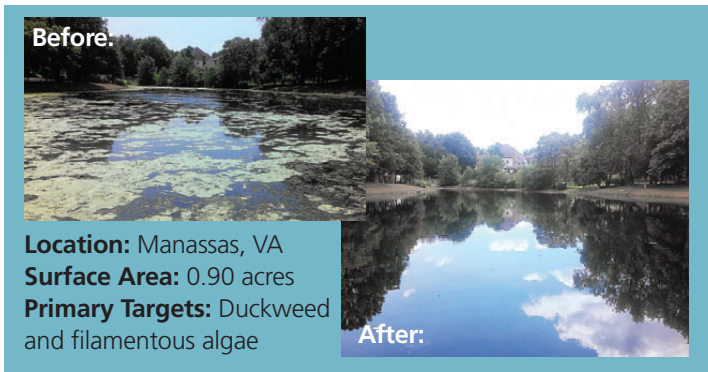
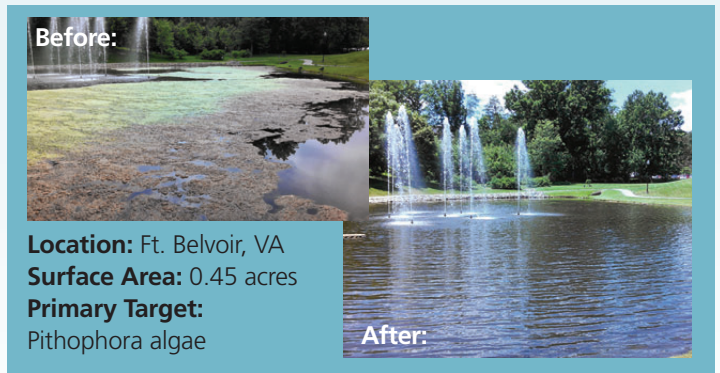
SOLitude has licensed and experienced aquatic pesticide applicators, who remain on the cutting edge of product and technological advancements, allowing us to provide our clients with the right prescription for treating nuisance aquatic weed and algae. We use only superior, environmentally safe herbicides and

algaeicides to help our clients' lakes and ponds find their balance.

Be sure to visit www.solitudelakemanagement.com to download **Your Guide to Sustainable Pond Algae and Aquatic Weed Control** and learn what the experts recommend for maintaining an ecologically balanced lake or pond. And check out our Facebook page for more success stories!

Here are just a few of the many successful treatments performed by SOLitude's expert applicators this year:





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).

October 18
 North Carolina Chapter of Community Associations Institute
Annual Conference and Trade Show
 Wilmington Convention Center, Wilmington, NC
www.cai-nc.org

October 24
 New Jersey Chapter of Community Associations Institute
Annual Conference & Expo
 Revel Resort & Casino Ovation Hall, Atlantic City, NJ
www.cainj.org

October 29
 Chesapeake Chapter of Community Associations Institute
Annual Expo and Business Provider Showcase
 Martin's West, Baltimore, MD
www.caimdches.org

November 18-20
 Carolinas Golf Course Superintendents Association Annual Conference and Trade Show
 Myrtle Beach Convention Center, Myrtle Beach, SC
www.carolinasgcsa.org



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to subscribe to the SOLitude blog and download our free educational guides that will give you the tools to make powerful and informed decisions about your lakes, ponds and aquatic habitat.



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Ponder These Thoughts

Solitude Lake Management wants you to be prepared for the Autumn season and all of the wonderful cool weather it brings. With this in mind, we recommend you consider the following tips as you enjoy the colorful fall months on your lake or pond:

- Along with your contract for annual maintenance, be certain to contact our office about scheduling a Bathymetric and Sedimentation Study as well as a structural inspection of your pond. This will allow for proper budgeting for future dredging and repair of any physical problems with your pond and its related structures.
- Fall is a good time to think about repairing and maintaining the areas around your pond. Be sure to trim the buffer zone and make certain that it is free of any woody vegetation. Repair any eroded areas around your pond before they become major issues. Erosion repair can easily be done in the fall months when you can overseed and apply an erosion blanket to allow for soil stabilization until the new seed germinates.
- Falling leaves and other yard debris may blow into your lake or pond. Try to keep leaves, clippings and other debris out of the waterbody as this adds nutrients which could lead to the growth of algae and other unwanted vegetation.
- If your pond has a fountain, now is the perfect time to schedule an Oil and Seals service which should be performed every three years. For those who live in the colder climates, you may desire removal and winter storage for your fountain. If so, this should be completed by early December.
- Liming is an important method for increasing alkalinity levels and fish productivity in ponds. This process, if needed, should be done in the fall or winter as it can have adverse effects on fish growth and algae production during the growing season.
- Fall is a great time to stock Rainbow trout. Trout serve as a very entertaining fish to catch and will survive in mid-Atlantic ponds during the fall, winter and spring months. During this time they transform your warm water fishery into a fun and entertaining cold water fishery that everyone can enjoy.