

Correspondence Control Unit  
Attention: Information Quality Complaint Processing  
U.S. Fish and Wildlife Service  
1849 C Street, NW, Mail Stop 3238-MIB  
Washington, D.C. 20240

August 20, 2007

To Whom It May Concern:

This correspondence is a Request for Correction of Information that we are submitting under the U.S. Fish and Wildlife Service Information Quality Guidelines.

**Part I:**

Description of Information to Correct

The information that we are referring to is included in the “Rulemaking to list Black Carp under the Lacey Act, Draft Economic Analysis”, prepared by U.S. Fish and Wildlife Service, Division of Economics and Division of Environmental Quality, drafted October 2004 and last revised August 2005.

- 1) P. 3, 3<sup>rd</sup> paragraph, first statement, needs to add largemouth bass. Private-sector largemouth bass growers also stock black carp for snail control for the same reasons as hybrid striped bass growers do.
- 2) P. 8. The assumption that Arkansas, Mississippi, and Missouri would not be affected by the proposed rule is not correct. A few telephone calls to individuals who had submitted comments previously could have provided the information needed. The lack of inclusion of the states of Arkansas and Mississippi is erroneous. No hatchery in Mississippi has spawned black carp and it is not known if the one hatchery that possesses a few black carp is capable of spawning them and producing triploid black carp. Moreover, Arkansas catfish farmers sell most of their catfish in Mississippi, Louisiana, and Texas. Listing triploid black carp as injurious would place a heavy penalty in the event of one black carp inadvertently being loaded onto a truckload of catfish destined to be electrocuted at a processing plant in another state. Thus, it is incorrect to not consider the economic effects on the states of Mississippi and Arkansas.
- 3) The cost estimates do not include the losses of farms that have already gone out of business due to trematode infestations. The following are the estimated losses from previous years that have not been accounted for. This statement implies that the only losses sustained by catfish are non-marketability of catfish. This is not true. The trematodes involved cause direct losses on fish farms. Terhune et al. (2002) report that “severe fish losses were confirmed....from multiple commercial catfish operations in northwestern Mississippi”. Severe mortalities and reduced production were reported. In Louisiana, two farms lost acreage directly due to the trematode problems. One farm was approximately 490 acres while the other was

- originally 1200 acres and was reduced to 200 acres. Another 90-acre farm is battling the problem and may go under this year. Based on lost revenue of \$3,000/acre, the annual total loss of farm-gate sales in Louisiana alone were in excess of \$4.47 million, not considering the 90-acre farm that may not survive financially. The total economic effect of these losses in Louisiana alone are over \$34 million. Given that Louisiana represents approximately 9.3% of the total acreage in the Louisiana-Mississippi-Arkansas area that has been affected by pelican transmission of the trematode, the annual economic impact in these three states of an inability to control for losses of trematodes could be \$365 million.
- 4) There is no doubt that the trematodes are spreading. It is not correct to ignore this range expansion of the trematodes. Several types of projections could be made to account for this expansion.
  - 5) It is not correct to ignore the multiplicative effects of the losses that would be experienced by the aquaculture industry. There are distributive effects that are not accounted for.
  - 6) The economic analysis ignores published information on the economic effects on the hybrid striped bass industry of listing all black carp as injurious.
  - 7) The average price used to estimate catfish losses was an unusually low price. The 10-year average price of catfish is \$0.70/lb. The U.S. Fish and Wildlife Service used \$0.57/lb, dramatically underestimating the value of losses that would be incurred over time.
  - 8) P. 17, The estimation of expected costs for the catfish industry is confusing, particularly the “1.8% of foodsize operations using black carp”. P. 44 of the APHIS publication that is the data source used for this analysis, shows that 4.1% of foodfish operations stocked black carp at that time. While p. 17 of the same document shows the 1.8% used in the analysis as responses related to biological control methods. While the exact reason for this discrepancy is not known, it is possible that farmers may not have associated “biocontrol” with “black carp.” At any rate, the estimates should also be run using the 4.1% of farms that stocked black carp. Moreover, the analysis needs to account for the greater percentage of use in the Delta region where there is a higher percentage of the acreage in catfish production.
  - 9) P. 21 states, “if Arkansas, Mississippi, and Missouri continue to supply black carp.” This is incorrect. Arkansas is the only state that currently supplies black carp.
  - 10) P. 21, second paragraph, 2<sup>nd</sup> sentence, the assumption is not realistic. The issues are marketability and fingerling supply effects on hybrid striped bass. See Wui and Engle (2007) below.
  - 11) P. 28, the comment, “While the Service has presented the alternative of listing only the diploid form of the black carp, sufficient information is not available at this time to assess the impact to small businesses of doing so. The Service is seeking additional data to enable it to consider this alternative in more detail when formulating the final rulemaking documents.” This is not true. Given that the majority (89% of catfish farmers, 97% of baitfish farms, and 91% of foodfish businesses other than catfish and trout (this includes hybrid striped bass farms)) are small businesses by the Small Business Administration, any analysis of the

impacts on the industry would allow for estimation of the effects on small businesses. Use of black carp is already regulated by the states through a variety of means.

- 12) P. 30, first paragraph. It is true that Alabama currently does not allow the use of black carp. However, the trematode has yet to become a problem in Alabama. The current rate of range expansion of the trematode makes it highly likely that it will spread to Alabama. When that happens, unless there is a viable alternative to the use of black carp, there likely will be demand for black carp. If the state decides to allow their use, then Alabama will also be affected. This is a very real possibility given the rate of spread of the trematode.
- 13) P. 30, 2<sup>nd</sup> paragraph. The 1.8% is used again here without referencing that 4.1% of the farmers surveyed indicated using black carp.

Effect of the Errors

The above-described errors result in under-estimation of the costs of listing all black carp as injurious under the Lacey Act. These costs are very likely to exceed \$100 million per year, but the U.S. Fish and Wildlife Service reports that there will be no substantial impact on a significant number of small businesses. That conclusion is erroneous. There will be substantial impact and one that has a disproportionate effect on rural southern states that are among the poorest in the U.S.

Supporting Documentation

**Comparison of our Cost Estimates with those in the Draft Economic Analysis Conducted by the U.S. Fish and Wildlife Service**

	Our 2007 Annual Cost Estimates <sup>a</sup>		U.S. Fish & Wildlife Service Estimates <sup>b</sup>	
	Farm-gate sales	Total economic losses	Farm-gate sales	Total economic losses
Catfish	\$45,400,000 <sup>c</sup>	\$281,500,000	\$49,000	\$0
Hybrid striped bass	\$11,959,000	\$50,650,000 <sup>d</sup>	\$0	\$0
Largemouth bass	\$2,800,000	\$17,100,000	\$0	\$0
Baitfish	\$2,500,000	\$15,200,000	\$0	\$0
<b>TOTAL</b>	<b>\$62,659,000</b>	<b>\$364,450,000</b>	<b>\$49,000</b>	<b>\$0</b>

<sup>a</sup>These estimates do not include effects on new farms that might enter the business or lost future revenue if restrictions on black carp prevent additional industry growth.

<sup>b</sup>Draft Economic Analysis stated that 3 to 6% of revenue will be lost, on average on baitfish and hybrid striped bass

farms. This would result in \$1,797,975 annual losses on baitfish farms and \$1,351,395 in annual losses on hybrid striped bass farms. These were not included in their tables of estimates of economic losses, in spite of discussing this in the text.

<sup>c</sup>These estimates are based on only the main catfish-producing region and do not take into account the rapid spread of the trematode and future infections.

<sup>d</sup>Range of \$28,400,000 to \$72,900,000 per year, depending on the alternative adopted.

Engle, C.R. and L.W. Dorman. 2006. Costs of trematode treatments. Arkansas Aquafarming 23(2):3-4. Cooperative Extension Program, University of Arkansas at Pine Bluff, Arkansas.

Hanson, T.R. and D.J. Wise. 2005. Economic analysis projects 10% loss to *Bolbophorus* trematodes in U.S. catfish industry. Global Aquaculture advocate, December: 64-65.

Wui, Y-S and C.R. Engle. 2007. The economic impact of restricting use of black carp for snail control on hybrid striped bass farms. North American Journal of Aquaculture 69:127-138.

Identification of any other public proceeding, including public comments in which the requester has previously requested similar corrections

Comments have been submitted related to the above-described errors in previous comment periods on the Draft Economic Analysis. However, the above-referenced documents were not published at that time and the estimates of damages in these have increased above those sent in previous comments.

Most recently, this information was presented in an Executive Order 12866 meeting with the Office of Management and Budget.

**Part 2:**

Description of Information to Correct

The information that we are referring to is included in the "Rulemaking to list Black Carp under the Lacey Act, Draft Environmental Assessment for Listing Black Carp (*Mylopharyngodon piceus*) as Injurious under the Lacey Act ", prepared by U.S. Fish and

Wildlife Service, Division of Environmental Quality, drafted October 2004 and last revised August 2005.

Page 4. Sentence: "A single black carp could eat more than 20,000 pounds of mollusks or other food sources during its life."

The number (20,000 pounds of mollusks) is used as an expected value, implying that this is the average amount of "damage" to be incurred by an individual black carp in the wild. However, that number is not calculated as an expected average, but rather is calculated with the most extreme values reported for each parameter used in that calculation. Realistic parameter values would result in a very different expected value.

- a. This is equivalent to saying that, since one human being can live to 130 years, can eat 10 lb of food a day, every day, that, over the lifetime of a human being, that the expected food intake is 474,500 lb of food.
- b. Another equivalent example would be that, since one mussel can spawn 500,000 spat a year and can live for up to 70 years, that each mussel would contribute 35 million new mussels to the mussel population over its lifetime.
- c. The clear fallacies in the example of a black carp eating 20,000 pounds of mollusks in its life are:
  1. The maximum possible years of lifespan are assumed in the calculation instead of an average lifespan appropriate for conditions in the wild.
  2. There is no mortality rate assumed.
  3. A perfect and infinite supply of food is assumed such that an unlimited amount of food is available for each black carp that allows it to consume its maximum amount each day without expending energy and time seeking out food.
  4. The only source of food assumed for the black carp is endangered mussels. Ignored are the large quantities of zebra mussels, other mollusks, insect larvae, and other types of food that black carp are known to eat.
  5. The calculation of mollusk consumption by black carp ignores the fact that very young fish do not consume the same quantities as large fish and that sexually mature fish do not consume the same quantities of food as young, immature fish that are in a rapidly growing phase.
  6. The calculation of mollusk consumption by black carp ignores the biological fact that fish are poikilotherms (cold-blooded), and they

do not eat when water temperatures are outside their optimal range. There are many days throughout the year, including the winter months, when water temperatures are sub-optimal and black carp will not eat much, if at all. Unlike other types of animals, fish do not need to eat every day.

Effect of the Errors

The primary effect of this error (implying an expected, average value, when the number is not calculated that way) is to dramatically over-estimate the risk to the environment of the use of triploid black carp.

Identification of any other public proceeding, including public comments in which the requester has previously requested similar corrections

Most recently, this information was presented in an Executive Order 12866 meeting with the Office of Management and Budget.

Requester Contact Information:



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