



September 27, 2002

Chief  
Division of Environmental Quality  
U.S. Fish and Wildlife Service  
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**RE: Federal Register Notice Proposing to List Black Carp as an Injurious Species (RIN 1018-AG70)**

To Whom It May Concern:

The U.S. Aquaculture Society, a Chapter of the World Aquaculture Society, represents over 700 aquaculture scientists and professionals from across the United States. The U.S. Aquaculture Society is committed to enhancing the scientific basis for aquaculture throughout the country.

The fundamental concern of the U.S. Aquaculture Society (USAS) is that policy development processes be well grounded in the best available scientific information. The USAS stands ready to offer review teams of nationally-recognized experts to the U.S. Fish and Wildlife Service as it considers either this or other policy considerations that have some relationship to aquaculture.

The published Federal Register Notice on the proposed listing of black carp as an injurious species contains numerous factual errors as well as errors of omissions as follows:

1. Black carp are critically important to the baitfish and hybrid striped bass industries for control of the yellow grub. The Notice fails to mention the need of the baitfish and hybrid striped bass industries for black carp and fails to include the economic effect on these sectors of the aquaculture industry.
2. The catfish industry needs black carp for control of the exotic trematode, *Bolbophorus confusus*, not the yellow grub. This error in the Notice contributes to a dramatic underestimation of the economic effects of this proposed listing. The exotic trematode has resulted in direct losses of catfish, at least 1,490 acres in Louisiana alone. Terhune et al. (2002) report that 32% of 821 ponds sampled in Mississippi were infected with the exotic trematode. The potential impact of this ruling, considering the extent of the trematode infections as well as the impact on the baitfish and hybrid striped bass industries, and the rapidly increasing numbers

and distribution of the pelican hosts of the trematode, clearly show that the economic effect of this rule will be hundreds of millions of dollars.

3. There is no other comparable control of the exotic trematode. Shoreline treatments of lime and copper sulfate/citric acid, reduce snail numbers in ponds. However, it only takes a few snails to re-infect a pond. Black carp and shoreline treatment are the only known, proven effective treatments at this point in time. Research is scheduled for the coming years by the Southern Regional Aquaculture Center to evaluate alternatives, including native species, but none have been proven effective to date.
4. The Notice fails to discuss risks of fertile diploid and sterile triploid black carp independently. Yet the risks are quite different as discussed in the U.S. Fish and Wildlife Service's own Risk Assessment on Black Carp (Nico and Williams 1996; Nico et al. 2001). Risks to the environment should be discussed separately for diploid and triploid black carp. Several statements in the Notice are in conflict with the recommendations of the U.S. Fish and Wildlife Service Risk Assessment.
5. This listing could well result in unintended adverse environmental impacts of the very type that this listing proposes to control. Restricting interstate transport of triploid black carp will create an incentive for states without farmers skilled in triploid technologies to legally produce, sell, and distribute fertile diploid carp. Increasing use of fertile diploid carp will increase the potential for breeding populations to develop in the wild. Allowing interstate transport only of sterile triploid black carp would allow access (for farmers that need black carp) to out-of-state hatcheries skilled in triploid technology. Any escapes that might occur would be of sterile fish with little risk (according to the Nico et al. Risk Assessments) of environmental damage.
6. The Notice errs in stating that testing of individual fish to verify triploidy is not economically feasible. Testing individual fish is the industry standard in the triploid grass carp program. Private hatcheries pay the U.S. Fish and Wildlife Service for inspection of their fish.
7. The aquaculture industry consists primarily of small businesses: 84% of catfish farms, 93% of baitfish farms, and 88% of foodfish other than catfish and trout (which includes hybrid striped bass farms) are small businesses (USDA 1998). Given the increasing numbers and expanding distribution of pelicans, the lack of black carp will clearly have **a significant effect on a substantial number of small entities**.
8. Published records of sales of black carp show that this species is being traded commercially in the U.S. Mitchell (2001) indicates that approximately 7,500 acres of water are stocked with black carp a year in the U.S. All of these fish are purchased from hatcheries in the U.S.
9. Comments related to the current distribution of grass carp in the U.S. should be framed within the context of the early introductions and intentional stocking programs of fertile diploid grass carp by a number of state and federal agencies. Fuller et al. (1999), citing Courtenay et al. (1984) states that grass carp were first

released into the wild when fish escaped from the U.S. Fish and Wildlife Service Fish Farming Laboratory in Stuttgart. The U.S. Fish and Wildlife Service stocked grass carp in lakes in Texas, and the U.S. Army has stocked grass carp into the Panama Canal. Many states have maintained stocking programs of grass carp for control of aquatic vegetation. Some states continue to stock diploid grass carp, while others now require that only sterile triploid grass carp be stocked. The essential point of this discussion is that it is not correct to state or imply, that the triploid carp program is a failure because grass carp today are found in natural waters in most states of the U.S. They are found in many areas because state and federal agencies have had stocking programs, some of which included stocking diploid grass carp, for many years.

10. There is no evidence that black carp are likely to infect other species with either exotic diseases, serve as intermediate hosts, or otherwise transfer parasites diseases more so than any other fish species already present in natural systems.

These comments are extended to the U.S. Fish and Wildlife Service in the spirit of offering constructive scientific expertise in the policy-development process. The USAS is committed to the responsible stewardship of natural resources as well as to the economic welfare of U.S. citizens.

Sincerely,

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#### **List of Citations**

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- Mitchell, D. 2001. The Catfish Journal 15(3):17.
- Nico, L.G. and J.D. Williams. 1996. risk assessment on black carp (Pisces: Cyprinidae). Report to The Risk Assessment and Management Committee of the Aquatic Nuisance Species Task Force, U.S. Fish and Wildlife Service, Washington, D.C.

- Nico, L.G., J.D. Williams, and J.J. Herod. 2001. Black carp (*Mylopharyngodon piceus*): a biological synopsis and updated risk assessment. Risk Assessment and Management committee, USGS.
- Terhune, J.S., D.U. Wise, and L.H. Koo. 2002. *Bolbophorus confusus* infections in channel catfish in northwestern Mississippi and effects of water temperature on emergence of cercariae from infected snails. North American Journal of Aquaculture 64:70-74.
- USDA. 1998. Census of Aquaculture. AC97-SP-3. National Agricultural Statistics Service. United States Department of Agriculture Vol. 3, Part 3, Washington, D.C.