

Chautauqua County Soil & Water Conservation District Newsletter

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Board Meetings are held the third Wednesday
of each month at 8:30 AM
Board of Directors: Fred Croscut, Jay Gould,
Bruce Kidder, Allen Peterson, Lisa Vanstrom



District Staff:
David Spann, District Field Manager
Cassandra Pinkoski, Grant Specialist
Greg Kolenda, District Field Technician
Melissa Mee, Secretary/Assistant Treasurer
Robert Halbohm, Water Quality Technician
NRCS Jamestown Field Office:
Robert Nothdruff, NRCS Resource Conservationist

Barley Straw Pond Kits

Even though barley straw cannot remove algae as fast as other treatments, it has been shown to work as a great long-term control method and can help stop algae from coming back in the future. Here is a brief breakdown of the complicated chemical reaction.

After barley straw is placed in the pond, it slowly begins to decompose. During decomposition, the cellular structure of the barley begins to break down, and the rate of breakdown is dependent on water temperature and oxygen content. Beneficial bacteria will work faster in warmer temperatures and well-aerated conditions, so you'll see faster results from barley in summer compared to winter. After a few weeks in the pond, decomposition changes from being bacteria dominant to fungi dominant, leading to "rotting".

As fungi eat away at the remains of the barley material, humic acid is produced, which is the first major step towards algae control. As the humic acids leech into the surrounding water it reacts with oxygen and sunlight, becoming more and more unstable which leads to hydrogen peroxide.

Hydrogen peroxide is a powerful algacide, but when produced from correctly dosed barley it's in a low enough concentration to be safe for fish and still work as an algae deterrent. The US Environmental Protection Agency does not classify barley straw as a legal algacide, however homeowners can apply it to their ponds with the caution it might not always work as expected.

The effectiveness of barley straw will depend on the amount of algae you have, the type of algae, and how quickly you want it gone. As with many natural methods of control, the timeframe to see results is often much slower in comparison to mechanical and chemical treatments. If you have a major algae bloom in your pond, and your fish are suffering, opting for a mechanical or chemical treatment to resolve the problem and then using

barley as a preventive method is usually the best way moving forward. The District carries barley straw kits year-round, as well as, other non-perishable items that are listed in the District's 2020 Tree and Shrub Catalog. To access a catalog and see what is being offered, visit www.soilwater.org and select the District Programs tab.

If you plan to apply barley straw to a pond, follow these general recommendations:

1. Apply barley straw to a pond as soon as ice is gone. The algae control properties of barley straw take several weeks to begin.
2. Determine your pond's size in acres, then plan to apply 4-5 bales of barley straw per acre. One acre is 43,560 square feet (roughly 208 feet by 208 feet).
3. When you get the bales, break them up and fluff up the stems so they make a big, loose pile. Stuff the barley straw into the onion sacks. Insert a buoyant object into the bag. The assembly should be able to float at the surface of the pond.
4. Place the sack on the pond surface & anchor it to stay in place, the sacks should be spaced evenly around the pond to assure even coverage. Barley straw should not be anchored near the edge of the pond, except near an in-flowing water course.

If you have additional questions or would like to purchase a barley straw pond kit, please call 716-664-2351 Ext. 5.



1: Taken from the article "A Guide to Pond Barley Straw & How it Works for Clear Pond Water" that was published by PondInformer.com; November 29, 2017; <https://pondinformer.com/how-to-use-pond-barley-straw/>

