

AquaticsⁱⁿBrief

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One for the Birds

By **Shannon Junior, Aquatic Ecologist**

I was standing by a pond with a client last week when he asked me, "What is that black bird with red on the wings?"

I answered, "It's a Red-winged Blackbird."

He looked at me with serious doubt, probably thinking that I was making fun of him. "No, really," I said. "That's the name of the bird."

His pond has cattails all around the edges, and there were probably about 10 male blackbirds flying around and singing in the cattails. It surprised me that he did not know what the bird was, but then again, I'm sure he doesn't have a shelf full of field guides, and it was likely not worth his trouble to go online to look it up.

I am a geek about wildlife. One of the best parts of my job is the opportunity to see hundreds of different ponds and the birds and other animals that inhabit them. But I definitely understand that most people do not spend quite as much time near the water, and may not be able to identify all of the birds they see around their ponds. This article highlights some of my favorite avian pond visitors.

Red-winged Blackbirds are among the most common of the birds seen around ponds. As the name would imply, they are black birds with red "epaulets" on the wings, and if you look closely you will also notice a pale yellow wingbar below the red. The female birds are smaller than the males, and are a non-distinct dark brown color with a paler, streaked breast. The females build their nests in the vegetation around the edge of the water, and especially favor cattails. The males help to defend the nests, and may swoop down on unfortunate passers-by that get too close, but would not actually harm or attack humans. The birds may produce up to three clutches of eggs in a single season. We have to be especially careful when chemically treating cattails to avoid nesting birds, and schedule cutting and removal activities outside of the breeding season.

Red-winged Blackbirds eat primarily seeds and fruit, but will also eat small insects and other invertebrates. In the late summer, the birds leave the ponds and join mixed flocks along with cowbirds, grackles, and starlings. These huge flocks of thousands of birds are an impressive sight

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Great Blue Heron



Purple Martin House



*A Full Service
Lake and Pond
Management Company*

Benefits to Choosing a Systemic Herbicide for Nuisance Aquatic Vegetation in Your Pond

By Sarah Miller, Aquatics Specialist, Atlantic Coast
SePRO Corporation

When weeds take over, an aquatic herbicide is often needed to restore balance to ponds, lakes, and other waterbodies. Depending on the weed species and individual dynamics of your pond, you often have the choice of selecting either a *systemic* herbicide or a *contact* one for control of nuisance submersed (below surface) and floating aquatic weeds. The primary difference and benefit of a systemic herbicide, is target plant kill and longevity of control. Contact herbicides only kill the parts of the plants they touch or come in contact with and are often less selective, meaning they can affect non-target species that may be beneficial to the ecosystem. Systemic herbicides are taken up by plant tissue and translocated or moved throughout a plant's roots, shoots, and foliage. In doing so, the



Sometimes it may seem that the systemic option is more expensive, but the long-term benefits to the overall health of the pond and cost of one treatment versus many during the season will usually balance out any difference in cost.

herbicide can effectively control the entire plant. When a contact herbicide is used, some plant biomass like roots that lie beneath the sediment can survive and regrow into new plants over the summer necessitating retreatment during the same season. Systemic herbicides in the *Auxin* family, like Renovate*, are selective to dicot or broad-leaved species like milfoils and lilies while other systemic herbicides like Sonar* Aquatic Herbicide can selectively remove various weed species by the dose applied, treatment timing, and sensitivity of the target weeds.

An additional benefit of several systemic herbicides is a slower die off of target plant tissue. A slower die back of target plants (weeks vs days) can minimize the potential for rapid decline in dissolved oxygen content. Rapid control of many stands of mature plants can result in a swift drop of dissolved oxygen in aquatic environments as all that plant material quickly decomposes. Experienced applicators examine ponds closely prior to making any treatments with herbicides to decide what treatment solutions will provide the most effective control while protecting the non-target

plants and aquatic organisms in the waterbody.

Sometimes it may seem that the systemic option is more expensive, but the long-term benefits to the overall health of the pond and cost of one treatment versus many during the season will usually balance out any difference in cost. These treatments can often yield many years of successful weed control depending on the target species. Even systemic herbicides, however, cannot control seeds or other reproductive plant parts that are not connected to the plant at the time of treatment. This is one of the reasons early season application is best; early treatment can prevent production of seeds, thus breaking the cycle. An early start can also mean faster control, as active plant growth is necessary for many systemic herbicides and slow growth later in the season (when plants are mature) may require additional treatments or higher doses. Now is the time to have a professional assess your pond and prescribe a custom treatment solution.

Aquatic herbicides have been extensively researched by the US EPA, government experts, universities, and registrants like SePRO Corporation in an effort to advance the science of aquatic plant management. Your Aquatic Biologist/Specialist can assess the problem weeds in your pond and assess your herbicide needs and options. They can then provide the best options for managing the weeds and maintaining a healthy and beautiful resource. ■

*Sonar and Renovate are Trademarks of SePRO Corporation

Poke it With a Stick

By **Ethan Chappell, Aquatic Specialist**

Science is based on observation. Very often the world around us reveals itself in subtle ways if we are patient enough to open our minds and our senses. In many instances these revelations can be aided by the use of tools from satellites orbiting the planet to microscopes examining the smallest forms of life. While these scientific devices are important, one cannot overlook the scientific contribution of the simple stick, perhaps the first device used by humans to probe our world. Consider, for instance, an oily sheen covering your favorite lake or pond. With the events unfolding in the Gulf of Mexico and the abundance of petroleum products in our lives it would



Naturally Occurring Pond Sheen

be easy to assume that the film across the neighborhood or backyard pond is yet another chemical spill. However, there are all manor of naturally occurring phenomenona that can create an oily-looking sheen across the water. Enter the humble stick... friend to science and your pond.

Humans have been poking things since the very beginning. If you find yourself confronted with a substance



Problematic Pond Sheen

or film across the top of your pond, just find a good stick, which are both cheap and typically available. I would suggest spending a minute to find just the right one (after all this is scientific). Then follow in the footsteps of your ancestors and poke that stuff. If the substance fills the displaced area immediately afterwards it is most likely a petroleum based product. If the area remains open for a moment or the substance fragments, it is most likely some

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One for the Birds Continued from cover

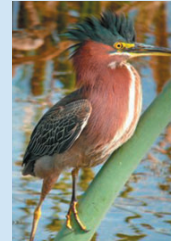
when seen flying overhead.

Perhaps the most noticeable pond visitor is the Great Blue Heron. I have frequently heard these birds referred to as "cranes", but cranes are very rarely seen in the Mid-Atlantic States and definitely don't breed here. Great Blue Heron can frequently be seen wading around the shores of ponds and lakes, hunting for fish and frogs. They may also eat small mammals and turtles, and have occasionally been known to choke to death on food that was too large for them to swallow. One of the most common misconceptions about Great Blues is that they will decimate fish populations so that there are none left for humans to catch. However, while they do eat fish, they generally don't bother with tiny juvenile fish, and can't handle fish as large as a trophy bass. In a pond with a healthy fish population and adequate structure and habitat, the heron is just a small player in the aquatic food web.

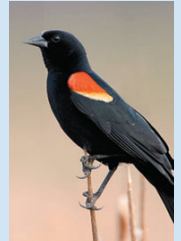
Have you ever wondered about those white bird houses you see near ponds and farm fields? These houses, often supplemented with suspended white gourds, are provided by humans for the benefit of Purple Martins. In the Eastern United States, Purple Martins nest almost exclusively in man-made structures due to the shortage of naturally occurring nesting cavities, so the birds are actually dependent on man for their survival. Non-native Starlings and House Sparrows compete aggressively for the natural nesting habitats, and will also invade man-made Martin colonies if they are not appropriately maintained by their human caretakers. It's funny that the practice of attracting Martin colonies was started in part because of the belief that the birds would help to reduce mosquito populations. However, while the birds do eat flying insects, mosquitoes do not actually make up a large portion of their diet. Martins are members of the swallow family, and have beautiful iridescent purplish-blue feathers and forked tails. You may notice these acrobatic flyers skimming the surface of your pond to steal a drink.

My favorite aquatic bird is the Green Heron. These strange-looking but beautiful little birds are somewhat reclusive, and may be difficult to see due to their cryptic coloration as they blend in with the shoreline vegetation. But their loud, squawking call is unmistakable, and perhaps you will have the opportunity to see one raise the crest of feathers on its head if it gets particularly excited. Like other heron, Green Heron are wading birds that hunt along the shorelines of ponds and lakes, particularly in areas where small trees or shrubs extend out over the water. The most interesting thing about them is that they often use bait when they hunt – they will toss berries, insects, or worms out onto the surface of the water to attract the interest of a nearby fish, and will stab their unsuspecting prey with a quick lunge of their bill.

These are only a few of the birds that can be found in and around our local ponds. Even a stormwater pond or a golf course irrigation pond can provide great habitat for waterfowl and other birds. I once saw a Black-crowned Night Heron at Spring Lake in the heart of the Northern Virginia suburbs, and a Mississippi Kite circling high above one of the ponds at Evergreen Country Club. These are unusual birds to see for even the most ardent wildlife observers, and I saw them right in someone's back yard. Who knows what amazing wildlife you might find visiting your neighborhood pond . . . ■



Green Heron



Red-Winged Black Bird

Meet the People of Virginia Lake Management

Virginia Lake Management would like to take a few moments to introduce our staff. We are proud of our qualified, educated, and highly trained staff. Each of our Environmental Scientists, Aquatic & Wildlife Biologists, Ecologists and Aquatic Specialists are ready to help your pond achieve optimal health and beauty. All are licensed professionals and factory service certified fountain and aerator technicians with a wealth of other certifications too numerous to mention. The entire staff regularly attends relevant industry and related technical training so that all are familiar with the most current industry-related techniques and products. We hope this helps you know us a little better. Please know that we are all available if you ever have a question. Thank you for letting us serve your community and its ponds!

Kevin Tucker — Owner and President

Kevin Tucker graduated from James Madison University with a degree in Business Management, but he always knew that his love of surfing and the great outdoors would lead him to a career involving water and our precious environment. Kevin started Virginia Lake Management in 1998 to focus on the growing need for adequate management of lakes and stormwater retention ponds and the preservation of our natural resources. Twelve years later, Kevin is enjoying a successful, expanding and ever-growing business with a staff of environmental enthusiasts equally as dedicated to preserving our world. Kevin is an active member of many trade and professional organizations and remains on the cutting edge of technology, product, and service improvements in the aquatics industry. Kevin has always been a student of his craft, and is continuing his education and knowledge daily through never ending research and development initiatives. He is technically trained in aquatics, lake management, limnology, environmental science, fisheries management, GPS mapping and bathymetry, and is a Licensed Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, NJ, and WV. Kevin is a respected and requested speaker for many industry events and educational forums and is widely recognized as an expert in the management of lakes, ponds, and other freshwater systems as well as the management of invasive aquatic plants.

Kevin is a father and husband who enjoys surfing, kayaking, whitewater rafting, mountain biking, hiking, camping, skiing, snowboarding and most every sport. He is a native of Southeastern Virginia and has spent much of his life on the Outer Banks of North Carolina.



Dustin Kennedy — Aquatic Biologist, Regional Manager

From work to recreation, you will rarely find Dustin Kennedy far from a pond, lake or the ocean. His love of good waves and great fishing paired with a passion for the environment have led Dustin to make Lake Management his career. A product of Old Dominion University where he earned a degree in Biology, Dustin found his home with Virginia Lake Management when the company was very young. In addition to his many qualifications, Dustin is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV & NJ. He is an Aquatic Biologist with our team as well as serving as one of our Regional Managers, overseeing a portion of our service area.



Shannon Junior — Aquatic Ecologist, Regional Manager

Shannon Junior has worked in the pond and lake management industry for over ten years. She received a B.S. in Biology from George Mason University where she also did her graduate work in Environmental Science

and Public Policy. Shannon has passed the Virginia Class A Contractor exam and is experienced with the feasibility studies, design, regulatory permitting and construction of new ponds. She is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV & NJ. Shannon “wears many hats” as a Regional Manager with Virginia Lake Management in that she is an integral part of sales, management, and field operations. She is a wildlife enthusiast, and loves that her job provides frequent opportunities to view many species of birds, reptiles, amphibians and other animals.



Kyle Finerfrock — Environmental Scientist

Kyle Finerfrock is a true outdoorsman enjoying hiking, fishing & camping. Intrigued by Science and Nature from an early age, it seemed his destiny when he earned his Bachelor of Science Degree in Environmental Science from CNU. Kyle has extensive knowledge of many different types of fountain and aeration systems and continually seeks training opportunities to further his knowledge. He is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV & NJ. Additionally, Kyle has received extensive training in and handles Virginia Lake Management’s Lake Mapping and Bathymetry which is one of the Company’s specialties. In his spare time, you will probably find Kyle on a rugby field – either playing or coaching.



David Ellison — Aquatic Biologist

David Ellison joined the Virginia Lake Management team as an Aquatic Biologist after graduating from Old Dominion University. He brought with him a wealth of experience in golf course turf and landscape management. During his years at Virginia Lake Management, he has constantly kept his industry knowledge current and relevant by regularly participating in continuing education programs. Dave is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV & NJ. He is an outdoor enthusiast and loves spending time at the ocean. He is an avid surfer and enjoys spending time with his family.



Ellen Stace — Operations Manager

Ellen Stace is often known as the “voice” of Virginia Lake Management. She is the cheerful voice you hear when you dial the Virginia Lake Management telephone number. Serving as Operations manager, Ellen manages many of the administrative and communications aspects of Virginia Lake Management. She has an extensive knowledge of lake management which has developed over the years through formal and on-the job training. This knowledge allows Ellen to be cross-trained in many areas of the business. Ellen retired from the U.S. Air Force and earned an Associates Degree in Science from Thomas Nelson Community College. She is a wife and a mom who enjoys hiking, camping, roller-blading and trying to stay fit.



Cyd Kroskey — Assistant Operations Manager

As Assistant Operations Manager, Cyd is responsible for managing the customer accounts and works closely with the rest of the office staff to

ensure the company's administrative responsibilities are met. Additionally, she manages the company's service order system which has been automated to real time job reporting from the field staff as well as overseeing the company's inventory. Cyd brought a wealth of experience to Virginia Lake Management including the years she proudly served our country in the U.S. Air Force. Cyd is a wife, mom and grandmother and enjoys being with the kids, boating, fishing, and staying young.



Kimberly Niesel — *CMCA, Director of Marketing*

Kimberly Niesel, Director of Marketing for Virginia Lake Management, helps to introduce the Company's many products and services to new clients as well as works with existing clients. Kim genuinely enjoys being around people which makes her well-suited for her work. She has extensive marketing and sales experience as well as a strong background in community management. She holds her CMCA (Certified Manager of Community Associations) designation and currently serves as the President of the Southeastern Virginia Chapter of CAI (Community Associations Institute). Kim is an expert at keeping busy, but when she does take a break from work and volunteering, she enjoys traveling, baseball, socializing with friends and is her daughter's #1 fan on the soccer field.



Randy Bolin — *Director of Sales*

If you have dealt with Virginia Lake Management on a sales level, you have more than likely spoken to Randy Bolin at one time or another. Randy is an integral part of the Virginia Lake Management team in that he is often the first contact many have with our company. Randy has an enthusiastic attitude with his customers that is infectious to those around him. He has a strong sales background and joined the staff bringing years of experience in Real Estate, Insurance Investment and Retail Sales. A native of North Carolina who has called Virginia Beach home for over twenty years, Randy is a loving grandfather who always enjoys spending time with family.



David Beasley — *Fisheries Biologist*

David Beasley is our resident "Fishing Expert." With a Bachelor of Science in Fisheries and Aquaculture and the experience of working closely with Bob Lusk, "The Pond Boss," Dave joined the Virginia Lake Management team as part of the Fisheries Division. His extensive knowledge of all aspects of fisheries management, fish behavior and overall lake management make him a well-rounded Fisheries Manager capable of helping clients create and maintain balanced and trophy fisheries. Dave is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV, NJ & NY. In his spare time Dave enjoys all types of hunting, fishing, camping, water sports and just relaxing in the outdoors.



Greg Blackham — *Aquatic Specialist*

As an Aquatic Specialist with the Virginia Lake Management Team, Greg is rarely seen idle. He regularly attends continuing educational opportunities provided by industry professionals and never misses the opportunity to exercise his knowledge. Greg is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV & NJ. Prior to his

employment, Greg worked in residential and light commercial construction, as well as landscaping and horticulture. He grew up in California and moved to Virginia after his active duty service in the Army. When not on the water, you can find Greg spending time with family.



Lee Abernathy — *Environmental Scientist*

Lee Abernathy joined Virginia Lake Management as an Environmental Scientist after graduating from The University of Virginia with a Bachelor's Degree in Environmental Science with a concentration in ecology. He also earned a minor in Urban and Environmental Planning. Lee is a valuable asset both in the field and in the office, occasionally assisting with marketing and sales. He is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV & NJ. In his spare time Lee is one of the avid fishermen in our company. He enjoys both saltwater and freshwater fishing and being out on his boat.



Brian Misener — *Wildlife and Fisheries Biologist*

Brian Misener's passion for the environment is reflected in everything he does. He joined the Virginia Lake Management team as a Wildlife and Fisheries Biologist with a wide variety of related experience. Having earned his degree in Wildlife and Fisheries Management from West Virginia University, Brian continually puts his education to work both on the job and as a volunteer. He always seeks additional training opportunities and is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, & WV. Brian, like others on the VLM staff, loves "the great outdoors." In his off time, he enjoys many types of hunting, fishing, dog training, and carving duck decoys.



Ethan Chappell — *Aquatic Specialist*

Ethan Chappell is an Aquatic Specialist with Virginia Lake Management. Growing up in Central Texas, Ethan developed his love for the outdoors. He enjoys camping, hiking, fishing, and hunting. Ethan has the unique experience of having worked as an underwater gardener who not only helped to maintain an underwater environment, removing invasive aquatic species, but also conducted interpretive tours of these gardens from glass bottom boats. In addition to Ethan's strong work ethic, he has a natural ability to communicate well. He has used this talent to speak at many trade and professional forums throughout Virginia Lake Management's service region. Ethan is a Certified Aquatic Pesticide Applicator in VA, NC, MD, DE, PA, WV & NJ.



Adam Harrow — *Environmental Scientist*

Adam Harrow has always had an appreciation for nature and outdoor activities. From backpacking and hiking, to adventure trips throughout Northwestern America, Adam has always enjoyed just about anything outdoors. It seems only fitting that Adam went on to earn a degree in Environmental Science from Westminster College in Fulton, Missouri. Adam is a Certified Aquatic Pesticide Applicator in VA and MD. He brings a passion and ambition to the team that inspires those around him.



"Water, Water Everywhere But Not a Drop To Drink"

By **Randy Bolin**

I recall learning about rain, snow, sleet and hail in my early school years. My science teachers instructed that moisture was necessary for human, plant and animal survival. The water that fell to earth evaporated back to the atmosphere to create more clouds, and then fell back to the earth again as precipitation. There began my elementary understanding of the water cycle. Water is a natural resource and one of the earth's best examples of natural recycling. But, as a society, despite all of our superior technology, there could be a time when nature's "well runs dry." Despite the "magic faucet in the sky" that always seems to bail us out of droughts and perpetuates the water cycle, abuse of any natural resource can eventually lead to shortages. If we continue to abuse water, our precious treasure, it will be lost.

Just like the water cycle we learned about in elementary school, our storm water retention pond system is a matrix of filtration systems that helps to clean and recycle our water. There are definitely benefits that storm water ponds bring to the improvement of water quality. One benefit is that storm water ponds capture diverted runoff from impermeable surfaces such as streets, driveways, parking lots, sidewalks, and roofs. They reduce the water flow rates that exist under natural conditions and the flood volume held in a retaining pond reduces the impact on downstream areas.

Another benefit, and I feel the most important one, is that storm water retention ponds provide pollutant removal through settling and biological uptake. Retention ponds are ideal partners with nature as 30% to 80% of common pollutants such as sediments, bacteria, greases, metals, phosphorous, and nitrogen are removed from the water before it enters nearby streams. For communities, it is like having a natural treatment plant for storm water run off. This means cleaner water will eventually find its way to our area streams and Bay. Storm water retention ponds are imperative in our battle to improve our water quality and help our cities and counties with



storm water management.

Living in a coastal community, I have become very much aware of how pollutants from storm water run-off are destroying the water quality in the rivers, inland bays, and ultimately the ocean. There are many private organizations that care and are pushing hard to improve and preserve these precious water resources. They are making some small improvements but it could be too late for some fisheries and their habitats. Lake and Pond Management Professionals spend years on education and training in an effort to put forth the best management practices in their industry. We should all do our part to assure that retention ponds stay healthy and continue to do their job to reduce pollutants. This is the first step to improving overall water quality in our entire watershed.

Several years ago, when I went to work in the Lake and Pond Management Industry, it never occurred to me that one day I would be writing an article about water quality. I have always cared about the environment but I never thought much about the quality of the water I consumed personally. My drinking water supply came from bottles that I always assumed were "pure" as labeled. I never gave much thought about the true quality and where it came from.

People in the United States of America take a good drink of water for granted. However, we need to be mindful that small actions we take on a daily basis such as spilling oil on the pavement, leaking antifreeze onto the road or even tossing trash where it doesn't belong, could end up contaminating our fresh water to a point that it cannot be preserved. We all need to take more responsibility to continually improve our practices when it comes to water. Keep in mind that it all starts with us, the individual, and it branches out from there. If we don't take responsibility to improve on life's most important resource, clean water, we may find ourselves surrounded by undrinkable water, and we will fulfill the Ancient Mariner's quote, "Water, Water, everywhere, but not a drop to drink." ■

Poke it With a Stick *Continued from page 3*

naturally occurring phenomenon. Insect larvae, pollen, seeds, frogs, fish, and a slough of natural processes produce the majority of what is known as 'bio-film' on the surface of water bodies.

More often than not, these bizarre looking sheens are completely harmless, but in the event that an oil or chemical has been spilled, this simple test can let you know what you're dealing with. Your local fire department, law enforcement offices or your state enforcement

agency can help you to remedy the situation depending on your location. Booms, dispersants, and absorbent pads may be employed to remove harmful substances or bind them up, thus making them less dangerous. If in fact the disturbance is naturally occurring, a little poke can save the money that would be spent on testing, time, and unnecessary cleanup efforts. ■

Fish Kill, How Vulnerable is My Pond?

By **David Beasley, Fisheries Biologist**

As we discussed in the last issue of our newsletter, most fish kills are a result of low Dissolved Oxygen levels. Proper pond management will greatly reduce the chances of a fish kill, but in some cases, it does not eliminate the scenario. Keeping vegetation, algae and microscopic plants (Phytoplankton) within expectable densities while properly aerating is the best way to reduce the chances of having a fish kill. Many stormwater ponds and farm ponds require management due to the high level of nutrients that accumulate from surface run off. These nutrients feed algae and plants that grow at a very rapid rate when water temperatures are warm. These vulnerable ponds require different management tools and techniques to control plant matter and limit the chances of having a fish kill.

The Oxygen requirement in ponds is highest when water temperatures reach the 80's. During these warm temperatures, the water's ability to hold Oxygen is at its lowest. These two factors team together to reduce the stability of the pond, making the scenario of a fish kill more probable. When a pond's water quality becomes unbalanced, something as simple as a few cloudy days are enough to induce a fish kill. It may come as an interesting fact to most, but fish kills almost always occur after several days of cloudy weather. The reason for this is because when sunlight is not present, plants actually use Oxygen (respire). This scenario is natural and more common than many realize. One thing that many don't realize is that when a fish kill is occurring or is about to occur, it will often happen over a series of days. When oxygen levels are low the fish in the pond will hang out near the surface of the pond. The fish will be very skittish and stressed out. One big give away is when dozens of fish all get startled at once as you approach the pond. Once oxygen levels reach into the lethal range it will likely take several days to kill the entire fish population. This gives pond owners a chance to aerate with surface aerators and add water from a neighboring pond using a siphon or a pump. Although it is not always practical, sometimes with enough notice the severity of a fish kill can be reduced by notifying a pond expert and taking the corrective actions necessary.

Avoiding the situation where a fish kill is possible is the best approach to preventing a fish kill. The two best practices that will keep the water in your pond healthy and your fish safe are to properly aerate while maintaining an acceptable level of vegetation. ■



Buffer Species Wanted: Dead or Alive (No Clippings Please)

By **Brian Misener, Wildlife and Fisheries Biologist**

In the past we've talked about a number of species that can grow in your pond's buffer. Some of these species are desirable and can benefit your pond in many ways. The beneficial plants are responsible for stabilizing the banks of the pond, reducing nutrients entering the pond, habitat diversity, etc. Other, undesirable plants cause problems in and around your pond and steps should be taken to remove these plants.

Unwanted plants can cause invasive species monocultures, degraded habitats, reduced water quality and various other issues. There are many ways to control these unwanted plants and most are very simple and cost effective.

Although previously we have spoken mostly about desirable versus undesirable plant species growing in the pond's buffer, we're going to change speeds in this edition. The culprit we will discuss in this issue causes problems almost immediately and should never be allowed to be present in the buffer. Unfortunately this problem isn't caused by the wind or an animal bringing the species' seed into the buffer. It can be caused by bad judgment, laziness, or a lack of education about buffer maintenance.

The culprit I am talking about is yard and lawn clippings. For one reason or the other, these end up in the buffer and in the pond where they break down and release excess nutrients into the water. Although, it appears sometimes these clippings end up in the water by accident, every time grass clippings go in the water, they almost immediately begin causing algae growth. Ponds are not composting areas and should not be treated as such. Lawnmowers generally eject clippings to the side in one direction, so it is necessary for all mowing to occur with the chute pointed opposite of the pond so that the clippings will blow away from the pond. Ask your lawn maintenance company to keep clippings and other debris away from the pond and the pond's edge. Ask that they either bag the clippings around the pond or mow away from the pond so that clippings do not cluster around or fall into the pond. Make certain that homeowners living on the pond abide by the same rules. And, if residents have a habit of dumping their yard waste in the buffer, ask them to discontinue this practice. This waste will eventually find its way to the pond and cause a whole host of problems from increased nutrient presence, to increased algae growth, to increased sediment buildup – not to mention the unsightly look of yard waste floating in the pond. ■



Ponder These Thoughts

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

- Warm 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.
- Mosquitoes can ruin summer fun. Think about stocking your pond with minnows or other fish that help to control the mosquito population. This, along with larvicides 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 is the perfect time to think about aeration. The warmer water temperatures can cause changes to the health of your pond. Keep the cooler water on the bottom constantly circulating and increase oxygen to the aquatic life by adding an effective and cost-efficient aeration system. ■

Check Us Out...

Virginia Lake Management will be participating in the following events over the next couple of months. We encourage you to come see us! If you need information on attending any of these events, please call our office.

July 29 – August 1 The Virginia Leadership Retreat, hosted by The Southeastern Virginia Chapter, The Central Virginia Chapter and The Washington Metro Chapter of Community Associations Institute, The Homestead, Hot Springs, VA

August 13 – 15 The Virginia Outdoor Sportsman Show, The Showplace in Richmond, Richmond, VA

September 23 The Chesapeake Region Chapter of Community Associations Institute Expo and Business Provider Showcase, Martin's West, Baltimore, MD

October 1 The North Carolina Chapter of Community Associations Institute Annual Meeting and Expo, Charlotte Marriott City Center, Charlotte, NC



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