Ohio Pond News

The Ohio State University

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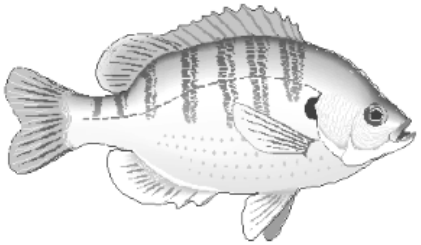

Inside this issue:

If It Were My Pond . . .

(Author's Note: Every year, I get numerous questions that start out with "If it were your pond . . . ?" Thus, I thought I'd try something a little different in this issue. I'll enlighten you as to how I would manage a pond if I had one. I do have five aquaculture ponds, but managing those is very different from how I'd manage my own private, recreational pond. So here goes.)

Small ponds are simple compared to large lakes and reservoirs, but still present unique challenges to the pond owner. Few ponds behave well without some level of monitoring and management. Below are my management strategies arranged in a topical format.

Geese Are Never Welcome! - I would use every legal method to prevent geese visitation at my pond. This is particularly true in February and March as pairs of geese look for ponds in which to raise a family. I know once parents are allowed to hatch goslings, it will be impossible to chase them off. My dog will have freedom to roam around the pond and chase off geese as they arrive. If need be, I'll buy a few noise makers and shoot them off into their direction. Goose hunters would also be welcome at my pond in fall to let local geese know my pond might be the last pond they visit. Geese aren't dumb. Shoot at them and that flock will avoid my pond. Why no geese? Geese are poop-machines, leaving piles of green material in yards and could cause a severe algae in my pond.

Be Wary of Unwanted Nutrient Sources - Ponds that have high levels of phosphorus and nitrogen grow more aquatic plants and algae, often to levels I would consider to be undesirable. Typically, elevated levels of these two nutrients are the result of nutrients coming into the pond from watershed sources. Besides keeping geese away, I would not fertilize grass within 50 feet of the pond unless that grass is sloped away from the pond. If farming or animal husbandry (even one pet horse) occurs in my watershed, I would divert water from those activities around my pond rather than allowing that water to enter the pond. Might cost me some money, but I know those nutrients will cause me serious algae and plant problems.

Natural Vegetation is an Ally! - To the fullest extent possible, I would maintain the portions of the watershed I own in natural vegetation or in hay production. These types of vegetation will uptake and use nutrients before they can enter my pond. That's an advantage in limiting growth of plants and algae. Warm season grasses and prairie flowers are at the top of the list in uptaking and using these nutrients due to their extensive root systems. If I rent out land for farming or a neighbor allows farming next door, I'd put in a wide buffer strip (wider the better) of these grasses and flowers between my pond and the farm fields.

I Like Some Vegetation - My pond would be managed for fish and wildlife so moderate levels of aquatic vegetation can help various fish and wildlife species. What do I like and how much? I'm particularly fond of native, submerged pond weeds as they provide critical

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Did You Know?

- Wish there was one event where you get answers to all your pond, wildlife, woodland, and prairie questions. Well there is! The location is the Gwynne Conservation Area and the event is OSU's Farm Science Review. During the 3-day Review (Sept. 16-18, 2008) numerous presentations, exhibits, and experts will be available at the Gwynne to answer your questions. Put this on your calendar now!

If It Were My Pond . . . *(Continued)*

habitat and food resources for a variety of migratory waterfowl (not geese!) such as blue-winged teal, pied-billed grebes etc. Also, largemouth bass and bluegills did not evolve in bathtubs. Research has conclusively shown that 15-20% of the pond having submerged pondweeds is optimal for a healthy, balanced bass-bluegill community. Cattails would be tolerated in small patches, but expansion would be strongly discouraged. Cattails provide nesting habitat for some bird species. Other emergent plants, such as sedges and wild flowers, would be allowed along the shoreline because of their wildlife value. I'd keep a few areas devoid of them to allow for easy access to swimming and fishing areas. Mown grass right down to the water's edge all around the pond will attract geese.

Dye the Pond Blue - One of the easiest ways to manage submerged plants to the 15-20% level is to dye the pond blue. If a pond is dyed blue correctly and according to the product label, I know submerged plants will only grow in water about three feet deep and shallower. In most ponds, that limits submerged plants to 20% coverage or less. Pond dye also helps in limiting filamentous algae production. I would dye my pond.

Plants I've Come to Hate! - While I like submerged pondweeds and emergent plants, there are plants and algae I would control immediately. The list includes: filamentous algae, duckweed & watermeal, water lilies (pretty but spread quickly), Eurasian watermilfoil, purple loosestrife, Phragmites, and reed canary grass. Why are they on my bad list? These problematic plants offer minimal fish & wildlife benefits and tend to create monocultures by crowding out desirable plant species. In terms of fish & wildlife habitat, habitat diversity is good and monocultures are bad.

Aerate, Aerate, Aerate! - I'm continually amazed at how ponds improve once a bottom, bubble aeration system is installed. My pond would have such a system. It would be electric if possible but I would not hesitate to install a windmill aeration system should my pond not have an electrical outlet nearby. Bubble aeration prevents pond stratification, which in turn improves decomposition processes and nutrient cycling, improves the fish food chain, enhances fish survival, and helps reduce levels of filamentous algae and duckweeds. Fountains do not provide the same benefits.

No Grass Carp (White Amur) in My Pond -Grass carp are aquatic plant eaters, preferring the native, submerged plants that I'd like to have 15-20% coverage from. It is tough to get grass carp to stop eating those plants once coverage has been reduced to 20% or so. Generally, grass carp eliminate the desirable aquatic plants. Also, grass carp have been shown not to control filamentous algae or duckweeds unless stocked in very high densities. In all fairness, if my goal was to have no vegetation in my pond, grass carp would be a viable tool to consider. Owners of ponds used for swimming or as water sources for plants or livestock might want to consider using them. However, my pond is for fish & wildlife, and I feel they would do more harm than good.

Keep a Granular Algaecide Handy - Filamentous algae is problematic for many pond owners and is on my list of plants to control immediately. Most ponds grow some filamentous algae and one key to successfully control this algae is to treat it as it appears. This is most easily accomplished with granular chelated copper compounds or granular sodium carbonate peroxhydrate products. A number of these products are on the market. I'd keep a container of such a product on hand so that on a weekly basis, I could spot treat new growths of algae as they appear.

Know Local Sources of Aquatic Herbicides - On occasion, submerged plants or emergent plants can become problematic, requiring use of an aquatic herbicide to bring them back into control. While I would not keep such herbicides on a shelf, I would know which local retail establishments have them in stock or can have them in a few days. This allows me to act quickly should I need to.

Only the Correct Fish Species in My Pond! - It seems like many pond owners want a diversity of fish species in their ponds, yet only a few species do well in ponds. My pond would contain only largemouth bass, bluegills, redear sunfish, and channel catfish, all species shown to be successful in ponds. Avoid bullhead catfish, common carp, green sunfish, and even both crappie species. They cause serious over-crowding problems and quickly ruin a pond.

Avoid Stocking Fish Just to Stock Fish - A major misconception with pond owners and anglers is that a good fish community can only be maintained by continually stocking fish. Nothing could be farther from the truth. The only species I would anticipate having to stock into my pond on an occasional basis is channel catfish. Channel catfish will not spawn in ponds unless large cavities are provided. While that can be done, I do not want channel catfish to over-populate my pond because that can lead to muddy water and problems for my other fish species. Thus, I'll stock 50 or so catfish every 3-5 years rather than risk a problem. Largemouth bass, bluegill, and redear sunfish all reproduce naturally in ponds, so no additional stocking is needed after they become established.

I'd Manage for Big Panfish! - Nothing beats fishing for big 8-11 inch bluegill and redear sunfish and a plate of properly prepared fillets of both species can be a real treat! I have two young boys who love to fish and big panfish provide them both a real thrill in neighbors' ponds. Additionally, while on the small side, the plentiful largemouth bass population associated with creating

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Marne Titchenell – Our New Wildlife Program Specialist

The OSU Extension Program has recently hired a new wildlife program specialist that can help answer your wildlife questions, whether it be around ponds or elsewhere on your property. Marne has a strong wildlife and forestry background after earning her B.S. and Master's degrees in the School of Environment and Natural Resources at The Ohio State University. Her thesis research evaluated the effect of shelterwood harvests on bat populations in oak-hickory forests of southern Ohio.

Marne originally hails from Toledo but has been fortunate to experience wildlife and forest management in other parts of the country. She was a biological technician at Browns Park National Wildlife Refuge in Colorado and then worked for the US Forest Service as a wildlife technician in the Huron-Manistee National Forest in Michigan. Not to worry, Marne assures us she is a diehard Buckeye fan. More recently, Marne worked as a naturalist with the Columbus & Franklin County Metro Park system where she realized her real passion was environmental education with specialization in wildlife. Given that our Extension program in the School of Natural Resources is largely environmental education based, it quickly became apparent that Marne's passion for wildlife & environmental education and our new Wildlife Program Specialist position was the perfect marriage. She is very excited about being part of our team and looks forward to working with Ohio's landowners and other client groups.

I will work cooperatively with Marne in developing educational programming and materials covering wildlife issues associated with ponds and small lakes. Topics will not only include coping with nuisance pond wildlife (geese, muskrats) but also managing for desirable wildlife species around small water bodies. I know many of you also have wildlife questions that do not involve water bodies, so feel free to contact Marne with those questions. She can be reached at titchenell.4@osu.edu.

Pond Factsheet Update

Available

Placing Artificial Fish Attractors in Ponds and Reservoirs: OSUE Factsheet A-1.

Pond Measurements: OSUE Factsheet A-2.

Controlling Filamentous Algae in Ponds: OSUE Factsheet A-3.

Chemical Control of Aquatic Weeds: OSUE Factsheet A-4.

Muddy Water in Ponds: Causes, Prevention, and Remedies: OSUE Factsheet A-6.

Understanding Pond Stratification: OSUE Factsheet A-7.

Winter and Summer Fish Kills in Ponds: OSUE Factsheet A-8.

Planktonic Algae in Ponds: OSUE Factsheet A-9.

Fish Species Selection for Pond Stocking: OSUE Factsheet A-10.

Cattail Management: OSUE Factsheet A-11.

Algae Control with Barley Straw: OSUE Factsheet A-12.

Ponds and Legal Liability in Ohio: OSUE Factsheet ALS-1006.

Ice Safety: OSUE Factsheet AEX-392.

Farm Pond Safety: OSU Factsheet AEX-390.

Notifying the Ohio EPA Prior to Applying Aquatic Herbicides: OSUE Factsheet A-13.

Duckweed and Watermeal: Prevention & Control: OSUE Factsheet A-14.

When to Apply Aquatic Herbicides: OSUE Factsheet A-15.

Pond Dyes and Aquatic Plant Management: OSUE Factsheet A-16.

Benefits & Problems of Aquatic Plants in Ponds: OSUE Factsheet A-17.

Note: these factsheets are available at ohioline.osu.edu.

2008 Pond Clinic Schedule

These are currently the pond clinics scheduled for 2008. If you want a pond clinic scheduled in your county during 2008, contact your county OSU Extension or SWCD office and let them know of your desire. They are always appreciative of folks who offer their pond as a clinic site.

March 20, Thursday - Union County

April 3, Thursday - Mercer County

April 26, Saturday - Jefferson, Carroll Counties

Sept. 16, Tuesday - Farm Science Review—numerous pond presentations.

Sept. 17, Wednesday - Farm Science Review—numerous pond presentations.

Sept. 18, Thursday - Farm Science Review—numerous pond presentations.

The Ohio State University

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Visit Ohio State University Extension's WWW site "Ohioline" at ***http://ohioline.ag.ohio-state.edu***

If It Were My Pond . . . *(Continued)*

big panfish populations provides additional angling opportunities for children. How to manage for big panfish? The Ohio Division of Wildlife's "*Ohio Pond Management Handbook*" provides guidelines for achieving this goal. It also provides guidelines for other fish management options. The handbook can be downloaded from their website.

Be Protective of Your Bass! - Largemouth bass are the predator that determines the success of your fish (and mine) management strategy, whichever strategy you choose. Harvest needs to be closely monitored and done according to the guidelines provided in the "*Ohio Pond Management Handbook*". Excessive harvest will cause a serious fish community imbalance and will take patience to correct. On rare occasions, additional bass may have to be stocked if harvest was excessive.

Safety First! - Ponds can provide exciting recreational opportunities but the pond owner always wants to think safety. Every pond should have a Safety Post with a throwable, floating life ring on it. The ring should be equipped with 100 feet of strong rope to allow retrieval of a person in distress. My pond might have two such safety stations. I would also make regular inspections of my dock to ensure no safety hazards have developed.

My small boat (and I would have one) would always be out of the water and chained & locked to a nearby tree when not in use. Life jackets would always be in use when using the boat.

No Welcome Mat for Muskrats - Muskrats can cause serious damage to dams and shorelines. This can lead to safety concerns. I'd be proactive in controlling their abundance, either trapping them myself or allowing a local trapper to do so. An out-of-season trapping permit can be obtained from your County Wildlife Officer.

Be a Reader! - There a number of informational resources available for pond owners to help with the management of their pond. I've already mentioned the Ohio Division of Wildlife's Pond Management Handbook. The Ohio State University Extension Program has a number of pond management fact sheets, which can be downloaded from the internet. These fact sheets are listed on page 3 of this newsletter. Additionally, a number of websites are available to help pond owners. Perhaps the most useful is called Aquaplant, which is associated with the Texas A&M University Extension Program. I visit the aquaplant.tamu.edu website on a regular basis.

Bill Lynch, Program Specialist, OSUE Natural Resources