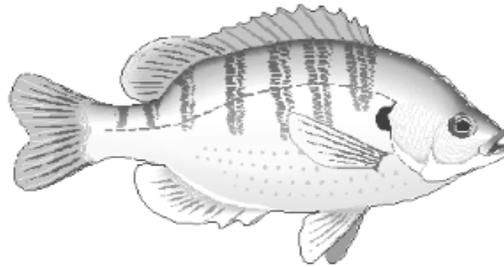


Ohio Pond News



The Ohio State University



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Herbicide Labels—A Must Read!

Aquatic herbicides and algaecides are commonly used to control plants and algae in ponds. The labels on the products provide critical information for the users of the product, whether it be pond owners themselves or commercial applicators. Indeed, chemical labels are legally binding, and use contrary to what's written on the label is unlawful. Fortunately, nearly all labels are now available on the internet. This allows the user to not only assess a number of products for potential use, but also review critical safety and use information that could influence their choice of product. The user should always read the entire label but several sections, in my opinion, deserve to be read a second and third time just prior to use. The makers of herbicides are required to provide this information under Federal Law to insure safety and proper use of their product.

For me, the most important section I read is the first aid portion of the label. Accidents do happen on occasion, and the user must be prepared to act quickly should one occur. Bystanders, especially children, should never be nearby when pesticides are used. The label provides instructions as to what to do if the product gets on skin or clothing, if it gets in eyes or is swallowed, and even if inhaled. Some labels have a section titled "*Note to Physicians*". Should an accident occur and medical help is sought, take the label with you—preferably a printed copy from the internet. This requires the user to print a copy and have it ready. I do not encourage users to take the actual container to a medical facility as this may cause problems. Think ahead!

All labels have a section titled "*Precautionary Statements*" which provide critical information on protective clothing and equipment to wear. Some pesticides are corrosive and require use of specific types of sprayers for use.

The label will also have information on water use restrictions, providing information on how many days the user should refrain from swimming, or using the water to provide drinking water to humans or animals, as well as watering plants. This information can be found within the precautionary statements section or could be a stand alone section. Some products have no water use restrictions while others have significant restrictions.

Another very important section is titled "*Storage and Disposal*" which provides information on how to store any un-used product or how to dispose of containers correctly. Containers must be cleaned prior to disposing of them, and this is generally best accomplished by triple rinsing the containers and applying the rinse water to the pond or lake area that was just treated.

A considerable portion of the label will be dedicated to "*Directions for Use*" which is where the list of species controlled can be found as well as the application rates required to achieve that control. This is the information that makes sure users are choosing the right product and application rate to achieve the control they desire. Never rely on someone telling you that a certain product should work—be sure by reading the label.

Did You Know?

- The state record white crappie of 3.9 lbs and state record black crappie of 4.5 lbs came from ponds. Yet, these species are not recommended for pond stocking because they typically stunt unless food supplies are unusually high. Interesting, the state record bluegill came from Salt fork Reservoir, not from a pond. Bluegill is a recommended species for pond stocking.

Fish Winterkills and How to Avoid Them

As ponds freeze over completely, owners need to monitor the situation to avoid a late winter fish kill. Winterkills are rare in Ohio, but do occur during harsher winters. Winterkills are the result of oxygen depletion, also the primary cause of summer fish kills. The difference is that in winter, oxygen levels decline slowly under the ice and can take weeks to reach critically low levels. In contrast, summer oxygen levels can decline to critical levels in just a day or so under certain conditions.

The presence of ice by itself does not necessarily mean a fish winterkill situation is going to develop. As long as sunlight can penetrate thru the ice, photosynthesis will occur and keep oxygen levels high enough to insure fish survival. Any condition that severely reduces or eliminates sunlight penetration will reduce oxygen production, with the result being lowering of oxygen levels as fish respiration and organic decomposition continues to occur in the dark. Two conditions are of most concern. Ice that is very

opaque will severely reduce sunlight penetration, and the thicker the opaque ice the more concerned the pond owner should be. The other condition is several inches of snow on top of the ice, even if its clear ice. The snow attenuates the light rays, causing very little light to penetrate thru both the snow and ice. The occurrence of either condition for more than several weeks will begin to significantly lower oxygen levels. The owner may wish to consider ways of increasing light penetration into the water under the ice.

There are a number of factors that hasten the depletion of oxygen once the ice and snow have curtailed photosynthetic activity. Ponds and small lakes with any of the following factors can experience a fish kill while nearby water bodies may not. Combinations of any of these factors greatly increases the risk. Shallow ponds are at a higher risk because less water volume means less total oxygen available once photosynthesis is curtailed. Old ponds with (continued on page 3)

Pond Ice Safety

Note: as I write this newsletter, bitterly cold weather is forecast that will likely have some pond owners considering winter ice recreation opportunities. It is appropriate to reprint an article written in the 2002 Newsletter given the increased readership.

All ice is not created equal! Ice strength depends on many factors, especially weather and ice thickness. Clear ice is new ice formed by a long hard freeze. It can be blue, green, or black and is the strongest type of ice. This ice is most prevalent early in the season. Opaque or milky ice is only half as strong as clear ice and is formed as the season progresses and ice is subject to thaws and refreezes, rain, or both.

Pond Ice Tips:

- ◆ The only absolute in ice safety is to stay off of it.
- ◆ 4 inches of new clear ice is the minimum thickness for travel on foot, skating, and ice fishing.
- ◆ 5 inches of new clear ice is the minimum for snowmobiles and ATV's.
- ◆ Ice that has a milky or opaque appearance is only half as strong as clear ice.
- ◆ Always keep a 100 foot length of rope nearby.
- ◆ Heed all warning signs about ice thickness or rules!
- ◆ When in doubt, stay off.
- ◆ Never venture on the ice by yourself. It is tough to save yourself.

What to do if You Notice Someone Has Fallen Through the Ice?

- ◆ Stay calm!
- ◆ Don't run up to the hole, you'll probably also break through.
- ◆ Find something on shore to throw or extend to the person – rope, a long pole, jumper cables are all possibilities.
- ◆ If rescue cannot be effected quickly, call or have someone call 911 immediately.
- ◆ Once rescued, get person to a warm place, remove wet clothing, and surround with warm blankets.
- ◆ Get the person to medical assistance immediately even if they seem fine.

What to do if You Fall Through and You're Alone?

- ◆ Remain calm and turn toward the direction you came from.
- ◆ Place hands and arms on the unbroken ice, work your body forward by kicking your feet.
- ◆ Once laying on unbroken ice, roll away from the hole to shore. Never stand. You may fall through again as wet clothes are very heavy.
- ◆ Get to a warm place fast! Seek medical attention.

Fish Winterkills and How to Avoid Them (*Continued*)

large amounts of black, organic bottom materials have a higher biological oxygen demand (BOD), which hastens oxygen depletion under the ice. Total control of aquatic plants and algae after mid-July increases winter BOD because decomposition may not be complete by ice cover. Completion of decomposition of those plants under the ice requires large amounts of oxygen.

So, how can winterkills be prevented? The key is to allow for sunlight penetration to occur in at least a portion of the pond, preferably about 25% of the pond's surface area. This is easily accomplished by shoveling off the snow. Be careful! It is prudent to make sure the ice is safe prior to shoveling the snow. Be sure to check ice thickness as you

move away from shore. A fully-charged, cordless drill with a butterfly bit make drilling test holes easy. The first check should be in water no deeper than your waist so that if you do go thru, it is relatively easy to get back to shore. Keep in mind that ice which has been under heavy snow for several weeks may not be as thick as you think.

Another technique to prevent fish winterkill is to have a bottom aeration system in place (or can quickly be installed) that can be turned on as needed in the winter. These bubblers will open up a sizable whole in the ice after a few days and allow for oxygen replenishment via the bubbles and photosynthesis in and near the open hole. Note: ice anywhere on the pond is not considered safe when aerating .

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: Factsheet A-17.

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

2009 Pond Clinic Schedule

These are currently the pond clinics scheduled for 2009. If you want a pond clinic scheduled in your county during 2009, 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 12, Thursday - Belmont County

March 19, Thursday - Union County

March 23, Monday - Licking County

March 28, Saturday - Brown County

April 14, Tuesday - Miami, Darke, Shelby Counties (joint)

April 28, Tuesday - Monroe County

May 14, Thursday - Franklin County

Sept. 22, Tuesday - Farm Science Review—numerous presentations

Sept. 23, Wednesday - Farm Science Review—numerous presentations

Sept. 24, Thursday - Farm Science Review—numerous presentations

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Visit the Ohio Division of Wildlife Website

Visit the Ohio Division of Wildlife website (www.dnr.state.oh.us/wildlife) and you will be surprised about the wealth of fish and wildlife information available for you to read and download. The following is a sample of items that should be of interest to pond owners:

- *Ohio Pond Management Handbook*—an excellent compilation of pond management topics.
 - *Fish Propagators List*—For those needing to stock fish, this list will be useful. Arranged by county.
 - *Wildlife A to Z Section*—Life history information on many of the mammals, birds, reptiles, amphibians,
- and fish. Included are fish species that recommended for pond stocking. You will spend an entertaining evening learning about these animals.
 - *Ohio Fish Identification Guide*—A colorful guide to help identify fish species.
 - *Goose Control Section*—A must read for those pond owners coping with Canada geese visitation.
 - *Hunting, Fishing, and Trapping Regulations*—Be sure about what you are doing!

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

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