

Aquatic Plants and their control

Our office is receiving lots of calls seeking the identification and control of algae in ponds. Aquatic plants are part of the aquatic ecosystems. Some of these plants are good and others are less desirable. Many different animals use aquatic plants as a food source or hiding place. However, just like any naturally occurring organism, they may interfere with human activities or simply providing a less appealing presence. The most common aquatic vegetation problems occur in impounded water. Excessive vegetation interferes with fishing, boating, and swimming, and dead, decaying vegetation produces offensive odors and an oxygen deficiency can also occur due to the decaying vegetation.

Aquatic plants are classified by growth habit: (1) algae, (2) floating plants, (3) submerged plants, (4) immersed plants and (5) marginal plants.

Target weeds must be correctly identified so that appropriate control practices can be selected and applied. For identification of unfamiliar aquatic plants, bring samples of entire plants (roots, stems, leaves and flowers if available) to our office. If necessary, we can then send the aquatic plants to the Herbarium, Division of Biology, Kansas State University, for proper identification.

Control of aquatic weeds can be subdivided into four general categories: (1) prevention, (2) mechanical and physical, (3) biological, and (4) herbicides. Often a combination of these practices is necessary for adequate control. All mechanical and physical control methods are labor intensive and give only short-term relief. They work best on small bodies of water that can be observed closely so control can take place before the problem gets too large. For more effective control, use mechanical and physical control practices in conjunction with biological or chemical control methods.

Herbivorous fish, the grass carp, is an effective biological method to control aquatic vegetation. A few problems are associated with grass carp. They may cause some loss of clarity of the water. Grass carp are indiscriminate feeders and can get so large that they consume most of the desirable vegetation in a pond and greatly reduce fish productivity.

Herbicides may be used to control aquatic weeds, but control may vary due to such factors as susceptibility of the aquatic weeds to the herbicide, stage of growth, rate of application; and the time of application. Some herbicides also may cause injury to fish if not applied properly. The publication provides information on alternative herbicides and their use for aquatic weed control.

Proper Use of Herbicides - All chemicals used for aquatic pest control should be applied in accordance with the directions on the manufacturer's.

Additional information on identification and control can be located at the following two locations:

- 1) K-State Research and Extension: <https://bookstore.ksre.ksu.edu/> . Select *Environmental and Natural Resources* in the left column, when that page opens, select *Farm Ponds* in the right hand column
- 2) Texas A&M University has an excellent site for identification and control - <https://aquaplant.tamu.edu/>

