

Negative Impacts Associated with Stocking Grass Carp or White Amurs

Grass carp (*Ctenopharyngodon idella*), also known as White amurs, is a species of plant eating, freshwater fish that is cultivated in China for food, but was first introduced into the U.S for aquatic weed control. These long, torpedo-shaped fish grow very rapidly and can reach a maximum size of more than 4 feet and weigh more than 80lbs. They live an average of 5 to 9 years, and can eat up to three times their own body weight each day.

Grass carp are considered an invasive species and it is illegal to possess or stock them in many states because they can wreak havoc with the ecological balance of a lake or pond. Although legal in Ohio, only triploid (sterile) varieties may be released into Ohio waters. Despite being legal in Ohio, most fishery scientists and lake experts discourage their use for several reasons.

First, with few exceptions, grass carp are generalist feeders and they will eat virtually any aquatic vegetation in a lake or pond. They do have preferences, though. One of the plants they dislike is Eurasian watermilfoil (milfoil). Milfoil is an aggressive invasive species that was introduced from Europe and Asia sometime around World War II. As milfoil is one of the most problematic species in northern lakes and ponds, many ill-informed lake managers and pond owners stock grass carp in an attempt to control it.

The net result is that when stocked to control milfoil, grass carp will tend to eat all of the desirable native aquatic plants first, and when little else is left, then get around to eating the milfoil.

Grass carp introduction can also contribute to algae problems in a lake or pond. While foraging for food, grass carp root around in the sediment, often dramatically increasing the turbidity of a lake or pond. This disturbance of the sediment along with the large amount of waste produced by these eating machines can result in a net increase of nutrients into the water column and can produce algal blooms.

Stocking grass carp can also be tricky, because when small, they may have little noticeable impact for several years. As they grow larger, the impacts can be much greater than anticipated or desired. When, as is frequently the case, grass carp are overstocked they can totally eliminate all aquatic plants in a lake or pond and this can have serious negative impacts on the fishery. This edge effect- no noticeable impact to a sudden decrease in vegetation- also contributes to the tendency of lake managers and pond owner to overstock.

Finally, once introduced grass carp are very hard to remove from a waterbody as they are seldom caught by rod and reel methods.

Despite these negatives, grass carp may be an appropriate weed control method in small self-contained systems like golf course ponds where the pond isn't being managed for a fishery.