

Using Grass Carp for Controlling Weeds in Alabama Ponds

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The grass carp, a native of Russian and Chinese rivers, was imported into the United States in 1963 for aquatic weed control and to be used as food. From the beginning, the grass carp controlled most underwater and some floating weeds in ponds. Unlike the common carp found in Alabama waters, grass carp do not stir up bottom mud to the extent of the common carp.

Grass carp need running water to spawn and they will not spawn in ponds. Each day, they can eat two to three times their own weight in aquatic plants and they may gain 5 to 10 pounds in a single year. When properly stocked in ponds, the grass carp control filamentous algae (pond moss) and underwater rooted plants. They also suppress floating duckweeds and water fern, but will not eliminate either species. When stocked at recommended rates, grass carp do not interfere with other fishes. They also do not interfere with fishing and can be caught with some difficulty on a hook and line using worms or grass as bait.

Grass carp have small bones in their flesh that can be removed by properly dressing the fish. Their flesh is firm and flaky, and it has a good flavor.

Sources Of Grass Carp

Adult grass carp spawn in late spring when the water is warming. They are injected with hormones to induce spawn-

ing. All sizes are available at any time of the year.

The fish are sold by commercial fish dealers across Alabama. However, recent legislation makes it a federal offense to violate state laws that prohibit the possession, transport, or sale of grass carp. Grass carp are not illegal in Alabama and can therefore be used freely.

Sizes and Numbers to Stock

Table 1 shows recommended grass carp stocking sizes and rates for use in ponds. Larger grass carp (8 to 10 inches) should be stocked in ponds with established bass populations. Smaller fingerlings (2 to 6 inches) should be used only when predators are absent or in newly stocked ponds where the predators are about the same size as the grass carp. Smaller fingerlings can also be stocked in catfish ponds. Grass carp are readily eaten by bass and other fish-eating fish.

Expected Results

It takes time for grass carp to bring a weed problem under control. Weeds may or may not be controlled at the end of the first growing season. Usually, you can see results by the end of the second growing season. If not, then you may need to restock with enough fish to bring the total number in the pond up to the maximum recommended rate of 20 fish per acre. If the weed you want to control

is not a favorite of the grass carp, you may need to try other control methods. For more information see Extension Circular ANR-48, "Control of Weeds in Lakes and Farm Ponds."

After the weeds are gone in ponds that are stocked at the maximum rate, about one-half of the grass carp should be removed. If the grass carp are left in the ponds, there will no longer be enough food to support all of the remaining fish. The fish can be selectively harvested by angling, by using a large mesh gill net, by applying 0.10 part per million 5 percent rotenone, or by shooting with a rifle or bow and arrow.

Stocking Grass Carp in Catfish Production Ponds

Grass carp can also be used for weed control in catfish production ponds. They will eat some of the catfish feed, but when stocked at recommended rates, they will not reduce catfish production.

Grass carp are in the catfish ponds only a short time before the catfish are harvested. Therefore, more grass carp may be needed to control weeds in the ponds. If the catfish ponds are harvested annually, about 40 to 50 8-inch fish should be stocked per acre. Weed control in catfish fingerling ponds may require 50 to 100 8-inch grass carp stocked per acre.

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Recommended Stocking Rates per Acre for Grass Carp

Bass Situation	Degree of Weed Infestation		
	Slight	Moderate	Heavy
Ponds with bass: stock large carp, 8-12 inches	5/Acre	10-15/Acre	15-20/Acre
Ponds without bass: stock small carp, 2-6 inches	6-8/Acre	12-18/Acre	18-20/Acre

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method to achieve this goal. The outreach forester can receive a list of names from community organizations, educational institutions, federal agencies, state agencies, and even from other landowners. From this collection of names, the outreach forester can establish a landowner database.

Once the underserved landowners are identified, the outreach forester will contact these landowners and build a trusting relationship. The outreach forester can contact landowners at churches, schools, community organizations, social events and field tours. By attending these functions the outreach forester can encourage the landowners present to meet, visit and discuss their concerns with other landowners.

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Large grass carp will injure fingerling catfish by thrashing and jumping in the harvesting seines. Workers who harvest catfish in ponds stocked with grass carp can also be injured from jumping grass carp and should be made aware of this potential danger.

Restocking Grass Carp

When compared with other mechanical and chemical methods, the use of grass carp to control weeds in ponds is inexpensive. Results usually last about five years. You should restock grass carp at the first sign of weed growth.

Grass carp are very active swimmers and jumpers. Entire populations have been lost through spillways during heavy rains. Ponds that overflow should be equipped with spillway barriers that prevent fish from escaping. For more information on how to construct a spillway barrier, contact your local Extension office for a copy of Circular ANR-326, "Spillway Barriers for Farm Ponds."

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Now that the outreach forester has empowered landowners to take an active role in managing their property, the next plan of action is to assess what needs to be done. The outreach forester will ask the landowners about their interests and objectives and apply the available training, financial and technical assistance needed to accomplish their goals. Several visits to the landowner's property will be necessary to assess the situation.

To serve landowners further, the outreach forester must deliver services to the landowners when possible or refer the landowners to other agencies that can. Some of the services provided by the outreach forester include writing management plans and assisting them with cost-share applications. Also, the outreach forester will inform landowners about meetings, workshops, tours, or any other activity that will enhance their

knowledge and accomplish their goals.

To complete the outreach success, the outreach forester must maintain contact with the underserved landowners, encourage them to take advantage of the available opportunities, and empower them to serve as role models for other landowners.

Even though the outreach effort is the main responsibility of the outreach forester, it is also the responsibility of all the employees in the Alabama Forestry Commission. If there are landowners not knowledgeable about the resources and opportunities available to them, then they need the agency's assistance. For further information about the Alabama Forestry Commission's outreach program, contact the state office in Montgomery or one of the outreach foresters. 

AWF and AFC Team Up for Seedling Giveaway

Approximately 90,000 tree seedlings beneficial to wildlife will be given away in late February by the Alabama Wildlife Federation (AWF) and the Alabama Forestry Commission (AFC). Mixed packages of 25 seedlings containing sawtooth oak, water oak, white mulberry, persimmon, Allegheny chinkapin, and other species that provide soft or hard mast beneficial to a variety of wildlife, will be given away through AFC personnel and AWF volunteers across the state. The seedlings are provided by the AFC, which grows them at the Hopper Nursery in Cullman, Alabama.

To reserve your pack of 25 wildlife seedlings, contact the Alabama Wildlife Federation in Montgomery at 334-832-9453 and provide your name, address, phone number and county where you live. In mid-February, you will be notified by mail of the date, time, and location for picking up the seedlings in your county. Supplies are limited in each county, so secure your pack early.

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