

Best Management Practices (BMPs) and Other Strategies For Minimizing the Risk of Importing Invasive Fish Species in Bait and Forage Shipments

Bait and forage fish are imported into Wisconsin for various reasons. Shipments of bait and forage fish can be a vector for the incidental or accidental introduction of prohibited invasive fish species. Chapter NR 40 of the Wisconsin Administrative Code provides that all non-native fish species are prohibited unless they are not viable in Wisconsin, or are named in Chapter NR 40 in lists of established non-native species, non-native fish species in the aquaculture industry, or non-native fish species in the aquarium trade. Prohibited fish species that may be incidentally or accidentally imported in bait and forage fish shipments include mosquitofish and Asian carp.



Mosquitofish, *Gambusia affinis*



Young asian carp (bighead and silver) may accidentally be imported in bait and forage fish shipments.

The bait and forage fish industry and the DNR wish to cooperate in developing practices to minimize the risk of such accidental importations. This document outlines an approach to understanding and minimizing the risk.

Chapter NR 40 states that “. . . no person may transport, possess, transfer or introduce a prohibited invasive species . . .”, but also states that that provision “does not apply . . . if the department determines that the transportation, possession, transfer or introduction was incidental or unknowing, and was not due to the person’s failure to take reasonable precautions.” One purpose of this document is to spell out some best management practices (BMPs) for bait and forage fish importers that the Department considers to be “reasonable precautions” in the importation of bait and forage fish. These BMP’s are not all inclusive but are a representative example of BMP’s that may minimize the risk of importation of invasive fish species. These BMPs apply to the transport of bait and forage fish to the point of delivery in Wisconsin only. Provisions of NR 40 also apply to possession and transport after delivery, and may be addressed in separate BMPs.

Bait and forage fish importers who follow the BMPs listed below may demonstrate to the Department that they have taken reasonable precautions to avoid the possession, transport and transfer of *Gambusia* and other prohibited invasive fish species, if such fish are unknowingly or incidentally present in a shipment. These BMPs are not requirements, but bait and forage fish importers in possession of fish species prohibited under Ch. NR 40 may be deemed to have taken reasonable precautions to avoid possession if the BMPs have been followed, provided that the importation is also in compliance with all applicable statutes, regulations, and orders of state and federal agencies, including quarantine orders. These BMPs apply to all shipments of bait and forage fish into Wisconsin, including those conducted by the Department.

Best management practices for importation of bait fish

1. Importer adopts a HACCP/Biosecurity Plan including the following elements:
 - a. Trucks used to haul fish are loaded with well water.
 - b. Inspect fish at the source prior to loading onto trucks for transport and record the presence of any prohibited species. Do not load fish if Asian carp are observed. Remove and destroy other prohibited species to the extent possible.
 - c. Inspect fish at the point of delivery in Wisconsin and record the presence of any prohibited species. Do not deliver fish if Asian carp are observed. Remove and destroy other prohibited species to the extent possible.
2. Driver carries records with fish shipments showing source and destination of the shipments and documenting inspection.
3. Importer utilizes suppliers that participate in the Arkansas State Bait and Ornamental Fish Certification program or that implement comparable BMP practices to minimize the risk of invasive fish species in shipments. The State of Arkansas is a major producer of minnows for Wisconsin markets and is a leader in the development of BMPs to minimize the risk of transporting *Gambusia*. Arkansas regulations provide for the certification of bait and ornamental fish meeting specified “Baitfish Best Management Practices”.

Other strategies and understandings

1. For purposes of risk analysis, the Department asks fish importers to retain records showing for all fish shipments the date, source (state and producer), destination (bait and forage fish facility which may be state hatchery, fish farm or bait and forage bait facility, or public stocking location), number of imported fish, and number of each prohibited species that were destroyed.
2. The Department will work with the bait and forage fish industry, the Department’s AIS Coordinator, Sea Grant, UW Extension, DATCP and others to 1) develop a system of bait and forage fish -vendor education, 2) develop/implement methods to validate the visual inspection method used in this BMP, including training and certification of those individuals performing inspections, 3) obtain funding for studies involving sub-sampling of shipments at the point of delivery to develop scientifically valid estimates of the numbers of prohibited species entering Wisconsin with imported bait and forage fish, and 4) consider any scientifically valid method that may be developed as a monitoring tool.
3. BMPs outlined above apply only to importation to the point of delivery in Wisconsin, not to possession by or distribution to vendors or other hatcheries/fish farms within Wisconsin. Bait and forage fish distributors and vendors are responsible for avoiding possession or transportation of prohibited species.
4. This outline of BMPs and strategies will be reviewed and updated periodically. In particular, as Arkansas or other states where bait and forage fish shipments originate adopt regulations providing for the certification of bait and forage fish shipments, the Department may consider accepting such certifications as providing sufficient demonstration of “reasonable precautions” in the importation of bait and forage fish.
5. The Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) is invited to participate in discussions and strategy development.
6. This summary does not pertain to or affect any other permits or requirements. In particular, the deliberate importation of non-native fish species for rearing on fish farms, use as bait, or introduction into the waters of Wisconsin requires a permit from the Department.

