

TESTIMONY OF EVERETT WILSON
DEPUTY ASSISTANT DIRECTOR FOR FISHERIES AND HABITAT CONSERVATION
U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

BEFORE THE HOUSE RESOURCES COMMITTEE, SUBCOMMITTEE ON FISHERIES AND OCEANS,
REGARDING ASIAN CARP IN THE GREAT LAKES AND MISSISSIPPI RIVER SYSTEMS

NOVEMBER 3, 2005

INTRODUCTION

Good morning, Chairman Gilchrest and members of the Subcommittee. I am Everett Wilson, Deputy Assistant Director for Fisheries and Habitat Conservation, U.S. Fish and Wildlife Service (Service). Thank you for this opportunity to testify today on the status of Asian carp in the Great Lakes and Mississippi River systems and efforts to prevent these species from occurring in other watersheds. The Administration is concerned about the impacts of invasive species on our native wildlife and their habitats. Mr. Chairman, we appreciate your leadership and support in the fight against invasive species. My testimony will focus on the invasion risks of Asian carp, as well as the Service's efforts to reduce their spread.

There is no question that the introduction and establishment of aquatic invasive species have significantly impacted our natural areas. We have only to look at a history of invasions, from the sea lamprey to the zebra mussel to the snakehead fish, to understand the broad scope of the problem. The United States continues to see a number of non-native, aquatic species, which may become invasive, crossing our borders for any number of reasons, and we expect this trend to continue.

Asian carp, specifically bighead, black, and silver carp, have been in the United States for decades, but we're just beginning to realize their current and potential effects. The Service, in collaboration with States, the Aquatic Nuisance Species Task Force, the U.S. Geological Survey, and many other partners have been assessing the spread and impacts of Asian carp, as well as the effectiveness of methods to prevent and control the proliferation of these species.

Bighead and silver carp are considered to be planktivores, as they feed by filtering out the microscopic plant and animal material from the water. Bighead carp are sold as live food in fish markets of major metropolitan areas and are also grown in conjunction with other cultured fishes because they improve the water quality of ponds. Silver carp, however, are not currently cultured in the United States.

Unlike the silver and bighead carps, black carp, using their teeth to break the shells, feed on freshwater mussels and snails. They are also used in catfish and hybrid striped bass culture to control snails that serve as a host for a parasite that infests the cultured fish. The black carp that are used in the aquaculture industry can be triploid (i.e., sterile) or diploid, depending upon state law.

STATUS IN THE GREAT LAKES

Bighead carp have been collected from the waters of 23 states, silver carp from 15 states, and black carp from four states. Because bighead and silver carp have established wild populations in the Mississippi River basin, many fear that it is only a matter of time before they move into the Great Lakes basin from the Illinois River of the Mississippi River basin. Several specimens of black carp have been collected in the Mississippi river basin, one near the mouth of the Illinois River, but it is unknown whether a breeding population is established. The Great Lakes basin and the Illinois River of the Mississippi River basin are connected via the Chicago Sanitary and Ship Canal (Canal). To prevent the spread via the Canal, the U.S. Army Corps of Engineers (Corps) constructed an experimental electrical barrier in the Canal. To date, bighead and silver carp have been collected in the Canal about 21 miles below the electrical barrier and about 50 miles below Lake Michigan.

ENVIRONMENTAL RISKS

Under intra-agency agreements with the U.S. Geological Survey, biological synopses and risk assessments for black, silver, and bighead carps were published in 2005. The assessments rated the probability of establishment and the consequences of establishment to determine the overall organism risk potential, assigning an estimated risk rating of high, medium, or low for each component. Those ratings are summarized below.

- o Probability of establishment in natural waterways in the United States is High
- o Consequence (economic and environmental) of establishment in the United States is High for Black carp and Medium to High for Silver and Bighead Carp

o Organism Risk Potential (combination of probability and consequence of establishment) is High for all three species

The most important conclusion reached by the scientists that conducted the risk assessments is that black, silver, and bighead carps pose unacceptable risks to freshwater resources in the U.S. and to the economies they support. As characterized by these assessments, some of the potential negative environmental impacts of the spread of Asian carp include: 1) black carp predation on native mussels (many of which are already imperiled in the United States), 2) direct competition with native fishes for food and habitat, 3) the transfer of harmful pathogens to native fishes, and 4) change in water quality.

EFFECTIVENESS OF CONTROL MEASURES

Effective, efficient, and environmentally sound measures are presently unavailable to control established populations of black, bighead, and silver carp. Therefore, immediate needs to address these species include: preventing additional introductions, implementing approaches that contain the spread, and developing integrated pest management programs that control abundance of all three species.

To prevent introductions, more outreach and education is needed to reduce the risk of additional introductions of all three species into U.S. waters. To contain the spread of all three species, technological barriers demonstrate promise when constructed in canals and waterways that connect naturally discrete basins, like the Great Lakes and Mississippi River basins. Assessments will need to be conducted swiftly to evaluate the benefits and impacts of installing such barriers. Those assessments will guide decisions by management agencies on the location and types of barriers that should be constructed to prevent the spread of established Asian carp populations.

As previously mentioned, the Corps constructed an experimental electric barrier in the Chicago Sanitary and Ship Canal in 2002 to evaluate its effectiveness in preventing the interbasin exchange of invasive fishes like Asian carp. A permanent electrical barrier is under construction by the Corps and is scheduled to be completed and activated within the next few months. The estimated cost for construction of the electrical barrier is \$9.1 million, and the operation cost is estimated to be \$20,000 per month. The effectiveness of these barriers, however, are still currently being examined, as well as their effects on migratory native fishes.

In addition, the Aquatic Nuisance Species Task Force (ANS Task Force) charged the Asian Carp Working Group with development of the National Management and Control Plan for Asian Carp. The draft plan is nearly complete. The plan will guide actions by management and research entities across the U.S. to develop and implement approaches intended to prevent additional introductions and to contain and control established populations of black, bighead, and silver carp. Implementation of the plan is critically important to reduce the risk of additional introductions and minimize the impacts of Asian carps on ecosystems, economies, and human health.

The ANS Task Force has also provided support to states in the development of Aquatic Nuisance Species Plans. As part of these plans, many states are encouraged to include provisions for rapid response. The State of Illinois has worked on the development of a rapid response plan for the capture of bighead and silver carp in the event that the barrier at the Chicago Sanitary and Ship Canal fails to stem the spread of these species.

INJURIOUS WILDLIFE EVALUATIONS

Under the Lacey Act, the Secretary of the Interior is authorized to regulate the importation and transport of species determined to be injurious to the health and welfare of humans, the interests of agriculture, horticulture or forestry, and the welfare and survival of wildlife resources of the United States. Species listed as injurious (including their gametes or eggs) may not be imported or transported across State lines by any means without a permit issued by the Service. Regulation of intrastate transport is the responsibility of each State. The statute limits the application of the injurious wildlife provisions to wild mammals, wild birds, fish, mollusks, crustaceans, amphibians, and reptiles.

The Service considers a variety of factors when evaluating a species for listing as injurious, such as the species' survival capabilities, its ability to spread geographically, its impact on habitat and ecosystems, its impact on threatened and endangered species, its impact on human beings and resource-based industries, and resource managers' ability to control and eradicate the species. Analysis of these factors guides the Agency's listing determination.

An injurious wildlife evaluation can be initiated with or without a petition. If little data are available, the Service publishes a Federal Register notice requesting biological and economic information. The Service evaluates scientific data, as well as available economic data to assess the costs and benefits of the potential rule consistent with required legal determinations.

If a species is found to be injurious, the Service publishes a proposed rule to add the species to the list of injurious wildlife and requests public comment on the proposal. We then evaluate public comments and any additional data gathered and either publish a final rule to add the species to the list or a notice explaining why the species will not be listed. This evaluation process and the timeframe under which we accomplish it varies based on the availability of data and the complexity of the analyses that may be required under the National Environmental Policy Act, the Regulatory Flexibility Act, executive orders, and other mandates.

STATUS OF INJURIOUS DETERMINATIONS FOR ASIAN CARP

The Service initiated an injurious wildlife evaluation on black carp in February 2000 after receiving a petition to list the species from the Mississippi Interstate Cooperative Resources Association. In June 2000, the Service published a notice of inquiry in the Federal Register, seeking biological and economic information of the black carp. We published a proposed rule to add black carp to the list of injurious wildlife under the Lacey Act in July 2002. Subsequently, in October 2002, the Service received a second listing petition from 25 members of Congress, primarily from the Great Lakes Region. The comment period on the proposed rule was reopened in July 2003 to gather additional information. In August 2005, the Service reopened the public comment period and published a Draft Environmental Assessment and Draft Economic Analysis of the proposed rule. The public comment period has been extended to December 16, 2005. We will evaluate all information received and gathered in making a final determination.

In October 2002, the Service received a petition from 25 members of Congress to add silver and bighead carp to the list of injurious wildlife under the Lacey Act. In July 2003 and September 2003, the Service published notices of inquiry for the silver and bighead carp, respectively, requesting scientific and economic information. The Service is currently developing a Draft Economic Analysis and Draft Environmental Assessment for each of these species to assist in the evaluations.

EFFECTIVENESS OF CURRENT LAW IN CONTROLLING INVASIVE SPECIES

While the Injurious Wildlife provisions of the Lacey Act give the Secretary the ability to designate injurious species, the nature of the law and the status of species introductions make these efforts more reactive than proactive. The Service has recognized the need for the development of a screening process for planned importations of live aquatic organisms. Having the opportunity to evaluate non-native species that are proposed for importation into the United States is an invaluable tool to ensure that we are proactive in preventing the introduction of harmful aquatic invasive species into United States waters.

Although current law encourages a reactive response to invasive species, the Service has a number of educational outreach programs aimed at preventing additional introductions. The Aquatic Nuisance Species Task Force and the Service have established a public awareness campaign known as Stop Aquatic Hitchhikers! that targets aquatic recreation users and promotes voluntary guidelines to ensure that aquatic invasive species are not spread through recreational activities.

Complementing this program is the recently created Habitattitude initiative. Developed by the Aquatic Nuisance Species Task Force and partners from the pet and aquarium trade and landscape and nursery industry, Habitattitude seeks to increase the awareness of multiple aspects of the growing aquatic invasive species problem through targeting a large audience and working collaboratively with industry partners. These are some examples in which the Service remains committed to finding a proactive solution to invasive species.

CONCLUSION

In closing, the Service is concerned about the effects of Asian carp on our natural resources and is collaborating with others to assess their range and impacts, but we are also taking action to prevent and control their spread.

Thank you, Mr. Chairman, for the opportunity to appear before you today and for your support in preventing impacts from invasive species. We look forward to working with you on the fight against aquatic invasive species in the future. I will be glad to answer any questions.