

WINTER NEWSLETTER – DECEMBER 2005

LIMITED ALGAE IN 2005

Warmer than usual water temperatures normally would have encouraged algae blooms. Substantially less algae and fewer algae applications in 2005 were primarily attributed to reduced rainfall (Nitrogen) and less surface water run-off (Phosphorus loading). Many of our aerated lakes and ponds did not require any algae treatments. This was especially noted where Bio Boost Enzymes and Bio Boost Bacteria were used as part of their preventative maintenance program.

EARLY BOOKING

If you order algaecides and/or herbicides by Friday, January 27, 2006, we will hold 2005 pricing and you will be able to save on your 2006 chemical treatment costs. Aquatic algaecide and herbicide prices have been affected by rising oil prices. Even the chelated copper products contain by-products from the petroleum industry.

We would like to earn your aquatic plant management business for 2006. We begin our permit processing on January 2nd. Grant applications are due in February and August. Many of the larger chemical applications are now mandating aquatic plant surveys prior to the applications. Remember it is always best to treat your aquatic plants early and manage your algae **before** it becomes a problem.

WINTER AERATION: UPDATE

Most of our customers are using total lake and pond aeration and mixing as a management tool. Realizing that most lakes and ponds benefit from year around aeration, one should understand that cold water holds more oxygen. In this situation less aeration is required during the winter months and as a result **part** of the aeration system can be shut down during winter.

If your aeration system will be shut down for the winter, we have observed that there is little advantage running aeration systems in the fall after the water temperature drops below 55°F. In this situation, however, it is very important to again start up the entire aeration system as soon as the ice breaks up in spring.

WINTER AERATION: OPEN WATER

Our Wisconsin DNR statues are very specific on how winter open water conditions caused by aeration equipment must be roped and identified. This Statue is intended to limit the risk to Lake Associations and pond owners with regard to open water. There is always the option of using Aquatic Biologists, Inc. "*ice domes*" over the bubbling diffuser(s) thus preventing open water.

LATE FALL AND EARLY SPRING CHEMICAL TREATMENTS

We have been working with chemical manufacturing companies and the Army Corp of Engineers for the past five years collecting and documenting late fall and early spring applications targeting exotic species of aquatic plants.

Eurasian Watermilfoil and Curly leaf Pondweed have been two of the primarily targeted species. E.W. Milfoil fall treatments have been very successful and early spring applications on Curly Leaf

Pondweed have been excellent. Fall plant surveys have better allowed us to identify exact weed beds on secondary growth of Curly Leaf Pondweed especially in Southern Wisconsin and Northern Illinois. In the spring we have experienced poor water clarity and have found it more difficult to identify exact treatment locations.

Identifying locations with GPS has been very successful. Fall site surveys can be done for a nominal fee on most local lakes when weather and wind conditions allow. If you need a quotation for budgeting purposes please give us, Aquatic Biologists, Inc. a call.

FALL FISH STOCKING

Fall fish stocking has been underway since mid-September. As conditions and water temperatures warrant, we will continue stocking walleye and musky through mid-December. Trout and fathead minnows should be available all winter. Please call for price quote – **(800) 442-6648**. Fathead minnows provide food for fish, feed on algae, organic material, and mosquito larva; and are great bait for all you diehard ice fishermen.

WINTER WATER QUALITY MANAGEMENT

We would not be doing our job as lake managers if we did not recommend evaluating your water quality conditions in late January, February, and/or early March. Understanding what is happening within your lake or pond at the most critical time of year will show where your dissolved oxygen levels are and provide information on how healthy your lake and fish population is.

Internal phosphorus loading can easily happen at this time when and if the lake bottom becomes devoid of oxygen. Testing phosphorus during February and/or early March more accurately shows what actually is available for spring weed and algae growth. Phosphorus tests can be very misleading when otherwise tied up in algae or aquatic plant biomass during the remainder of the year. We can easily bind much of this phosphorus before weeds and algae become a problem. Please call for scheduling.

AQUATIC PLANTINGS

When reviewing and thinking back at your 2005 water quality and water clarity conditions, we would ask what aquatic plants are competing for the lake nutrients that are causing the problem or concern.

Aquatic plants provide food and cover for fish and wildlife, stabilize bottom sediment, filter nutrients, reduce suspended particles in the water, slow down or prevent soil erosion, and compete directly with algae and other nuisance plant species. We would encourage you to consider aquatic plantings if you do not have a diverse aquatic plant community. We are now booking aquatic plants for spring and summer plantings. Inquire about prices.

SHALLOWER WATER THAN NORMAL

Shallow water requires more aeration. If your pond or lake water level is low going into winter your fish population will be confined to a smaller area. Bottom unhealthy gases will use up the same amount of space and your fish will have a less healthy water volume area to survive. Reducing your fishery going into the fall and early winter or adding aeration may be your only alternatives to maintaining a healthy fish population especially with this year's early snow and ice cover.