

## NEW JERSEY DEP FISH AND WILDLIFE

Bureau of Freshwater Fisheries P.O. Box 394 Lebanon, NJ 08833 Phone: (908) 236-2118



## INFORMATION ON GRASS CARP STOCKING

The grass carp (also known as the white amur) is of interest because of its preferred diet of aquatic vegetation. It is the largest member of the minnow family and is native to the Amur River Basin in China and Russia. It was brought into this country in the 1960's for the specific purposes of testing its ability to control nuisance aquatic vegetation. In order to control the unchecked spread of this species throughout our waterways, a genetically altered form known as the "Triploid" was developed, which is incapable of successful spawning. This was done to prevent natural reproduction, which would allow them to spread unchecked in our waters and subsequently denude these waters of vegetation. Aquatic plants are an essential part of the aquatic environment, as fish, waterfowl and furbearers utilize them for food and shelter. They are especially important to fish species such as the chain pickerel who use it for egg laying substrate, and for young bass and sunfish who feed on insects clinging to its stems.

There are a number of factors that affect the rate and the amount of vegetation consumed by grass carp, such as water temperature, water quality, size of the fish and very importantly the species of vegetation available. Young grass carp will eat filamentous algae, however they switch to a diet of weeds at an early age. At that time they will first choose the most succulent vegetation and when the supply is diminished will begin feeding on the less palatable species. Grass carp are even capable of eating fibrous emergent species when necessary, but will do so at a slow rate.

Because of the potential that this species has of severely altering our freshwater aquatic habitats, New Jersey DEP Fish and Wildlife requires that an approved permit from our agency be obtained and submitted to the hatchery before any can be purchased. Approval of this permit is based on our policy, which is adopted to allow for certain levels of vegetation control without major adverse affects to our aquatic biota. The following points are the essential parts of our Policy.

- Permission to stock will only be given for the "Triploid" form.
- They must be obtained from one of the hatcheries on our list of approved hatcheries, where the US Fish and Wildlife Service certify them as "Triploid".
- We will allow for the stocking of waters of 10 acres or less in size, and where it can be reasonably expected that the fish can be prevented from escaping.
- A minimum of 40% of the lake surface must be covered with a vegetation that is palatable to the species before it will be considered for stocking.
- Stocking of grass carp will not be approved in areas identified as sites of endangered or threatened species, plant or animal.

As it is difficult to predict the eventual results of stocking, biologists from Fish and Wildlife will inspect each water and examine it to determine the difficulty of escapement of the stocked fish as well as the type, coverage and density of the problem vegetation. Based on these factors the fisheries biologist will decide if stocking is acceptable, and if so, select a maximum allowable stocking rate that is designed to reduce the vegetative coverage to an ecologically acceptable level after a period of about two years. If deemed necessary at that time, additional stocking will be approved to reduce the weed cover to something less than 40% of the lake's surface.

Contact the Bureau of Freshwater Fisheries at (980) 236-2118 or (856) 629-4950 for an application and further information.