

The use of Grass Carp in the United States:

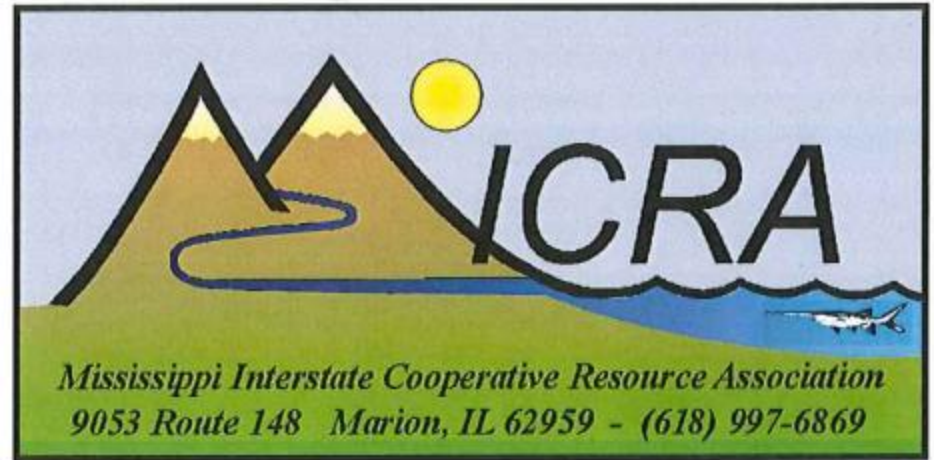
Production, triploid certification, shipping, regulation, and stocking recommendations for reducing spread throughout the United States



**Mississippi River Basin Panel
Great Lakes Panel
Joint Meeting
April 14, 2015**

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Introduction



HDR

Project Objectives

1. Summarize Legal Diploid Introductions
2. Summarize practices of Triploid Production:
3. Analyze the effectiveness of Triploid Certification:
4. Summarize Shipping practices :
5. Summarize Inspection and Enforcement:
6. Compile state Regulations:
7. Identify Potential Contamination:
8. Recommend actions for Risk Reduction:

Steering Committee

- Co-chaired by the MRBP Executive Committee
- State ANS coordinators
- USFWS NTGCICP inspectors and administrators,
- National Association of State Aquaculture Coordinators
- Commercial triploid Grass Carp producers and distributors.

Methods

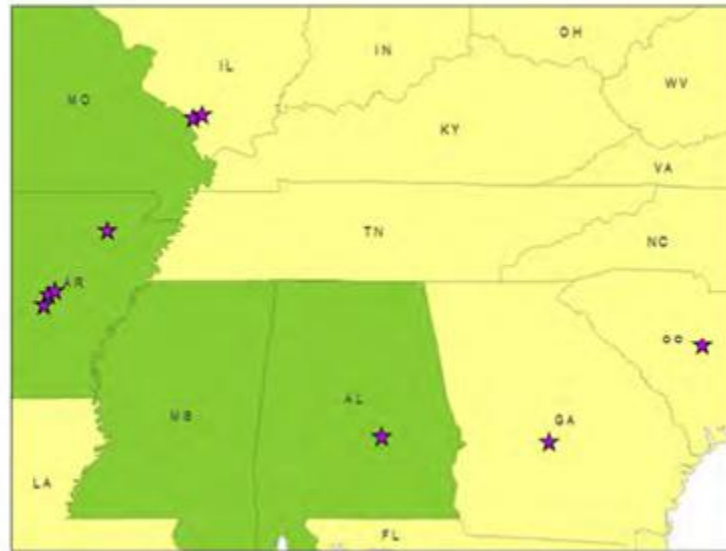
HDR conducted Personal Interviews and Facility Inspections

- States
 - ✓ Grass Carp regulations, rationale, inspection procedures, and stocking records.
- USFWS NTGCICP
 - ✓ Triploid Grass Carp certification records, a list of producers and inspectors, and producer standards.
- Producers and Distributors
 - ✓ SOP/BMPs, production information, distribution, and experiences.

Results

- Report is available at the MICRA website
 - ✓ <http://www.micrarivers.org/resource-materials/micra-documents/category/15-micra-reports.html>
 - ✓ MICRA website under “resources” tab

NTGCICP Participating Producers



Producers & Distributors

- 393 Distributors & Producers
 - 19 producers/grow-out facilities
 - Attempted contact with all distributors (2x).



Discussion

- “The most important part of a national policy strategy is consistent regulations to remove diploid Grass Carp from the commercial supply chain.”
- “There are currently seven states in the continental U.S. that allow stocking of diploid Grass Carp to control nuisance aquatic vegetation (Alabama, Arkansas, Colorado, Iowa, Mississippi, Missouri, and Nebraska).”
- “Each of these diploid states border at least two other states that either prohibit all Grass Carp or restrict their use to triploid Grass Carp only.”
- Since it is not possible for all states to adopt similar prohibitions, MICRA developed additional recommendations for a consistent National Policy Strategy for Grass Carp to reduce unintentional and illegal introductions.

Recommendations:

1. All states prohibit the production, sale, live shipment, stocking, import, and export of diploid Grass Carp except for permitted diploid brood stock at appropriately licensed production facilities.
 - Removes diploids from the commercial supply chain
 - Reduces the number of entities handling diploids
 - Requires participation / coordination by all states
 - Cannot eliminate possession (triploid production and aquaculture use)

Recommendations (cont.):

2. States that allow triploid Grass Carp production should develop a consistent set of minimum standards (SOPs and BMPs), permit requirements, and record keeping for diploid Grass Carp broodstock.
 - Addresses the exception in Recommendation 1 allowing permitted diploid brood stock at licensed production facilities
 - Nine facilities in seven states should work together to develop common language for the recommended minimum standards, permit requirements, and record keeping.

Recommendations (cont.):

3. States that allow the legal importation of triploid Grass Carp should adopt consistent, uniform regulations that allow only USFWS certified triploid Grass Carp (or an equivalent state approved certification program: e.g., South Carolina and Louisiana).
 - Recommendation addresses consistency of triploid Grass Carp regulations among states.
 - The USFWS NTGCICP is the most widely used triploid Grass Carp certification program.
 - Consistent regulations among states will assist enforcement regarding importation of Grass Carp.

Recommendations (cont.):

4. Increase random inspections and enforcement of relevant regulations in states that allow the importation of certified triploid Grass Carp.
 - the NTGCICP currently lacks authority for enforcement of regulations – involvement ends with the issuance of a Ploidy Release Authorization.
 - inspection of Grass Carp shipments and enforcement of regulations is dependent upon the receiving states
 - Increased enforcement would help ensure diploid Grass Carp do not enter the triploid Grass Carp supply chain.
 - HDR and National Asian Carp Plan recommend expanded authority for USFWS to provide ploidy determination for states conducting inspections of Grass Carp shipments.
 - This would require additional authorization and fees for the NTGCICP.

Recommendations (cont.)

5. Improve state regulation of the live fish shipping industry and develop standards for Grass Carp distributors.
 - Regulations are warranted to prohibit shipment of certified triploids on the same vehicle with uncertified triploids or diploid Grass Carp.
 - NTGCICP does not have authority over shipment and distribution of certified triploid Grass Carp.
 - States have reported regulatory violations related to the shipping and stocking of Grass Carp (IL DNR 2014, State of Michigan 2012).
 - States should develop complimentary standards and regulations for live-fish haulers and work with the USFWS to develop NTGCICP standards for distributors of certified triploid Grass Carp.
 - This would require additional authorization and fees for the NTGCICP.

Recommendations (cont.)

6. Modify the scope and Standards of the USFWS National Triploid Grass Carp Inspection and Certification Program (NTGCICP), including direct participation of states and Grass Carp distributors.
 - Engagement of responsible state agencies and commercial Grass Carp producers and distributors in the administration and operation of the NTGCICP is warranted.
 - The purpose of the USFWS's NTGCICP is to provide assurance to state natural resource agencies that shipments of certified triploid Grass Carp do not contain diploids (USFWS, 2014).
 - The NTGCICP specifies requirements for USFWS inspectors and private producers, but has no enforcement authority over shipments.
 - To further address the exemption in Recommendation #1, states could require all uncertified triploid Grass Carp to be purchased from producers actively participating in the NTGCICP.

Recommendations (cont.)

7. The USFWS should work with states, triploid Grass Carp producers, and other partners to develop defensible ploidy testing procedures for quality control and law enforcement purposes in support of state random inspection programs.
 - States reported not having adequate resources to provide law enforcement, nor the equipment and expertise to determine ploidy of fish in inspected shipments.
 - National Asian Carp plan recommended that the USFWS provide ploidy determination for states conducting inspections of Grass Carp shipments
 - The Plan also recommends additional fees to reimburse USFWS for ploidy determination in support of random state inspections of certified triploid Grass Carp.
 - Additional support is needed in development of reliable field tests to rapidly determine ploidy of inspected Grass Carp.

Recommendations (cont.)

8. Develop and provide information about NTGCICP, Grass Carp regulations, and best management practices for natural resource managers, aquaculturists, and the general public.
 - Shippers and distributors are required to navigate a maze of varying state regulations and permit requirements.
 - Further, private individuals are often unaware of regulations and rely on suppliers for knowledge
 - law enforcement officials need to be better informed of Grass Carp regulations.
 - One potential source for developing such informational materials would be the various Land Grant and Sea Grant extension programs.

Questions?



Next Steps

1. MICRA has agreed to host a meeting of the 7 diploid states to begin coordination discussions.
2. MICRA has requested MRBP to review the 8 recommendations:
 - Develop action items
 - Prioritize actions for implementation
 - Report back to MICRA

GLP / MRBP

Are there opportunities for a joint recommendation?

- Quick ploidy test?
- Modify NTGCICP authority / scope?
- Assist with “standards” for transporters and distributors?
- Others ??