Restocking a Winterkill Pond

This was one of those winters across Ohio that caused a significant number of winter fish kills. This was particularly true across central Ohio where thick ice developed prior to the three major snowstorms in early February. All that snow on top of the ice reduced sunlight penetration to zero and oxygen levels declined steadily. In Union county where I live, most ponds did not become ice free until mid-March. In some ponds, owners found their fish floating or lying dead along the bottom. For those pond owners who experienced a kill, they now need to develop a strategy to restock their pond.

The first activity is to determine whether it was a total fish kill or just a partial kill. How to tell? The pond owner (and friends) should try and catch some fish, particularly bluegills. If hours of fishing in April do not yield a fish, then a total kill was more likely and the pond will need a complete restocking. If only a few bluegills are caught and no bass are caught or seen, then a partial kill occurred. Also, try and remember the species and sizes that you saw dead. If all species and sizes were evident, then a total kill is the likely scenario. If only one species is dead or only larger fish were evident, a partial kill may have occurred. Why is this important? If some bluegills survived, the pond owner probably need not stock them. They produce large numbers of fry in just a few years and bluegills will easily rebound. A partial kill often only needs to have bass, catfish, and grass carp (if used) restocked. Thus, it is important to have some insight into the magnitude of the winter fish kill.

For any stocking that may be needed, be sure to obtain OSU Extension’s factsheet *Fish Species Selection for Pond Stocking* which can be obtained at ohioline.osu.edu. The factsheet provides considerable detail on which fish species work best in ponds, how many to stock, and when to stock them. A short summary is in order. Only four recreational species work well in ponds and small lakes: largemouth bass, bluegill sunfish, redbear sunfish, and channel catfish. Other fish species could cause considerable fish community problems if stocked. When to restock is a very important consideration. When fish are transported in oxygenated bags or large tanks, they experience stress. The amount of stress is far less in colder water than in warm water, and thus, optimum times to stock is when water temperatures are less than 60 F and preferably around 50 F. That means spring or fall stocking, not summer! Also, stress is quickly increased if the temperature differential between the pond and transport water differs by more than 5 F. The more equal the water temperatures, the less stress the fish will experience.

In a pond that experienced a total fish kill, an alternative stocking strategy might be considered. Fathead minnows can be stocked in the spring and be allowed to spawn naturally. This will build up huge numbers of small fathead minnows. Game fish stocking then occurs in the following fall. The large amount of minnow prey greatly enhances survival and growth of the stocked bass, bluegills, and catfish. As the minnows decline, bluegill spawning increases and small bluegill then become the predominate prey for the bass.

Did You Know?

- Numerous species of frogs and toads head to ponds to lay their eggs in spring. For some pond owners, the noise is deafening. Fortunately, it last just a few weeks. If you notice excessive numbers of tadpoles during summer, it means your bass population may not be in good shape. Bass love to eat tadpoles.
Aquatic Plant Management Considerations

The following are tips for pond owners to keep in mind when managing aquatic vegetation in their ponds.

- Walk around your pond every two weeks and note vegetation abundances. It is better to take corrective action earlier rather than later.

- Pond dyes must go in early, no later than April 15. Supplemental additions may be needed to maintain the desired color. Buy an extra gallon and keep it on hand. It can be difficult to find pond dyes after early summer.

- If white amur (grass carp) are being used, an additional stocking of 2-3 per acre should occur every other year to maintain a variety of sizes and replace those that died.

- Speaking of grass carp, they have plant preferences. Before stocking them, be sure they will eat the plants causing you problems.

- Algae control is an ongoing activity until October. Consider keeping a supply of your preferred algicide on hand to allow you to spot treat as needed.

- Safety first when using herbicides and algicides. Read the label completely. They can all be found on the Internet. Personal protection is a must and children should never be nearby when making an application.

- Assess submerged plant abundance in mid-May with a garden rake dragged along the bottom in 3-4 feet of water. If plants are abundant, consider treating them rather than later when risk of a fish kill is greater.

- Cattails should be treated when the seed head is still green.

- Be careful with water lilies. They quickly spread. Control with a glyphosate product near the end of their flowering period.

- Duckweed, watermeal, and filamentous algae problems are indicative of excessive nutrients. Reducing nutrient inputs can often reduce these problems.

- Largemouth bass and bluegills did not evolve in bathtubs! Small amounts of native, submerged plants can enhance the fish community. Once abundances exceed 20%, problems with the fish community will appear due to too many hiding places for small bluegills.

- Bottom aeration can be a valuable tool in reducing problems with algae, duckweeds and watermeal.

- Watershed management is also important to the health of a pond or small lake. Many of the aquatic plant problems pond owners deal with have their origins in the watershed due to inputs of unwanted, excessive nutrients. Turn off that nutrient spigot and the water body will improve.

What’s Growing on My Fish?

Winter has finally let loose its grip on Ohio and people are beginning to walk around their pond. A number of pond owners have called about white growths on their fish, especially channel catfish. Those growths are often described as small white, cotton balls attached to the fish. The most common areas to see them on fish are the tails, upper back, and mouth region. So what is the white growth? It is called Saprolegnia fungus, a fungus present in all ponds and lakes. It is an opportunistic fungus and shows up on fish that have wounds from diseases, rubbing against something, or puncture wounds from fish-eating birds. Often fish that die have the Saprolegnia fungus on them but the fungus is not what caused the deaths.

The Saprolegnia fungus can show up at any time but it is most prevalent just after winter and again during spawning. The early spring incidences is related to fish stress during the winter and typically occurs after hard winters like we just experienced. Often, oxygen levels decline under the ice. If those levels go too low, a winterkill results. However, they can get to a level where fish don’t die but are low enough to subject the fish to a long period of stress. Stressed are susceptible to a wide variety of pathogens and get sick. Sick fish often have growths on them.

Another time the fungus often appears is during bass and bluegill spawning. The males are constantly fanning the nest, which creates wounds on their tails. Fungus quickly invades these wounds and causes growths. Some fish will die, others may not. Also during spawning, these fish are more susceptible to spear attacks from fish-eating birds. Those wounds will often have fungus on them.

What can be done? Not much. While there are treatments to combat fungus, they are not cost effective in ponds and lakes and in many cases do nothing to help with the underlying pathogen problem. Mother nature will determine the extent of the problem.
New Canada Goose Factsheet!

A new factsheet titled “Coping with Canada Geese: Conflict Management and Damage Prevention Strategies” is now available on ohioline.osu.edu. It was written by Marne Titchenell, Wildlife Program Specialist and Bill Lynch, Aquatics Program Specialist with The Ohio State University Extension Program. The factsheet describes the conflicts associated with too much goose visitation to ponds and lakes, their biology and how we encouraged their population explosion, and concludes with a description of strategies to minimize conflicts.

The following conflict prevention strategies are described in detail:
- Hunting;
- Habitat manipulations;
- Harassment techniques;
- Predator decoys;
- And Special Permits from Ohio Division of Wildlife.

Pond Factsheet Update

Available at ohioline.osu.edu

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


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

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


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


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.

Using Grass Carp to Control Aquatic Plants: OSUE Factsheet A-19.

Coping With Canada Geese: Conflict Management and Damage Prevention Strategies: OSUE Factsheet W-3.

2010 Pond Clinic Schedule

These are currently the pond clinics scheduled for 2010. If you want a pond clinic scheduled in your county during 2010, 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.

April 19, Monday - Williams County
April 21, Wednesday - Knox County
April 29, Thursday - Brown County
May 1, Saturday - Dayton (Ponds With a Purpose)
June 3, Thursday - Montgomery County

July 24, Saturday - Farm Science Review (Ponds With a Purpose)
Sept. 21, Tuesday - Farm Science Review—numerous presentations
Sept. 22, Wednesday - Farm Science Review—numerous presentations
Sept. 23, Thursday - Farm Science Review—numerous presentations

Note: clinic or workshop details can be obtained by checking your county’s SWCD or OSU Extension web pages.
Ponds With A Purpose Workshops

Are you one of those pond owners who wants a deeper understanding of their pond and its management than can be obtained at a regular evening pond clinic? Two all day (9:00 AM - 3:30 PM) pond management workshops will be held for owners like yourself who want that additional information. The first will be held Saturday, May 1 at Cox Arboretum in Dayton, Ohio. The second will be held July 24 at the Gwynne Conservation Area, just west of Columbus, Ohio. Attendance is limited at both locations to 40 people, so register now. Cost is $35 and includes lunch and handouts. The following presentations will be made:

- How Ponds Function—Understanding is the Key!
- Aquatic Plant Management: Problems and Corrective Measures.
- Pond Aeration—Improve your Pond’s Health!
- Fish Stocking: The Good, the Bad, and the Ugly!
- Avoiding Fish Kills.
- Pond Management Strategies: Big Bluegills or big Bass, or a Little of Both.
- Pond Wildlife: How to Attract Them!

Visit Ohio State University Extension’s WWW site “Ohioline” at http://ohioline.ag.ohio-state.edu

This newsletter contains recommendations that are subject to change at any time. These recommendations are provided only as a guide. No endorsement is intended of products mentioned, nor is criticism meant for products not mentioned. The editor, authors of articles and Ohio State University Extension assume no liability resulting from the use of the recommendations.

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