

Aquatic Plants and Their Control

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We are receiving a lot of calls pertaining to the identification and control of plants in water. I will share information on control in this article and I would suggest that for more detailed information, you should access the KSU Extension publication, Aquatic Plants and their Control. The number of the publication is C-667. An easy way to get the publication is to go to www.bookstore.ksre.ksu.edu Put the publication number in the search box. Another excellent resource is the Texas A& M publication. The link to that web site is: <http://aquaplant.tamu.edu> Aquatic plants are a natural part of the aquatic ecosystem, used by many different animals either as food or as a hiding place. However, as with any naturally occurring organisms, they may interfere with people's activities either by their over-abundance or by their mere presence. When this occurs the plants are considered "weeds" and some control is desired.

The most common aquatic vegetation problems occur in impounded waters. Excessive vegetation interferes with fishing, swimming and boating, and dead, decaying vegetation produces offensive odors. A more serious problem results from the oxygen deficiency caused by the decaying vegetation.

Aquatic plants are classified by a similar growth habit as: (1) algae, (2) floating plants, (3) submersed plants, (4) emersed 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 label, as registered under the Federal Insecticide, Fungicide and Rodenticide Act.