Pond Management Should be on Your Mind

This past February has brought us one of our first great ice skating and ice fishing opportunities on our ponds in a long time. Shallow ponds and those with low inflow may have seen some fish kills due to the thick ice in 2021. If you experienced a fish kill, know that the key to preventing this is to have open water in your pond. But do remember that open water is dangerous if the pond is used for skating or fishing purposes.

As always, you should have some safety equipment up at your pond year-round. Especially if used in winter for ice fishing and skating. Safety equipment is not just for swimming season. Drownings happen in seconds and too often. In many cases, the would-be rescuers become drowning victims themselves. It is best to throw something to the person in the water from the shore, anything that floats will help. Pond safety is too often overlooked, but is a vital, critical part of being a pond owner. We have pond safety kits available at the Holmes County, Ohio State University Extension Office. If you need a kit for your pond, call 330-674-3015 for details.

Now that spring is here, it's time to control the weed issues you may have experienced last year. Vegetation is not a bad thing in ponds. Aquatic plants add necessary food and oxygen to the aquatic life that reside in your pond. Some of the good weeds are under the water's surface and are not a visual issue. It's the vegetation on top of the pond's water that can cause so much anguish. The first issue to typically appear (and the one that frustrates pond owners the most) is not a weed at all, it is Filamentous algae.

Filamentous algae is a fibrous mat that looks ugly when floating on the pond's surface and seems to appear overnight. This alga starts its growth cycle on the pond's bottom. As it grows, it builds oxygen under its fibrous mat. Once buoyant it floats up to the surface. At first, a couple mats will appear and within a few days, the entire pond surface can be covered. It looks bad and if you use your pond for swimming, it is gross to walk/wad through. Fishing can become annoying when the algae snags on the fishing line and hook each time you reel in the line. A little bit of this menace can lead to some major headaches. Left unchecked, it can explode into a real issue that is bad for the pond.

Of course, the next question is, "How do I kill it?" The time to treat for Filamentous algae is when it is growing on the bottom of the pond. Once it floats to the surface, it is too late to treat as it is already dying. Filamentous algae is controllable with some effort. Management needs to be a multi-front approach including mechanical, chemical, biological and structural control strategies to reduce and rid the pond of this unwelcome guest.

Mechanical Strategies

Once the algae floats to the surface there is no sense to treat it with chemical as it is already dying. The best strategy is to mechanically remove it with a rake by pulling it out of the water and away from the pond. You can also drag a rake on the pond bottom, close to shore, to break up the mats making them come to the surface quicker to remove them from the pond. The best time to do mechanical removal is on a windy day as mother nature will help you by blowing the floating algae to one area, making for easier removal. Do not leave the removed mats on the pond bank. As it dies, the nutrients flow back into the pond aiding to the next cycle of growth.

Chemical Strategies

Many copper-based chemicals work very well on filamentous algae. Again, once it comes to the surface it is a waste of money to treat then. Chemical application works best after physical removal of mats, both floating and on the pond bottom. Following this order will require lower volumes of costly chemicals and lessens the potential of killing fish. When treating a pond with any chemical only treat a quarter of the pond at once. If you treat and kill all the plants at the same time, you can create a very low dissolved oxygen zone in the water. It takes large volumes of dissolved oxygen to break down the now dying or dead organic matter. Robbing the water of its dissolved oxygen starves the fish of oxygen and can lead to their death.

Biological and Structural Strategies

This is the hardest one to work on as it often means changing what is happening on the land around the pond. Adding more White Amur fish (biological) is not the answer. They eat bottom rooted pond plants, not algae. If runoff from the landscape runs into the pond this can be a source of nutrient loading. If you do not stop the source of nutrients getting into the pond then it will be hard to get ahead of the algae. Reducing the pathway (structural) of nutrients getting into the pond will help greatly.

One thing that helps all ponds is the use of an aerator to add oxygen to the water column. Especially in ponds that are trying to breakdown organic material that robs oxygen from fish. Two types exist; the best method is a bottom bubbler (called a diffuser) that forces air from the pond bottom up to the surface with a series of fine bubbles. The other is a fountain. Although they look nice, they do not do as good of a job getting the oxygen back into the water column. Wind and fresh water flowing into the pond will also add a little oxygen, but if the incoming water is laden with nutrients, then it is just adding to the weed and algae growth.

Lastly, keep the Canada Geese off your pond. They are neat to look at, but they are dirty, annoying and just a couple can really throw off the water quality (especially in small ponds). Their manure, which they deposit at the ponds edge, (where you walk) is very high in phosphorus. Soluble phosphorus is the nutrient that best grows algae. A mature goose at 14 pounds of weight defecates more than 28 times a day, depositing 2 pounds of high nutrient goose stuff. Plus, if you let two geese take up residence, the next year you will have more as many of the offspring will stay.

So again, now is the time to start developing your plan of attack or treatment plan for your pond. Be realistic in that if you want no weeds, you'll need to build a cement pool, which you will have to treat to keep the algae out of too.

To reach the Holmes County Extension office call 330.674.3015, or stop in at our NEW office space at 111 East Jackson Street, Millersburg (the old BP gas station east of the Courthouse).