

Catfish 2000



1st International Ictalurid Symposium

Workshop Proceedings

June 26, 1998

The Blackhawk Hotel
Davenport, Iowa

Background

The *Catfish 2000 Workshop* was sponsored by the *Mississippi Interstate Cooperative Resource Association* (MICRA). Funding assistance was provided, in part, by Grant Agreement No. 14-48-98210-98-G029 between the U.S. Fish and Wildlife Service and the MICRA under authority of the Fish and Wildlife Act of 1956, as amended (16 U.S.C. 742a-742j).

The Workshop was held in cooperation with *Catfish 2000 — the 1st International Ictalurid Symposium* held on June 23-25, 1998 at the River Center in Davenport, Iowa. Symposium sponsors included in the *Illinois Chapter of the American Fisheries Society*; the *North Central Division of the American Fisheries Society*; the *Iowa Chapter of the American Fisheries Society*; *In-Fisherman, Inc.*; the *Quad City Conservation Alliance*; and the *Upper Mississippi River Conservation Committee*. Financial support was provided, in part, by the U.S. Fish and Wildlife Service, Division of Federal Aid.

The *Catfish 2000 Symposium* was organized as an attempt to assemble scientists, biologists, resource managers, fishermen, and vendors of fishing equipment at a common forum to exchange information on ictalurid catfish and to further the interests of these important gamefish species. The purpose of the *Catfish 2000 Workshop* was to:

- use what had been learned at the *Catfish 2000 Symposium*;
- identify data and information needs; and
- develop a list of action items, opportunities, or strategies for future actions related to catfish management and research.

The information compiled in this workshop and by these *Proceedings* is intended to assist MICRA as well as any of the participating states, federal agencies, universities,

or private groups in formulating programs and projects which will further the knowledge and management of Ictalurid catfish. A list of attendees is provided at the end of these *Proceedings*.

The *Catfish 2000 Workshop* was organized by Jerry L. Rasmussen, MICRA's Coordinator/Executive Secretary, and facilitated by Gary Flory, *The River Group*, McPherson, KS. Mr. Flory was assisted by the following six discussion group leaders:

John Pitlo, Iowa Department of Natural Resources; Dan Sallee, Illinois Department of Natural Resources; Dennis Riecke, Mississippi Department of Wildlife, Fish & Parks; Tom Mosher, Kansas Department of Wildlife & Parks; Gerald Mestl, Nebraska Game & Parks Commission; and Hal Schramm, Mississippi Coop Unit.

Don Bonneau, Head of Fisheries Research, Iowa Department of Natural Resources; Fred Harris, Chief of



"Take a kid catfishing — you won't be sorry!"

Program

Fisheries, North Carolina Wildlife Resources Commission, and Doug Stange, Chief Editor, *In-Fisherman* magazine provided introductory remarks for the Workshop to set the stage for further discussions.

Don Bonneau's Points

- We need to get kids involved in fishing.
- Fishing license sales in Iowa are “flatter than a pancake”, and the percent of license buyers 16-29 years of age has systematically declined.
- The number of middle aged license buyers has systematically increased. We are producing weak “year classes” of young anglers — this is a major problem because we know people learn to fish when they are young.
- The industry needs to help address this problem.
- Public concerns include water quality and habitat, but the states individually have trouble building partnerships beyond their area of limited authority — MICRA may be able to assist on this.
- Catfish is king in Iowa and is very abundant.
- We can do a much better job of marketing sportfishing for catfish.
- Habitat quality is important: good stream habitat will support 120 lbs/acre, and fair habitat will support 79 lbs/acre, while poor habitat will support only 21 lbs/acre.
- The average biomass of channel catfish in Iowa lakes is 155 lbs/acre, with a range from 12 to 548 lbs/acre.
- Stocking is important to catfish fishing. A well managed lake with good water quality will support 400 hrs of fishing/acre.
- Catfish populations are dynamic and subject to many influences. For this reason, our studies need to be long term and, thus, are expensive. Iowa's assessment of the impact of commercial harvest on the Upper Mississippi

River channel catfish population cost over \$500,000. The databases developed from long term studies are very important to our management efforts, but we need to be aware of their costs and combine our efforts whenever possible and make efficient use of the expensive data. Because of past experience, Iowa does not undertake fish population studies less than 5 years in duration.

- Regulations are needed, but catfish populations are dynamic and a good study may cost \$500,000. Instead of studies we need to spend money on habitat, access, etc.



“Catfish is king in Iowa”

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Tom Flatt, Ohio River Fish Management Team, Avoca, IN

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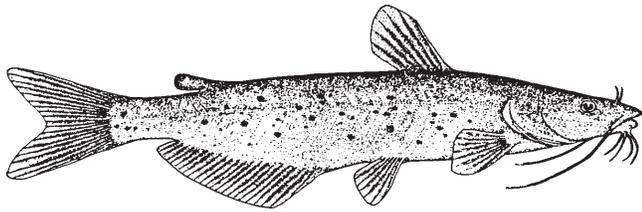
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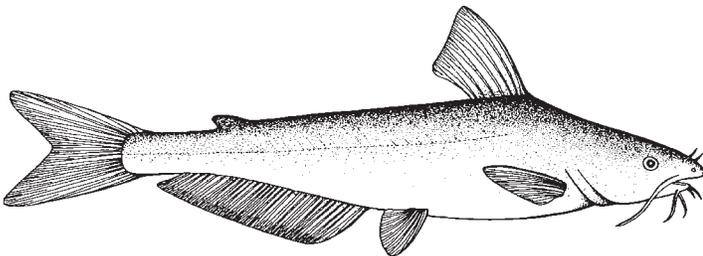
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- MICRA is exciting because we all have limited funding and manpower, and we shouldn't all be reinventing the wheel, we should be sharing resources to get better results for less money.
- We need to develop partnerships through MICRA or similar groups along watershed lines and increase our efficiency in resource management and the use of expensive databases through the use of EPA's Ecoregions and other ecosystem concepts.
- We should get EPA involved, and fish need to be included in any reauthorization of the Clean Water Act (CWA).



“channel catfish”

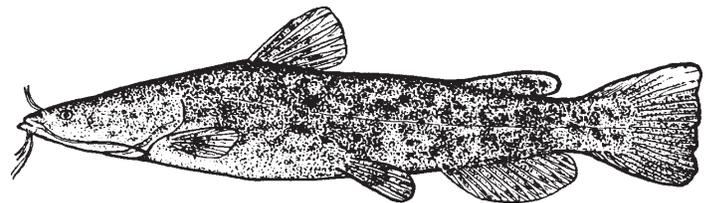
- The new Clean Water Action Plan includes a \$550 million proposal to benefit the Nation's water quality — All involved in fisheries management and fishing need to be part of the implementation process. After all, the Clean Water Act was designed to make the nations waters “Swimmable and Fishable”.
- We need to improve fish culture techniques and public access — Iowa now has one access/15 miles of stream.
- Education and marketing are also important — we need to do for channel catfish what we have done for musky — We need to promote and capitalize on a trophy catfish fishery and use our abundant catfish populations to increase participation in the sport of fishing.
- Those involved in wildlife and wildlife management are doing a better job of building partnerships with other authorities for the benefit of wildlife habitat and wildlife than we are at marketing our resource.



“blue catfish”

Fred Harris' Points

- Fred agreed with most, if not all, of Don Bonneau's points, and added some of his own.
- North Carolina has all three major catfish species (i.e. channel, flathead, and blue) — all are introduced species.
- Channel catfish have been in North Carolina for about 100 years, and continue to be stocked.
- Flathead catfish were introduced into North Carolina's coastal rivers in the 1960's and have spread to many areas and reservoirs.
- Flathead catfish rapidly decimated North Carolina's bullheads, and now are turning to redbreast sunfish — people are upset about the latter.
- Blue catfish were also stocked in the 1960's, and are spreading into some of North Carolina's not-so-productive reservoirs.
- North Carolina is not looking for the *predator-deluxe* that the blue catfish was described as at the Symposium.
- The impact blue catfish are having on crappies, bass, stripers, etc. is not known.
- Channel catfish are a commodity, and may need to be customized a bit through hybridization or selective breeding in intensively managed fisheries — but any hybrid or genetically altered fish should be sterilized so that it can be controlled.
- Once flathead catfish have decimated bullheads and other target species, they may decline and stabilize — North Carolina biologists hope so.



“flathead catfish”

- Cluster analysis shows promise as a way of determining management options.
- Enhancing flathead and blue catfish are not North Carolina management objectives.
- North Carolina does not favor introducing a bigger predator in the form of a South American catfish species.
- Regulations are a questionable management tool for blues and flatheads in many waters, because there may not be enough catfishers to impact them.



- We need to apply to catfish what we have learned

“Image, presentation, and marketing — I’d rather be catfishing”

- The major problem in the Southeastern states is how to control population growth to limit the impacts of catfish on indigenous fishes.
- In the future a larger customer base will, in all likelihood, develop for blue and flathead catfishes. Until then we have the situation of exotic fishes (that have a relatively small angler following) expanding at the expense of indigenous fishes that have a well established angler following.

about other species.

- Tremendous opportunity exists — we have all these large fish in place, and we need to do something for them now.
- We are not necessarily in favor of regulations — except maybe where big fish are concerned. Where 20 lb catfish are common as in the Red River fishery in Manitoba they have to be protected.
- Regulations are popular with fisherman, and every state must have a fishery like the Manitoba example.
- States might consider treating large catfish like big game.
- Difficulties will exist between anglers and commercial fishermen, but they can be addressed.
- Anglers keep saying they want some of these things, so we must address them.

Doug Stange’s Points

- The diversity of anglers and management needs is amazing.
- *In-Fisherman* exists to help address the problems states are facing.
- We would like to help in the debate with the public.
- We don’t have our own agenda, but we do deal with a very select group of the public.
- We may be able to suggest where some opportunities exist.
- There is great concern that we will miss this historic opportunity to do something for the immense catfish resource that we already have in place.
- There is fear that history will repeat itself in that fishing for large catfish will never be as good as it is today.

Discussion

Six individual discussion groups identified the following major issues:

Group 1: (Dan Sallee, Group Leader)

- Recreation vs commercial fisheries: Missouri River closure, increased participation, resource allocation.
- Contaminants: real, perceived or education prob-

lems; public perception about rivers; what are the issues (education).

- Sampling protocol/data gaps: There is a need for comparing between states. This is a concern because some states don't or can't acquire all the gear they need. We could go one step further and combine all data into one centralized data base.
- Connected floodplain issues: habitat restoration/maintenance, underutilized resources now, what about the future.
- Elevating catfish issues within agencies. This is not a basinwide issue, but one we should all focus effort on.

Group 2: (Dennis Riecke, Group Leader)

- Resource allocation: sport vs commercial, quality vs quantity, no clear policy directives are coming from some state agencies.
- Fish consumption advisories: concerns with safety, differing action limits in adjacent states.
- Stock assessment: recruitment, mortality, standardized sampling gear/plan/methods.
- Standard economic use survey of all angler groups (limb lines, setlines, slat baskets, jugs, etc.) with an assessment of angler attitudes toward one another is needed.
- Interstate coordination on sport & commercial regulations is needed.

Group 3: (Hal Schramm, Group Leader)

- Angler relations and needs: all aspects, what anglers want, how they are using things, education, recruitment of anglers.
- Water quality, including contaminants.
- Fish sampling protocols/long term data base: all aspects, compare to past years, what other states are doing, etc.
- Habitat (physical): determine how many pounds of fish can be raised in a given habitat — use this to dictate stocking rates, floodplain interaction, etc.
- Exotics: Don't introduce new species into native fish populations.

Group 4: (Tom Mosher, Group Leader)

- Quantify demand/use of riverine resources: includes partitioning use conflicts between sport and commercial and other users. Don't know how many sport fishermen we have.
- Developing partnerships among states and users. We need to bridge the gap between anglers and scientific communities; and promote riverine resources with

political entities and the public.

- Water usage/water rights, navigation, etc., and pollution/contamination effects on fish populations: least terns and piping plovers are showing up now. If we accommodate them, we need to know if catfish will be affected.
- Interjurisdictional waters: differing regulations among border states.
- Introductions and exotics: How will they effect catfish.

Group 5: (John Pitlo, Group Leader)

- Clean water — Clean fish: Are fish safe to eat? We need to team with EPA.
- Habitat connectivity to floodplains and tributaries — decline of black bullheads on the Upper Mississippi was probably due to habitat loss.
- Management: We need to take a basinwide look at trophy regulations, and appease commercial vs sportfishing interests.
- The public: Increase public involvement in catfishing, make a fishing trip convenient. Make buying a license easy (i.e. Convenient Store Fishing).

Group 6: (Gerald Mestl, Group Leader)

- Catfish sampling: Avoid duplication of effort.
- Recreational Use Surveys: Common surveys and techniques need to be developed, we don't want to duplicate efforts.
- Effects of angler access to rivers on catfish populations. What are they?
- Migration barriers: What are grade control structures and levees doing to catfish?

Recommendations

After the six discussion groups finished their review, the entire group reviewed all issues, consolidated and combined common issues and actions, and then ranked the consolidated issues/actions according to priority. Each participant was given a limited number of votes to cast for each issue/action. The ranked score of each major Issue/Action follows:

<u>Issue/Action</u>	<u>Score</u>
Clean Water — Clean Fish	113

- Team with EPA to develop clean water (i.e. fish maintenance/habitat needs) standards.
- Standardize fish consumption advisories and action limits between states.
- Develop information/education materials on the real and perceived threats of fish flesh contamination.
- Work to improve public perception about rivers and river quality.

Catfish Sampling Protocols and Standardized Data Base 85

- Strive to avoid duplication of effort.
- Develop sampling protocols and long term data bases (all aspects) for catfish in order to compare data between years, states, etc.
- Consider going one step further and developing one centralized data base for riverine fisheries.

Recreational Use Surveys 78

- Develop common surveys and techniques.
- Surveys need to quantify demand/use of riverine resources, including partitioning and use conflicts between sport and commercial fishers and other users.
- Surveys need to include all angler groups (limb lines, setlines, slat baskets, jugs, etc.) as well as an assessment of the attitudes of one type of angler to another.

Habitat Restoration/Maintenance 58

- Work to reconnect rivers to their floodplains and tributaries whenever and wherever possible.
- Determine how many pounds of fish can be raised in a given habitat and then use this to dictate stocking rates.
- Eliminate migration barriers (e.g. grade control structures and levees) wherever possible

Fishing Regulations 45

- Address participation and allocation issues related to recreational vs commercial fishing.
- Take a basinwide look at trophy regulations and ways to appease commercial vs sportfishing interests and quality vs quantity issues.
- Develop clear policy directives for state agencies.

Public Involvement 21

- Increase public involvement in catfishing by making fishing more convenient (i.e. fishing licenses could be sold at convenience stores, and fishing access could be more attractive and user friendly).

Partnerships 19

- Develop partnerships among states and users.
- Bridge the gap between anglers and the scientific community.
- Promote riverine resources with political entities and the public.

Angler Relations and Needs 15

- Address all aspects of what anglers want and how they are using things.
- Enhance education in order to recruit more anglers.

Interstate Coordination 14

- Standardize sport & commercial regulations on interjurisdictional waters.
- Standardize regulations between bordering states wherever possible.

Exotic Species/Introductions 9

- Prevent the introduction of new species into native fish populations.
- Determine how exotic species and introductions effect catfish.

Fisher Impacts 4

- Assess the effects of angler access to rivers on Catfish populations.

Water Usage 2

- Assess the impacts of water rights, navigation, etc. on catfish.
- Determine the effects on fish populations of management for other species (i.e. least terns and piping plovers are being displaced to new areas and management to accommodate these species may be impacting catfish populations).

Conclusions

The Workshop concluded with a discussion of future actions. It was agreed that:

- the identified Issues/ Actions should be reviewed by MICRA and others for implementation, and
- that a future symposium should be planned within two years or more at a location close to an international airport, after everyone has had a chance to gather more data.