

MESSENGER-INQUIRER



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Maintaining Recreational Ponds

Ponds are an important asset for property owners, and proper maintenance can ensure they will look great many years after construction. Each year I receive calls pertaining to pond bank erosion and leaks, weed infestations, and fertility management. Preventing problems before they occur is the easiest approach to managing ponds. Addressing problems that have been ongoing can become quite expensive to correct. The anticipation of keeping a pond looking nice requires a budget of money and time for maintenance.

Nutrients provided from lawns, cropland, or pastures in the watershed will fertilize pond vegetation. Excessive pond fertility will result in an abundance of weeds and algae growth. Aquatic plants and algae thrive on excessive nutrients and may become difficult to control. I doubt any Daviess County ponds need additional fertilizer to promote algal fish food. Ponds used for fishing must be stocked properly, limed, and harvested correctly. For Kentuckians interested in maintaining fishponds, a monthly management calendar is available on the web at <http://aquaculture.ca.uky.edu/>.

Weed control is an essential part of pond management. Before using any aquatic chemicals, determine they are safe for livestock if the pond is serving this dual purpose. Proper design is the first step in pond management. Banks should be sloped steeply so that only a small

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area of water at the shoreline is less than 2 to 3 feet deep. A general rule is a slope of three to one, for every three feet in distance from the shore; the depth should increase one foot. If time has allowed sediment to fill in around the shoreline, it might be time to dredge. Another preventative tool is the use of chemical shade products that provide an attractive appearance and prevent weed growth by blocking sunlight to prevent it from reaching the bottom. Maintain a good sod and grass cover around your pond, and do not allow trees to grow on the levee. Trees will eventually die and leave an extensive root system to rot and allow leakage. If you already have trees on the levee, it is best to leave them. Removing established trees is sure to leave roots, which will rot resulting in leaks. Filamentous algae are one of the most common pond weeds. Copper sulfate algaecide is the best treatment for algae, but its control efforts must be proactive with treatment when the first algae appears on the surface. Waiting until the pond is covered makes control more difficult. Only small areas can be treated at a time and there are specific intervals required between each treatment. Killing all the algae at once uses significant oxygen in the water, which could be fatal to the fish.

A biological control utilizing triploid grass carp can help to keep some plants and algae in check. These fish are plant eaters and can help control pond vegetation. Depending on the severity of the plant problem, triploid grass carp will need to be stocked at a rate of 5 to 20 fish or more per surface acre of water. If stocking grass carp purchase the larger fingerlings. Bass will consume minnows if there are any present.

Chemical control methods can also be used. Several types are labeled for aquatic weed control, but weed identification is essential in determining which herbicide to use. Very different modes of action are needed to control floating algae versus submerged weeds. When used

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properly, aquatic herbicides are effective in controlling vegetation without harming fish. There may be restrictions on water usage for a period of time after treatment with a particular herbicide. Always check the herbicide label for possible restrictions. Publications pertaining to chemical control options based on weed type are available at the previously discussed website.

Crawfish burrows are a common problem. The key to controlling these is improving drainage in and around the levee to allow soil to properly dry. There are no pesticides labeled for control of crawfish.

If the water is used for livestock, fence around the pond and provide water from a stock tank below the dam and outside the fence. Animals will increase soil suspension, nutrients, and erosion. Do not allow livestock access to a pond unless a gravity flow tank is not an option. In this case, fence the pond to allow limited access to only a few locations around the shoreline.

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