

LIVE AQUATIC BAIT PATHWAY ANALYSIS FOR THE MISSISSIPPI RIVER BASIN



The Prevention and Control Committee of the Mississippi River Basin Panel on Aquatic Nuisance Species (ANS) commissioned a report detailing the current state of the live aquatic bait industry in the Mississippi River Basin. This fact sheet summarizes that report's findings.

OVERVIEW OF THE BAIT INDUSTRY

The bait industry is comprised of several components and can be complex. The diagram below shows a general overview of how the bait industry works. However, steps may be skipped or repeated, based on the situation. Production estimates were not feasible for the basin, as some fish that are produced or harvested are used as feeder fish for other species (generally sport fish), and records were sparse.



REPORT SUMMARY

- The Mississippi River Basin (MRB) spans 28 states.
- 42 species were sold as live aquatic bait.
- Potential ANS and pathogen risks include:
 - Viruses (golden shiner, fathead minnow nidovirus, viral hemorrhagic septicemia, and unknown)
 - Parasites (Asian tapeworm and ovarian parasites)
 - Non-native transplants (western mosquitofish and three crayfish species)
- Significant movement of bait in the MRB
 - 50% of states receive bait from Arkansas, which boasts a robust certification program.
 - 5 states export to other MRB states, 4 of which export wild-harvested bait.
 - Bait is transported in small quantities (single mail shipments of a few pounds) up to large semi-loads (up to 5,500 pounds).
- Federal regulations are restricted to:
 1. Reportable aquatic pathogens
 2. Lacey Act injurious species
 3. Bird depredation permits
- State regulations vary considerably
 - Reporting requirements are inconsistent and records are often not readily available.
 - Most states have some restrictions to limit the spread of ANS or pathogens.
- See reverse side for full state comparisons.

CONCLUSIONS AND NEXT STEPS

There is much inconsistency across the MRB in terms of live aquatic bait use and regulations. Angler practices and bait availability drive many of the discrepancies. Most states have some measures in place to reduce the risk of spreading ANS or fish pathogens. However, consistent regulations are likely not feasible due to the large differences in bait use practices across the MRB.

The Live Aquatic Bait Pathway Analysis: State of the live bait industry and its laws, regulations, and policies in the Mississippi River Basin was prepared as a report by Jeffrey Gunderson on 4/30/2019, and can be found on the MRBP website under [Resources>Funded Research](#).

WHAT'S BEING SOLD

28 minnow species		
<i>Top species include: golden shiner, white sucker, emerald shiner, fathead minnow (aka rosy red), goldfish (aka black salty), and sunfish (bluegill, green sunfish, and their hybrids)</i>		
12 aquatic invertebrate species	2 amphibians	Other bait
<i>Top species include leeches and 5 species of crayfish</i>	<i>Frogs (grouped into one category) and tiger salamanders</i>	<i>11 live non-aquatic baits and 27 frozen or preserved baits</i>

STATE OVERVIEWS

NOTE: ONLY STATES IN PURPLE EXPORT TO OTHER MRB STATES

State	Importation	Miscellaneous	Wild bait harvest	Commercial
Alabama	Y, R	E	P, C, CL	CP, CPL, HR, FH
Arkansas	Y, R, FH	E, RR	P, C, CL, AR	CP, CPL, HR, FH, REP
Colorado	Y, R, FH, ANS, REP	E, RR, IWR	P, C, CL, AR	CP, CPL, HR, FH, TR
Georgia	Y	E, RR	P, C, CL, AR	CP, CPL, HR
Illinois	Y, R, FH, ANS, REP	E, RR, IWR	P, C, CL	CP, CPL, HR, FH, REP, TR
Indiana	Y, R, FH	E	P	CP, CPL, FH, REP
Iowa	Y, R, REP	E, RR, IWR	P, C, CL	CP, CPL, HR, FH, REP, TR
Kansas	Y, R, FH	E, RR, IWR	P, C, CL	CP, CPL, HR, TR
Kentucky	Y, R, FH, REP	E, RR	P, C, CL, AR	CP, CPL, HR, REP, TR
Louisiana	Y, R	E	P, C, CL, SR	CP, CPL, HR, FH, REP
Minnesota	No importation	E, RR, IWR	P, C, CL, AR, SR	CP, CPL, HR, FH, REP, TR
Mississippi	Y, R	E, RR	P, C, CL	CP, CPL, HR, REP, TR
Missouri	Y, R, REP	E, RR	P, C, CL	CP, CPL, HR, REP
Montana	Y, R, ANS	RR	P, C, CL, AR	HR, ANS, REP
Nebraska	Y, R, FH, REP	E, RR, IWR	P, C, CL, AR	CP, CPL, HR, REP
New York	Y, R, FH, REP	E, RR	P, C, CL	CP, CPL, HR, FH, TR
North Carolina	Y, R	E, RR	P, C, CL, AR, LR	CP, CPL, HR
North Dakota	Y, R, ANS, REP	E, RR, IWR	P, C, CL	HR, ANS, REP, TR
Ohio	Y, R, FH, REP	E, RR	P, C, CL, AR	CP, CPL, HR, FH, TR
Oklahoma	Y, R, REP	E, IWR	P, C, CL, AR, SR	CP, CPL, HR, REP
Pennsylvania	Y, R, FH	E, RR	P, C, CL, AR	CP, CPL, HR, FH, ANS, REP, TR
South Dakota	Y, R, FH	E, RR	P, C, CL	CP, CPL, HR, FH, REP, TR
Tennessee	Y, R, REP	E, RR, IWR	P, C, LR	CP, CPL, HR, REP, TR
Texas	Y, R, REP	E, IWR	P, C, CL, AR	CP, CPL, HR, REP, TR
Virginia	Y, R	E, RR	P, C, CL, AR	CP, CPL, HR, REP
West Virginia	Y, R, REP	E, RR	P, C, CL	CP, CPL, HR
Wisconsin	Y, R, FH, ANS, REP	E, RR	P, C, CL	CP, CPL, HR, FH, ANS, REP, TR
Wyoming	Y, R, FH, ANS, REP	E, RR	P, C, CL, AR	CP, CPL, HR, FH, ANS, REP, TR

IMPORTATION:

Y = import allowed
 R = species restrictions
 FH = fish health requirements
 ANS = ANS-free requirements
 REP = reporting requirements

MISCELLANEOUS:

E = export allowed
 RR = bait release restricted
 IWR = restrictions on bait used in infested waters

WILD BAIT HARVEST:

P = personal harvest allowed
 C = commercial harvest allowed
 CL = license required for commercial harvest
 AR = restrictions for angler use of harvested bait for fish health or ANS
 SR = seasonal restrictions on commercial wild harvest
 LR = limit/quota restrictions on commercial wild harvest

COMMERCIAL BAIT:

CP = commercial production
 CPL = production license needed
 HR = commercial harvest restrictions (species or waters)
 FH = fish health requirements
 ANS = ANS-free requirements
 REP = reporting requirements (harvested or production)
 TR = transport restrictions