

SPRING 2013

# Aquatics<sup>in</sup>Brief



Volume 7, Issue 2

## Inside:

Page 2

**OPERATION:  
Mosquito Control**

**Grass Carp –  
Dispelling the Myths**

Page 3

**Pet and Ponds:  
The Good, the Bad  
and the Ugly**

Page 4

**I AM “Part of The  
SOLution”**

**Notes from our 2012  
Volunteer of the Year**

Page 5

**New SOL  
Aaron Cushing**

Page 6

**Phoslock – A New  
Tool for Water Quality  
Restoration**

**Seeing Is Believing!**

Page 7

**Reduce Plastic. Be  
“Part of The SOLution”  
Check Us Out...**

Page 8

**Ponder These Thoughts**

## Pets and Ponds: *The Good, the Bad and the Ugly*

By Gavin Ferris, Ecologist

There can be a cost to doing a job too well. At its core, a stormwater basin only needs to absorb and slowly release excess runoff, and need not be pretty, attractive, or biodiverse. To be as valuable an asset to the community as possible, however, it needs to be all of these things, and it is our job as pond managers to make these facilities function both as stormwater retention devices and as idyllic natural settings. While a well-maintained stormwater pond may indeed also be a beautiful habitat for wildlife and an aesthetic pleasure, it still poses certain hazards that pet owners should be aware of.

Any natural setting contains certain dangers that pet owners need to mitigate when enjoying time outdoors with their dog, especially when bodies of water are involved. Water may be deeper than expected, and even strong swimming dogs can be imperiled by strong currents. Debris may also be hidden beneath the surface that can injure or entangle a swimming pooch. A pond designed for stormwater maintenance may also include drains and underwater structures that could pose additional hazards. These drains can be

especially dangerous as draining water may be too swift to swim against, and may pull your dog under. Storm-swollen ponds are going to be particularly turbulent as water is rushing in from the neighborhood and out through the drainage structures. While your pond may be beautiful, it is best to save the swimming for the beach or an area set aside for safe dog swimming, like a retriever training area.

**Any natural setting contains certain dangers that pet owners need to mitigate when enjoying time outdoors with their dog, especially when bodies of water are involved.**

It is also best not to treat your pond as a giant water dish while taking Fido for a walk. Human-caused pollutants like spilled automotive chemicals and residential pesticides are one concern, but a more likely danger is coliform bacteria. High populations of Canada geese in suburban neighborhoods

*Continued on page 3*

**SOLITUDE**  
LAKE MANAGEMENT

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

## OPERATION: Mosquito Control

By **Lisa Richards, Fisheries and Wildlife Biologist**

**E**very summer it happens: you go outside for a nice day and you end up a victim to mosquitoes. They are annoying pests and also carry deadly diseases. Fortunately, there are precautions and steps you can take to protect yourself from these nuisances.

The Asian tiger mosquito (*Aedes albopictus*) causes the most complaints of all mosquito breeds in the mid-Atlantic. Every year, thousands of calls are made to state and local agencies about mosquito issues. Nearby lakes, ponds, streams, and drains are usually blamed for the cause; however, Asian tiger mosquitoes do not breed in bodies of water with natural soil. Instead, they breed in artificial containers. They also have a limited flying radius of only about 200 yards, so if you are bitten by this type of mosquito, check your yard or porch for standing water in containers such as flower pots, corrugated plastic drainage hoses, bird baths and tree holes. By simply emptying the stagnant water, you are eliminating the breeding ground this mosquito requires. Asian tiger mosquitoes can carry several diseases, specifically West Nile. Keeping your yard and surroundings clear of breeding containers

is an easy and important step to protect yourself.

Other species of mosquitoes do utilize lakes and ponds for breeding. Water bodies should be properly managed to help control these pests. Warm, stagnant water is an ideal place for mosquito breeding. Aeration in a pond can help to manage water temperatures and keep the water circulating. Overgrown vegetation around lakes and ponds can provide shade for mosquito larvae to hide in, so buffers should be trimmed and managed. Many fish and amphibians consume mosquito larvae as part of their regular diet. Stocking minnows is another natural way to keep the mosquito population under control. Finally, certain aquatic plants, such as cattails, provide a resting area for adult mosquitoes and should also be managed or removed.

So, the next time you find yourself itching at all of those mosquito bites, remember these important tips for reducing mosquitoes in your community! ■



## Grass Carp – Dispelling the Myths

By **David Beasley & Aaron Cushing, Fisheries Biologists**

**A**s pond and fisheries managers, we are often tasked with manipulating submersed vegetation in lakes and ponds. For various reasons, there may be limitations on the use of herbicides as a management tool. As an alternative, triploid grass carp (also known as white amur), are often used to help control unwanted aquatic vegetation due to their ferocious appetite for submersed vascular plants and some types of branched algae. These fish are regulated by most states, and a permit is typically required in order to stock them in your lake or pond. In some states however, they are not even allowed.

Although grass carp are commonly stocked across the country, there are many myths surrounding them and how they are used in aquatic vegetation management. Many pond owners who have stocked them in the past will say they didn't work. Others have a lot of questions concerning the impacts, once stocked: How fast will they reproduce? Will they eat everything? Won't they get out? The truth is, when

stocked properly, all of these concerns can be avoided.

In 1983, US grass carp producers began production of a sterile (triploid) form of grass carp, meaning they cannot reproduce. The fact they are sterilized is a step in the right direction, but other measures need to be considered. Many people have learned through experience, or are told, that grass carp cannot control their submersed vegetation. Unfortunately, in many cases, this is a misunderstanding and human error played a role in the failure. Prior to stocking grass carp, it is very important to have accurate expectations surrounding what control you can achieve. Stocking rates, sizes, time of year, the species of vegetation present, how quickly you want results and even possible predators all play an important role in the successful introduction of grass carp. Since their mortality rate averages 20% annually, grass carp need to be restocked over time to maintain a sufficient population.

If the vegetation species is within the diet

of the grass carp, then the higher the carp's population is, the better control you will achieve. However, these carp can consume up to their body weight in vegetation each day while actively growing, and up to 80% of their weight daily once they become adults.

Often people want to eliminate all the unsightly vegetation in their pond as fast as possible and stock too many fish, only to find the carp quickly grow and consume all plants. This will leave the available nutrients that were once tied up in vegetation to fuel algae growth, leading to undesired blue-green algae blooms which produce toxins. Excessive grass carp also lead to the loss of habitat for smaller fish and wildlife and overstocking has many negative effects and should be avoided.

If using grass carp to control unwanted vegetation, you should only stock enough to eat a particular quantity of plants per day so that not all vegetation is wiped out. Please consult with a fisheries biologist prior to stocking grass carp. ■





## Pets and Ponds *Continued from front cover*

mean that the ponds frequented by waterfowl and areas downstream of dropping-laden fields are likely to have dangerously high coliform bacteria counts, and should not be treated as potable, even for your pets. True, wildlife drink from these ponds all the time, but domestic pets do not have the constitution of wild animals, and if their digestive systems are irritated by contaminated water, guess who gets stuck scrubbing the carpets? You do. So if you think your dog might need a drink during your stroll around the pond, bring a water bottle. Female dogs can also develop urinary tract infections from exposure to contaminated water; one more reason not to let them swim in the storm basin.

While we're on the subject, it's worth considering the wildlife that may be around the pond and the impact they may have on your pet's health. First, ponds are often home to aquatic mammals like muskrats, nutria, beaver, and other critters that swim in the water like frogs and ducks. If your dog is anything like mine, such a target may be irresistible, and an unleashed canine may charge headlong into the water in pursuit of this perceived invader. As previously discussed, this may create a dangerous situation in and of itself, and adding a frightened wild animal with claws and teeth into the mix does nothing to make it less so. Ponds are also attractive places for raccoons to visit, and raccoons are the country's #1 vector of rabies. Good leash control and diligent maintenance of a vaccination schedule are vitally important to a dog's health and safety in a natural area.

Diseases other than rabies can be contracted when out in nature as well. Mosquitoes can carry heartworm, which if left untreated will be fatal to a dog. A more recent development is the increase in Lyme disease in the mid-Atlantic region. The exclusion of natural predators and hunters from residential areas has led to an explosion in the deer population, which has, in turn, led to high numbers of disease-vectoring ticks. Your pond is a water source for wildlife, and the vegetation around it a source of food and cover, meaning that deer will frequent that area more than others and the risk of picking up a tick is increased. Lyme can be fatal to dogs, so please consult your veterinarian about Lyme vaccines to protect your canine companion as well as flea and tick treatments and heartworm preventative medication.

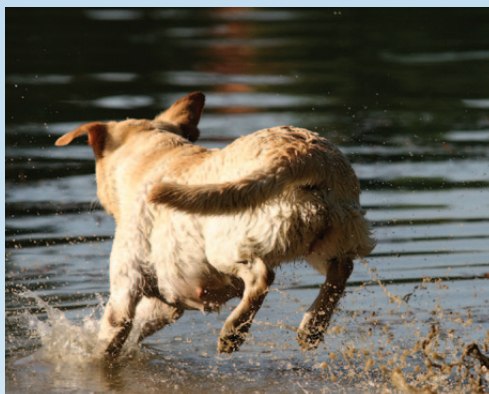
You may have noticed that in this discussion about pets I have only talked about dogs. Cats are also prone to the same hazards around a pond, and should also be vaccinated against rabies and

**The exclusion of natural predators and hunters from residential areas has led to an explosion in the deer population, which has, in turn, led to high numbers of disease-vectoring ticks.**

other transmissible diseases, protected by flea and tick prevention, and kept away from wild animals and hazardous areas. Unlike with a leashed dog, this is very difficult to achieve with a cat, and so, if you'll excuse my soapboxing for a minute, cats should live inside. There is an environmentalist argument for this, in that free-ranging housecats kill billions of native

songbirds and small mammals every year, but it is also for the cat's own good. While it is true that large predators are unlikely to be in your neighborhood, we do have plenty of foxes, owls, hawks, and even coyotes in some areas. I have personally found cat bones in owl pellets, tabby cat fur in coyote droppings, and once found a cat's remains in a hawk's nest. I apologize for my stark tone, but when I find such evidence I am struck with the thought that this may have been some child's pet and only wish to prevent future incidents. The only way to keep your cats safe from teeth and talons is to keep them inside. If you give in to their desire to roam free, you must be aware that someday they may not come back.

Please do not let me frighten you away from enjoying the natural beauty of your neighborhood pond or other green space. Nature is indeed a joy to experience for us and for our pets. One needs to recognize that nature also demands respect, and that remembering our boundaries maintains safety for ourselves, our pets, and our wild neighbors. In my experience, this respect and appreciation of the independence of nature makes time afield all the more enjoyable, and I wish only the same for you. Have fun, and stay safe. ■



## I AM “Part of The SOLution”

### 2012 Volunteer of the Year — Shannon Junior

I love dogs. Not in the way that normal people love dogs, but in the way that crazy people love dogs. Sometimes I talk about my dogs so much that people get confused and think I must be talking about my children. I’ve had as many as six at a time, but am holding steady at “only” four right now. All of the dogs that I’ve ever owned have been homeless when I met them, and there has only been one that I have brought home “on purpose.” I am a sucker for a dog in need, and I am exactly the kind of person that should never set foot in an animal shelter.

But where I live in Madison County, Virginia, they cleverly situated the shelter right next to the landfill. After driving by it for 3 years on the way to drop off my trash and recycling, I finally broke down and stopped



*Shannon was instrumental in encouraging her co-workers to participate in several team volunteer events throughout the year.*

in for a visit. My life has never been the same. Before that day, I was blissfully unaware that hundreds of dogs and cats were being euthanized in my community every year. After that day, I made it my mission to do something about it.

It was a very slow process. Madison is a rural county with limited funding for the shelter, no leash law, a very low spay/neuter rate, and minimal awareness or concern about the plight of homeless animals. I started off by visiting the shelter on Saturdays to walk the dogs and spend time with them, which helped me realize how quick the turnover rate of animals was. I started taking photos of the dogs and creating flyers that I posted all over town. I contacted

the local newspaper, and they agreed to highlight 2 adoptable dogs each week. I worked with the County Administrator to get us approved as a PetSmart Charity, and began bringing adoptable dogs to the Culpeper store on Saturdays. Our adoption rate began to improve, and I started to believe that change was possible.

Then I began to work on fundraising. My friend Jimm at Sharp Rock Winery graciously agreed to host a fundraiser for us at his vineyard. The shelter staff helped to organize a garage sale with donations from the community, and we also held a Dog Wash that was a rousing success. Prince Michel Winery gave us the opportunity to be a Charity of the Month as part of their community outreach program. Our shelter began to get a lot of local recognition, and our donation rate increased exponentially.

The biggest change occurred when I started a Facebook page. It gave the shelter the opportunity to reach a wider audience and put us on the radar of rescue organizations. Our fan base grew slowly – we held steady at about 50 fans for almost a year, but then things started to take off. We currently have almost 900 fans, and the number grows every day. We now have about a dozen rescue groups that pull dogs from us on a regular basis. We have had people come from as far away as Indiana and Wisconsin to adopt our dogs! That’s pretty amazing for a small shelter in a rural part of Virginia.

Last year, SOLitude Lake Management started The SOLution, a program to encourage our employees to volunteer to help create a better world. Whether it’s cleaning the bay, teaching kids to fish, donating gifts to underprivileged families, or helping animals in need, we are encouraged to follow our passions to be “part of The SOLution.” This was especially exciting for me because it gave me the opportunity to earn donations for the shelter for work that I was already doing. Another perk of the program is that we are able to receive paid time off in exchange for group volunteering events that take place on weekends. The entire staff of our Fredericksburg office



*Shannon totaled over 200 hours of volunteer service in 2012, mostly helping the dogs at the Madison County Animal Shelter find their “forever homes” at various adoption events.*

joined me to help out at the Dogapalooza Adoption Event last fall at PetSmart. The staff had a great time and earned an extra day off, and best of all, two of the long-term residents of the shelter found their “forever homes” at the event.

My biggest reward from The SOLution program was receiving the Volunteer of the Year Award, for which SOLitude donated



*Shannon received \$500 towards a charity of her choice for winning SOLitude’s 2012 Volunteer of the Year Award and another \$1,030 donation to thank her for over 200 logged volunteer hours within the year.*

more than \$1,500 to the Madison County Animal Shelter. The funds went directly to our Spay & Neuter account to reduce the cost of adoptions from the shelter, and there are many dogs and cats sleeping in warm beds and getting their bellies rubbed right now as a direct result of The SOLution program!

I won’t say that the last two years at the shelter have been easy. My first fundraiser cost me over \$500, and I barely raised \$200. Sometimes I really miss sleeping in on Saturdays, and my gardens have suffered some serious neglect (You can also probably hear my husband in the background saying, “Me, too!!”). One of the mantras of animal rescue work is “You can’t save them all” – I don’t want to talk about Big



# New SOL

In each issue, staff members from SOLitude will be highlighted. It is our pleasure to introduce the incredibly talented members of our staff 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 a biology degree and why?**

**A** When I was young, my father took me trout fishing on the Stillwater River near Absorkee, MT. After every fish we caught, I asked my dad a million questions. I think he got tired of it so at 6 years old my parents got me a 10-gallon aquarium for my room and a bunch of books about wild fish and tropical tanks. It wasn't long before I knew more about the fish for sale in the pet store than the employees!

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

**A** I was born near Billings, MT and at 6 years old, my family moved to Buffalo, NY. I attended the State University of NY, College of Environmental Science and Forestry (SUNY ESF) at Syracuse, where I earned a BS in Environmental and Forest Biology. From there, I earned a MS in Biology focusing on Fisheries Ecology and Management from USGS Arkansas Cooperative Fish and Wildlife Research Unit. I conducted a three-year research thesis studying the movement and survival of rainbow trout in the catch-and-release areas of AR tailwaters.

I accepted a Fisheries Biologist position with a federal research lab and assisted with several fisheries projects sponsored by the Army Corp of Engineers, including the development of a 3D underwater fish tracking technology. I gained invaluable experience working on the

largest hydroacoustic fisheries project ever conducted!

I pursued SOLitude Lake Management when I saw an opportunity to increase my professional growth, work hands-on with numerous fisheries clients and return to the east coast, closer to my family.

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

**A** When I was a graduate student, my research method for tracking tagged trout was radio telemetry. Being able to put fish to "sleep," perform surgery, and stitch them up was pretty cool.

**Q What are you most passionate about professionally? What excites you most about your work and the contribution you can make?**

**A** I really enjoy seeing the results of our fisheries management planning and hands-on work. With all the energy and time that goes into each project, it is great to see it all pay off with exceptional fishery results and a satisfied client. When I am doing this kind of work, it feels more like fun than work for me.

**Q What is your best fishing tip?**

**A** In areas that have a lot of fishing pressure, I seem to do well with live or natural looking baits. If you're in a popular fishing spot, fish will see all kinds of bizarre lures in front of them and will learn not to go after those.



**Aaron Cushing,**  
*Fisheries and Wildlife Biologist  
Environmental Scientist*

**Q What was your best catch?**

**A** I caught my biggest fish during graduate school, while fishing out of the town lake in Fayetteville, AR. It was my first time fishing for big catfish and I landed a 40-pound blue catfish right on shore! My friend said I caught the town's Goliath.

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

**A** When the weather is nice, you will find my wife, Lisa, and me with our new pup, Vancouver, out exploring our new hometown of Fredericksburg, VA. We are having fun getting to know the area and meeting new people. ■

Buddy or the other dogs I couldn't save, but I think about them every day. I prefer to linger on the happy endings. As I write this article, there are 266 dogs in the "Success Stories" album on the Facebook page of the Madison County Animal Shelter. I took every one of those photos, and nothing

makes me happier than to scroll through them. Yes, I'm crazy, but everyone has something they're crazy about. Maybe for you it would be 266 fewer hungry children or 266 pieces of trash removed from the stream in your neighborhood. Whatever it is, it doesn't take a lot to make it happen –

just one person. You'll sleep better at night and the world will be a better place.

And if we ever happen to meet, please understand why the question I ask after "So, what's going on with your pond?" is usually "So, do you have any pets?" ■

Thanks for being "part of The SOLution," Shannon!

**The SOLution**  
creating a better world

*Shannon Junior is an Aquatic Ecologist and Regional Manager with SOLitude Lake Management*

# Phoslock – A New Tool for Water Quality Restoration

By Shannon Junior, Aquatic Ecologist and Regional Manager

**S**ePRO, a provider of water quality and technology products, has a series of proven products that our team of experts and customers rely on to make our lakes and ponds balanced and beautiful. SOLitude Lake Management is fortunate to be among the first companies in the U.S. to have the opportunity to use an innovative new phosphorus binding product called Phoslock. We applied it to hundreds of ponds during 2012, and we are very excited about its implications for our clients' ponds and the Lake Management industry in general.

Over time, sediment and organic matter slowly accumulate in the bottom of a water body. This natural aging process, known as eutrophication, is one of the worst enemies of a healthy pond or lake. Phosphorus is a key component of the organic matter, and it's the primary limiting nutrient in the development of harmful algal blooms. Phoslock can literally reverse the aging process of a water body by removing phosphorus from the system.

Traditional reactionary algae management programs involve periodic treatments of algae blooms with aquatic algacide products. Although this strategy will temporarily clear up the blooms, the nutrients will be recycled through the system to fuel future blooms. More proactive and comprehensive algae management strategies are geared towards water quality improvement to minimize the conditions that



*Shannon Junior treated a pond in a community located in Loudoun County, VA. This pond was continually plagued by severe algae blooms. A trial with a new SePRO product, **Phoslock**, was used in conjunction with the herbicide program already in progress, helping to greatly improve the health of the pond. Because of the wonderful results, **Phoslock** will be added to the treatment strategy moving forward.*

are conducive to bloom formation. SOLitude implements an integrated approach that includes strategies such as aeration, beneficial bacteria, and aquatic dye to help reduce the prevalence of blooms. Phoslock is another "tool in the toolbox," and it's unique in that it directly targets phosphorus to remove it from the system.

Phoslock is derived from a naturally occurring mineral called lanthanum, which has a high affinity to bind with free reactive phosphorus. The reaction forms an inert complex known as rhabdophane (LaPO<sub>4</sub>), which is extremely stable and insoluble. As a result, phosphorus is permanently removed from the water column and is no longer available as a food source for algae blooms. The product is completely safe for use in the aquatic environment, with no adverse affects on fish, macroinvertebrates, or other wildlife.

Because of the high specificity of Phoslock, the amount required to mitigate phosphorus in a pond or lake can be directly calculated by performing laboratory testing on the water and sediment. Once the results are evaluated, a site-specific phosphorus removal prescription can be developed to directly address the nutrient issues of a water body. A phased approach can also be

implemented with applications performed over multiple years. This approach allows our clients to develop a predictable and reasonable budget for their algae management programs. ■

## Seeing Is Believing!

Our staff and clients have seen amazing results with Phoslock and many of the other SePRO products we use to treat lakes and ponds. SOLitude received five SePRO "Seeing is Believing" awards. These awards recognize a very high standard of excellence in water quality treatment for lakes, ponds, and stormwater basins that have demonstrated the effectiveness of SePRO products in improving these aquatic ecosystems. Here are some of our results from using SePRO's quality products:



*Shannon Junior treated a 1,500 acre agricultural property in Free Union, VA. The large lake was overtaken by aquatic weeds, so its recreational use became limited. The owners agreed to a low impact environmental herbicide program with **SePRO's Sonar Q** and were extremely satisfied with the results.*



*David Ellison treated two community stormwater ponds on a farm in Suffolk, VA. The larger of the ponds was taken over by filamentous algae and became an ecological issue as well as an eyesore for the community. **SePRO's Captain XTR** was used one time and the project came in under budget.*



# Reduce Plastic. Be "Part of The SOLution"

**L**IFESAVER® Bottle is the world's first all-in-one ultra filtration water bottle and was designed specifically to save lives. But think about the ways it can also help reduce plastic in the environment and save you money!

Whether you enjoy hiking, biking, camping, hunting or fishing, LIFESAVER® products are easy to carry, provide the flexibility to use water from any fresh water source and is better for the environment than bottled water.

The LIFESAVER® Ultra Filtration Water Bottle uses a highly advanced ultra-filtration system to remove bacteria, viruses, pesticides, chemicals, cysts, parasites, fungi and all other microbiological waterborne pathogens. Fill it directly from any available water source and you can be sure that you are consuming pure, pathogen-free water. It has replaceable filters which can treat up to 4,000 or 6,000 liters of water at a rate of 750ml in just under a minute without using chemicals or leaving a chemical taste. There is no need for tablets, boiling, chemicals, tubes, shaking, scrubbing, waiting or effort. The LIFESAVER bottle produces clean, sterile drinking water with no foul taste — fast!

Help create a better world and be "part of The SOLution." Be sure to look into getting a LIFESAVER bottle for you or a loved one and help reduce the amount of plastic in our environment! ■



The LIFESAVER® 4000 and 6000 Ultra Filtration Water Bottles, as well as filters and accessories, are available through our on-line store. [solitudelakemanagement.com](http://solitudelakemanagement.com)



Kyle Ellison treated a golf course irrigation pond in New Kent, VA, that was neglected for over a year and became covered in algae. **SePRO's SeClear** was applied and after two treatments, the entire algae bloom died and did not return for the remainder of the season.



(From left to right) David Ellison, Kyle Finerfrock, Shannon Junior



## Check Us Out...

**S**olitude 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 17-20

**2013 Community Associations Institute Annual Conference & Exposition** — Hilton San Diego Bayfront, San Diego, CA

### May 9

**Pennsylvania and Delaware Valley Chapter of Community Associations Institute's SOAR Annual Conference and Expo** — Citizens Bank Park, Home of the Philadelphia Phillies, Philadelphia, PA

### June 1

**Chesapeake Bay Foundation Clean the Bay Day** — Various locations

### July 26-28

**Virginia Leadership Retreat, Community Associations Institute** — The Homestead, Hot Springs, VA

### August 9-11

**Virginia Outdoor Sportsman Show** — Richmond Raceway Complex, Richmond, VA

*View videos, case studies, our blog and more at*  
[www.solitudelakemanagement.com](http://www.solitudelakemanagement.com)

*Sign up to receive our quarterly newsletter and important tips and reminders electronically.*  
Email [info@solitudelake.com](mailto:info@solitudelake.com)



## 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:

- 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.
- Have your pond's water tested. Find out early in the season if there is a chemical 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.
- If your fountains were stored during the harsh, winter months, schedule for them to be put back into the water and have them run 24/7 to increase healthy dissolved oxygen in the water.
- For all you anglers out there — don't be tempted to cast too close to the fountain! Every spring we get several calls about fountains going down due to fishing lines being sucked up into the impellers and wrapped around the shaft. This causes failed seals and expensive repairs.



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



TOLL FREE: 888.480.LAKE (5253)  
www.solitudelakemanagement.com  
P.O. Box 969, Virginia Beach, VA 23451  
Email: info@solitudelake.com • Fax 888.358.0088

- **Fountains & Aeration Systems**
- **Algae & Aquatic Weed Control**
- **Biological Augmentation**
- **Ultrasonic Algae Control**
- **Fisheries Management**
- **Water Quality Monitoring**
- **Annual Lake & Pond Management**
- **Bathymetric Studies**

PRESRT STD  
U.S.Postage  
PAID  
Norfolk, VA  
Permit No. 1048