

Aquatics **in** Brief

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Ponder These Thoughts

Goose Chase

By **Greg Blackham, Aquatic Specialist**

Resident Canada geese populations in North America are estimated at 4 million. Chances are that they have found your community pond. Even more likely is that the residents of your community consider them to be a nuisance — they can be aggressive, cause unsanitary conditions, and destroy property at a rapid rate. Their numbers have grown at an incredible pace over the last few decades and they are becoming a widespread problem in urban and suburban areas. Don't get me wrong... I love geese, but they are not a great fit for ponds in developed areas.

Before I discuss mitigation strategies I want to stress the first and most important rule in geese control. **DO NOT LET PEOPLE FEED THEM!** Feeding them creates an unhealthy relationship with humans, causes a slew of health hazards for the birds, and encourages them to return to a dysfunctional setting.

You may not realize you have a geese problem until it is too late. Often, complete control can never be achieved, but a happy medium can be found by repelling the

majority of the birds and discouraging further mating at your pond. Adult Canada geese can live more than 20 years and they mate every year, usually at the same pond. Their young generally return to their birthplace to reproduce as well. If, for example, four geese from every clutch survive to be mating adults, it does not take complicated mathematics

Controlling nesting habits is much less costly than controlling already large populations.

to see how exponential population growth occurs. Controlling nesting habits is much less costly than controlling already large populations.

According to the non-profit organization, GeesePeace, the mating season occurs from February to early April and nesting starts in late March and goes through mid-May. Gosling maturing and foraging occurs between mid-May and early July, while molting, or the

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Goose Chase *Continued from front cover*

flightless period when geese shed their outer wing feathers and regrow new ones, occurs in the span from mid-June through early August. Pond hopping and foraging occurs the rest of the year from August through February.

There are limited control methods that can be started in the summer months, but now is the best time to plan out your overall goose control management program to start up in January or February. If you can successfully repel the mating couples from choosing your pond as a suitable nesting area, this will save you the most money. Discouraging geese from choosing your pond is dependent on the local environment. The couple needs to feel safe from predators before they will be comfortable building a nest. The following methods are, in my experience, the best ways of discouraging nesting and overall desirability for geese residency in general. Keep in mind that there is no silver bullet to discourage geese. Geese are highly intelligent and adaptive, so it is incredibly difficult to fool them for a long time. And to really expel them, you may need a professional management company or state agency to help out.

The most effective and natural goose repellent is:

Tall, thick, vegetated buffer around the pond. I am not talking about a little strip of scraggly vegetation. You need a buffer at least 3 feet tall by 2 feet wide for this to be really effective.

Some less natural but also effective goose repellents are:

Monofilament line completely enclosing the perimeter of the pond or area you are trying to repel. The line should be set at about 12 inches high. Even better than one line, is two lines staggered about 6 inches vertically.

Monofilament line in a grid over the surface of the pond. The closer the lines in the grid, the more success you will probably have. The line should be about 12 inches above the surface. Unfortunately this is unattractive and less effective than buffers.

The least effective repellents are:

Noise emitting devices: horns or cannon blasts, balloons, flashy tape or lights.

Predator decoys: dog, wolf, or coyote models, owls or alligator heads.

There are many products being sold that tout high success rates but I have seen very few with much long term success. When using scaring techniques, like the wolf or owl decoys, the scaring device needs to be moved every couple of days. If they see the same "predator" in the same spot for about a week, it will not be effective once they determine it is not a threat.

The most effective way to expel and repel Canada geese from your pond is through the use of trained border collies. These dogs, under direct supervision of a trained professional, can completely scare away the birds. The process is very rigorous and intense at first

as the dogs need to completely convince the geese that this pond is dangerous. Border collies possess a rare talent of being able to perfectly simulate a wolf or other predator by crouching down and staring at the geese as if to attack. As the birds flock to the pond for sanctuary, the dog is then boarded into a boat convincing the geese that the water is not safe either. The dogs need to do this 2-3 times a day for a few weeks until the geese leave and then periodically after that when geese try to return.

Repelling geese should not be done during their molting phase. Geese molt their feathers in late June and for approximately six weeks are flightless. It would be inhumane and ineffective to try and scare them off during this time because they have nowhere to go. You may need to herd them away from sensitive areas during this time, but you should seek guidance from the state or a professional before doing so.

If you cannot discourage mating couples from residing on your pond late winter through early spring, then your next step is to consider nest and egg control.



Greg Blackham's supportive daughters, 11 year old Lilyana and 9 year old Violette, joined dad in the fun as he wrote this informative article.

Canada geese nests and eggs are protected by federal and state regulations and you will need to get a permit before destroying or tampering with any eggs or the nest. The permit is very simple and can be done online at <https://epermits.fws.gov/eRCGR/geSI.aspx>. Before registering, you should train the person who will actually be adding the eggs and familiarize yourself with the proper procedures. The only accepted methods of adding the eggs are shaking, puncturing and oiling. Oiling is the most effective and humane method and is done with 100% food grade corn oil. A good resource for these procedures can be found at http://www.aphis.usda.gov/wildlife_damage/downloads/canada_goose.pdf. By adding eggs and correctly destroying nests, the mating couple no longer has any particular attachment to your pond for the duration of the season. Using border collies during this time (but before summer molting) is highly efficient and should be done if the community is serious about controlling their resident geese.

As with all successful programs, Canada geese control begins with proper community planning. To be done right, the community needs to be well-educated and armed with the right tools for long term success. There are many state agencies and professionals that can help you develop a management strategy. Contact your State Wildlife Service Agency or local pond management professionals to learn more about local regulations, effective strategies, and helpful tips on geese control. ■

Create Excitement and Community Bonding Through Recreational Fishing

By **Matthew Phillips, Aquatic Biologist and Environmental Scientist**

Like many, some of my fondest memories growing up were the days that I went fishing. I spent countless hours by a pond or river with my Dad or fellow fishing buddies. We weren't always successful, but we always managed to have a good time. It was these early fishing adventures that helped instill a deep appreciation for the natural environment and was one of the driving factors towards my education and professional career decisions.

While we live in the suburban jungle, there are still wonderful and easy opportunities for us to enjoy the aquatic environment. Due to stormwater regulations, most neighborhoods come equipped with ponds. These ponds can easily be transformed into great fisheries for the entire community to enjoy. HOA's can create neighborhood fishing tournaments and other events to get the residents involved. These events offer a sense of community and an appreciation for the natural environment. They also provide an immense amount of fun for the people involved.

Most ponds already have fish in them, even if none were originally stocked, so many communities may not be aware of what they have in their pond. Your lake and pond management company can provide electro-fishing studies to determine the type and relative age of the fish. From this information, along with the size of the pond, it can be determined how many and what types of fish are needed to create a balanced fishery.

In order to ensure a sustainable fishery, a food source needs to be made available. Fish feeders provide one of the best sources of supplemental food for fish, but these devices may not be the most practical in neighborhood settings. Talk to your lake and pond management company about yearly minnow stocking. Stocking minnows not only provides food for the fish but also helps reduce mosquito larvae and allows the aquatic community to prosper.

Fish are naturally attracted to structure or underwater objects. Adding fish cover or submerged structures in the pond provide the necessary underwater habitat for the fish. Strategically placing



Your lake and pond management company can provide electro-fishing studies to determine the type and relative age of the fish.

this structure in areas that are constantly fished will only increase your chance of catching a whopper. If your pond doubles as a stormwater BMP, there may be limitations to what structure would be allowed, so make sure you consult with a professional to help you make a good decision.

Fountains, diffused aeration and beneficial plants and bacteria, in combination, will further improve the habitat and create a very healthy lake or pond. In turn, this will create a healthy fishery. Experienced biologists can create a healthy and fun fishery for your community to enjoy for years to come. If you have any questions about what is needed to improve your specific pond or lake, talk to a fisheries biologist or other similarly qualified pond management professional, and they can tailor a solution that is right for you. ■

The SOLution *Creating a Better World*

As part of our commitment to environmental stewardship and community involvement, our employees strive to foster our company core values both inside and outside of the workplace. Through volunteerism, activism, outreach and fund-raising, we believe that we can help to make a difference in the world. By building bridges in our local communities and across the country, we hope to increase our sustainability footprint and make our mark as a company that sincerely cares about the world we live in.

Check out a few of the many fun and inspirational volunteer events the SOLitude team supported so far this year...

Brandywine Polar Plunge

West Chester, PA

Our brave Ecologist, Gavin Ferris, plunged into the frigid 38 degree Brandywine Creek as his local teammates rallied to support him. Funds raised by this annual Polar Plunge event support environmental efforts of the Brandywine Valley Association as the group continues to protect and conserve the region's natural resources. Gavin even won an award for his classy plunger attire this year!



Dogapalooza Adoption Event

Fredericksburg, VA

The Fredericksburg team volunteered with pet adoptions at this year's Dogapalooza event. Shannon Junior, Aaron Cushing and Jeremy Haley helped walk and show off the dogs at the Madison County Shelter and Old Dominion Humane Society booth. 38 dogs were adopted from the booth and a total of 307 dogs and cats were adopted at the event!



Watershed Day, Graves Mountain Lodge

Syria, VA

Shannon Junior, Aaron Cushing and Lisa Richards taught the importance of watershed conservation to over 100 Madison County, VA 6th graders at Watershed Day. The SOLitude team spent most of the day in rubber boots teaching kids how to use a kick seine and identify some interesting aquatic invertebrates. The kids were beyond fascinated with the creatures they found!



Brandywine Creek Annual Cleanup

West Chester, PA

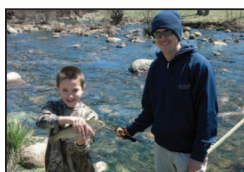
Marc Harris, Greg Blackham and Tracy King canoed down the Brandywine Creek and cleaned a long stretch totaling 3.75 miles! We recovered an old kitchen sink, garbage can, tents, tarps, basketballs, water bottles, cups and other miscellaneous trash from in and around the creek. John Phelps supported the efforts with roadside trash clean up surrounding the creek. All in all, a very fun and successful adventure!



Heritage Day, Graves Mountain Lodge

Syria, VA

The Fredericksburg team volunteered at Heritage Day, which was a fun-filled day of fishing and activities for kids under 12. Over 100 kids stopped by to see the big fish in SOLitude's tank, while our volunteers educated them about the environment and electrofishing. Our fisheries experts even helped the kids catch a few fish.



Family and Youth Casting Call

Washington, DC

The Fredericksburg team was excited to sponsor and volunteer at the 2013 Family and Youth Casting Call. This event was all about getting kids outdoors, active and "hooked" on fishing. Our fisheries team stocked the canal with approximately 2,000 bluegill and bass to help these amazing kids have an enjoyable fishing experience. Our large fish tank and shad spawning obstacle course game were also a huge hit with the kids.



Camp Holiday Trails Restoration

Charlottesville, VA

We completed phase 1 of the lake restoration plan for a lake at Camp Holiday Trails, a camp for kids with special health needs. All labor and materials were donated by SOLitude and our amazing partner, Aqua-Master. The new aerator will improve water quality and help return it to a usable state for the children!



The Foodbank of Southeastern Virginia

Hampton, VA

SOLitude's Hampton Roads team stuffed over 1000 bags of food so far this year for the local Foodbank's Backpack program which gives underprivileged children in Title 1 schools a supply of nutritious food for the weekend. The team also sorted several boxes of donated food items for local churches and organizations to select needed food items for residents in need.



Join us in the fun and help support our local communities! We encourage our clients, partners, family and friends to all be part of The SOLution. If you would like to share a non-profit's goals or upcoming event, contact our Director of Marketing, Tracy King, at tking@solitudelake.com. ■

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 Fisheries and Wildlife Sciences degree and why?

A We had a career day in high school at which point I was fairly certain I was going to be a geometry teacher because I liked kids, loved geometry and LOVED the summertime! But a Fisheries Biologist from our local department of conservation came in and gave a presentation about his field of work. At the time, I was fishing 4-5 times a week and had no idea a career like this even existed. I love everything about fish and fishing, so it was an easy decision!

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

A I grew up in Missouri and during my higher education, I worked with the Missouri Department of Conservation identifying macroinvertebrates from benthic lake samples and transplanting aquatic vegetation to benefit lakes. I received a Bachelor of Science in Fisheries and Wildlife Sciences from the University of Missouri-Columbia and then worked for the US Geological Survey, collecting silver and bighead carp for processing, imaging, and aging. I accepted a job at the US Fish & Wildlife Service in California monitoring juvenile Chinook Salmon outmigration and Green Sturgeon spawning grounds and outmigration. After traveling abroad, I moved back to Missouri to work for a leading lake and pond management company in the Midwest, where I gained further experience servicing lakes, ponds, fountains and aeration systems.



Jeremy Haley,
Fisheries and Wildlife Biologist

All of these experiences, combined with a passion for the outdoors and aquatic environments, have ultimately led me to join the SOLitude team.

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

A I studied abroad for a wildlife management program in Africa and we helped capture rhinos and other wild animals for relocation. It was an amazing experience!

Q What excites you most about your work and the contributions you are making?

A I always liked field work and collecting data for research, but since my start with SOLitude, I realized how much I like pond management from a fisheries standpoint. I've always been good at brainstorming and problem solving, and this quality allows for different viewpoints and ideas that are often very beneficial to my client's lakes, ponds and fish.

Q What is one of your best fishing tips?

A Confidence, confidence, confidence....always have confidence in your bait, otherwise you're probably not going to use it properly... or have as much fun!

Q What would be impossible for you to give up?

A Awesome, unknown outdoor adventures. You will always find me outdoors enjoying life! ■



Congratulations to our Volunteer of the First Quarter, Marc Harris!

Marc joined the SOLitude team in January 2013 and wasted no time becoming part of The SOLution. He spent three mornings with the Hampton Roads team at the Foodbank of Southeastern Virginia helping with the Foodbank's Backpack program and also helped assemble furniture for their office staff. And, on his own time, he spent several Saturdays renovating two houses in Virginia Beach and Portsmouth, VA for the Habitat for Humanity. Marc has truly embraced our program, The SOLution, and our company culture from his very first day. Our management team is extremely proud that we are finding young, bright talent who also believe that it is important to give back to the environment and our communities. Congrats Marc! ■

Love Your Mother Earth!




We would like to thank all of our Facebook, Twitter, LinkedIn, Pinterest, Instagram, YouTube and Google+ fans for connecting with us on our various social media pages. In the month of April, SOLitude pledged to plant 1 new tree for every new social media follower to celebrate Earth Day and Arbor Day this year.



We are happy to announce that in conjunction with the National Forest Foundation, the SOLitude Lake Management family planted **100 new trees** this past spring!

Thank you for all of your support and for joining the fun! If you aren't already part of the action, connect with us today on your favorite social media site! ■

1 LIKE = 1 

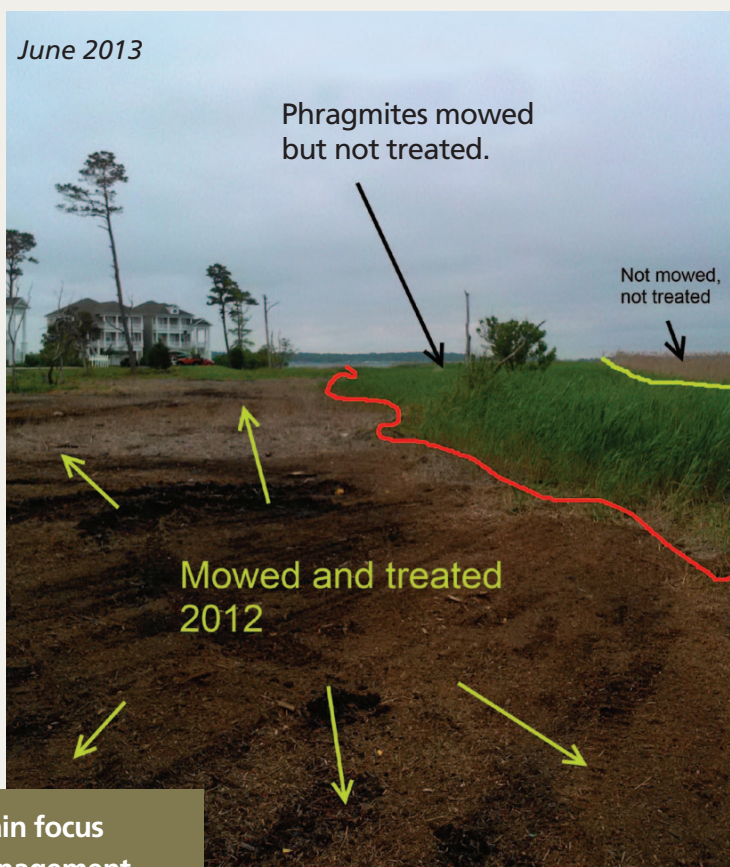
LOVE YOUR MOTHER 

Phragmites Combo Punch

By **Greg Blackham, Aquatic Specialist**

For those of you struggling with phragmites and invasive species control, you know how frustrating eradication goals can be. Traditionally, the main focus of a phragmites management program is herbicide treatment in the fall. During the fall the plants take up more herbicide than at any other time of the year because of the translocation process, when the plants are sending all their sugars and nutrients to their rhizomes for the winter. While this is still the best time for treatments in any serious eradication pro-

June 2013



Traditionally the main focus of a phragmites management program is herbicide treatment in the fall.

gram, I have noticed even better results with a multi-faceted approach.

At several communities in Delaware with shoreline phragmites stretches, we have taken an aggressive stance with phragmites suppression and eradication measures. We began with a complete mowing of the previous year's plants in the spring with equipment specialized for mowing in a marshy/tidal environment. Then, in early June, as the plants got to about waist high, we conducted an herbicide suppression treatment. Because the phragmites had been mowed, we were able to get an excellent blanket of coverage over the plants. We knew that this treatment would not completely kill the plants since the rhizomes themselves would not uptake enough herbicide for complete control, but what we did accomplish, however, was suppressing the

plants from further growth in the season.

By the fall, the plants were still waist to chest tall and did not have a chance to produce any seed heads. At this time, we were able to perform another herbicide application and uniform coverage of all the target plants. When assessing the plants this year, I have seen dramatic results indicating more success than I had thought possible. Not only did the process lead to a more aesthetically pleasing result without a 12 foot wall of phragmites blocking all views throughout the year, but the plants never produced seeds. This will help combat the self-perpetuating nightmare that is phragmites. When I have a serious discussion with people about reasonable eradication goals, I usually err towards 5 years or longer, but I am now more optimistic that this timeframe could be cut in half!

Take a look at the picture from a community in Delaware. In the illustration you can see how well this approach has worked. Happy phragmites hunting! ■

Energy Cost Savings with LED Bulbs

By **Kimberly Niesel, Director of Business Development and Client Relations** and **Tracy King, Director of Marketing**

Have you updated the inefficient light bulbs in your house and office to more eco-friendly light-emitting diode (LED) bulbs yet? If not, chances are the thought has crossed your mind. LEDs are everywhere in the light bulb aisle of your local hardware store. These bulbs produce a small fraction of the heat of fluorescent and incandescent lights. Traditional incandescent light bulbs are known to waste about 85-90 percent of the energy they consume on heat. Yes, there is a higher upfront cost to purchase LED bulbs, but the increase of usage hours and the decrease in energy consumption and your total electric bill will make it well worth the switch.

Now you are probably saying, "What does this have to do with my lake or pond?" Well, if you have an aerating fountain with lights, chances are it is still using inefficient incandescent bulbs as well. Due to the Energy Independence and Security Act legislation that went into effect early this year to address the problem of inefficient light bulbs, certain deemed "inefficient" bulbs, like the 75 watt halogen incandescent bulbs used in many fountains, are actually being phased out and will no longer be made in the United States or exported to U.S. Suppliers. Retailers can sell what they have on the shelves, but once this supply is gone, it is gone.

SOLitude Lake Management has taken preemptive steps to ensure our clients' fountains do not "go dark" as a result of this legislation. Working in conjunction with fountain manufacturers, we have a solution that will make your fountain bright and beautiful and will save you money in the process. Instead of having to replace your lighting fixture right away (which could be a considerable expense), we will only need to replace the bulbs with more energy efficient LED bulbs when the 75 watt halogen supplies run out.

Fortunately, these changes will come with cost-saving and performance benefits that will provide you with good long term value. The first benefit you will see is the beautiful, bright glow around your fountain. The LED lighting actually has a slightly brighter and clearer light than your current halogen



Finally, and most importantly, the new bulbs are rated for 16-20 times the usage hours or "life" of the halogen bulbs they replace.

lights. Next, you will see lower cost in your energy bill. LED bulbs cost an average of 85% less to run (depending on usage) than their incandescent equivalents.

Finally, and most importantly, the new bulbs are rated for 16-20 times the usage hours or "life" of the halogen bulbs they replace. This will result in a significant savings in the expense associated with replacement bulbs and the labor to replace them 2-3 times per year. Win, win, win!

Contact our office anytime with questions. And as always, SOLitude Lake Management will continue to keep you informed of changes in legislation and new trends in our industry that will affect you. It is just one more way that SOLitude Lake Management is looking out for you, and one more way that we are all looking out for our water resources and our environment. ■

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).

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

September 27

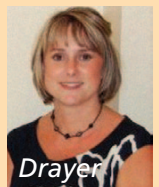
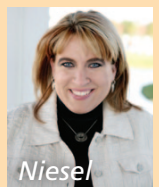
South Carolina Chapter of Community Associations Institute Annual Community Associations Day and Trade Show
Sheraton Hotel, Myrtle Beach, SC

September 27

Southwest Virginia Chapter of Community Associations Institute Annual Community Associations Day and Trade Show
Sheraton Conference Center, Roanoke, VA



Please join us in congratulating our Director of Business Development and Client Relations, Kimberly Niesel, for her part in the award winning event for the Central Virginia Chapter of Community Associations Institute (CAI). Along with the Chapter Executive Director, Stacey Drayer, Kim, as the Social Committee Chairperson, created an event called "The CAI INFO-mercial" that included programming to benefit all membership types through education, networking, and professional fellowship. This successful event was recognized in the Member Services Category at the CAI National Conference this spring in San Diego, CA. Kim and Stacey were on hand to accept the award. Congratulations to Kim and the Central Virginia Chapter of CAI!





TOLL FREE: 888.480.LAKE (5253)
www.solitudelakemanagement.com
P.O. Box 969, Virginia Beach, VA 23451
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Aquatics**in**Brief

SUMMER 2013 | Volume 7, Issue 3

Ponder These Thoughts

SOLitude Lake Management wants your pond to be prepared for the summer heat. With this in mind, we recommend you consider the following tips as you enjoy the summer months on your lake or pond:

- Warm summer weather seems to bring out the best and the worst in ponds. Although algae and aquatic weeds seem to be more abundant at this time of year, a year-round maintenance plan is the best way to ensure a healthy pond all year long.
- Summer is the perfect time to think about aeration. The warmer water temperatures can be detrimental to the overall health of your pond. Increase oxygen, reduce stagnation and stratification, and prevent algae, mosquito breeding and many other water quality problems with a properly sized aeration system.
- Mosquitoes can ruin summer fun. Think about stocking your pond with minnows and other small fish that help to control the mosquito population. This, along with larvicides, beneficial buffer plants, and proper aeration, can eliminate a potentially big problem.
- Living on a lake brings responsibility. Remember to respect the natural buffer around the lake and never mow all the way to the water. Also, be sure to keep clippings and other debris out of the water as this adds nutrients and spurs algae growth.
- Summer months = Good Fishing! Make sure you maintain your fish habitat with good water quality and cover. Consult our experts if you have questions about proper maintenance of your fishery.

