

IOWA CHAPTER OF THE AMERICAN FISHERIES SOCIETY NEWSLETTER
September 10, 2010

LATERALLINES



Potential State Record Falls Short
page 7



INSIDE THIS ISSUE:

PRESIDENT'S CORNER—ANDY FOWLER	3
STANDARDIZATION, FISH STRUCTURES, AND DIGITAL IMAGES— LEWIS BRUCE	4-5
AGE AND GROWTH OF FLATHEAD CATFISH FROM POOLS 12 AND 13 OF THE UPPER MISSISSIPPI RIVER- CALEB SCHNITZLER	6
STATE RECORD FLATHEAD CATIFSH- JIM MAYHEW	8-9
ISU SUBUNIT UPDATE	10-11
2010 CONTINUING EDUCATION	12
PICTURES FROM AROUND THE STATE	14
FISHERIES PROJECT GRANT APPLICATION	15-16





Newsletter of the Iowa Chapter of the American Fisheries Society Volume 28, Number 2

Chapter Officers

PRESIDENT

Andy Fowler
Chariton Fisheries Research Station
24570 US Highway 34
Chariton, IA 50049
(641)774-2958
Email: Andy.fowler@dnr.iowa.gov

PRESIDENT-ELECT:

Chad Dolan
Lake Darling Fisheries Station
111 Lake Darling Rd.
Brighton, IA 52540
(319)694-2430
Email: Chad.Dolan@dnr.iowa.gov

SECRETARY/TREASURER

Andy Otting
Boone Fisheries Research Station
1436 255th St
Boone, IA 50036
(515)432-2823
Email: Andy.Otting@dnr.iowa.gov

MEMBERSHIP CHAIR

Bryan Hayes
Southwest Regional Office—Lewis
57744 Lewis Rd
Lewis, IA 51444-5103
(712)769-2587
Email: bryan.hayes@dnr.iowa.gov

Committee Chairpersons

AuditBen Dodd
MembershipBryan Hayes
Resolutions.....Don Herrig
REAP.....Ben Dodd
Continuing Education.....Clay Pierce
Student AffairsClay Pierce
Nominations.....Donna Muhm
REAP.....Ben Dodd
Best PaperChad Dolan
Newsletter.....Kim Hawkins

Welcome Our President-Elect—Chad Dolan



Chad attended the University of Wisconsin-La Crosse where he received a B.S. degree in Biology (Aquatic Science Emphasis) in 1994. While pursuing his degree, Chad worked as a Seasonal Fisheries Technician for the US Geological Survey at the National Fisheries Research Center in La Crosse, WI. Chad began working for the Illinois Natural History Survey (INHS) in 1995 as a Creel Clerk/Research Assistant at Lake Michigan Biological Station, Zion, IL. In fall of 1996, Chad accepted a position as a Fisheries Technician at the INHS-Great Rivers Field Station, Alton, IL. He continued work with the INHS until departing to pursue graduate work at Mississippi State University in summer 1998. Chad studied under Dr. L.E. (Steve) Miranda in MSU's Department of Wildlife and Fisheries where he completed his thesis entitled

“Effects of Electrofishing on Injury and Mortality of Warmwater Fishes”. He received Honorable Mention Best Student Paper for the paper entitled “Effect of Electrofishing Configuration on Crappie Immobilization Success and Injury” which he presented at the National AFS Meeting in St. Louis, MO in 2000. Chad received his M.S. degree in Wildlife and Fisheries Biology from Mississippi State University in 2001. Shortly thereafter, Chad accepted the position of Watershed Ecologist with the INHS, Springfield, IL. Chad found his way back to INHS-Great Rivers Field Station, Brighton, IL in 2004 where he served as Research Coordinator. Chad accepted the position of Fisheries Biologist, Lake Darling Management District, Iowa Department of Natural Resources, Brighton, IA in 2008. Chad is a former member and Raffle Chair of the Illinois Chapter of the American Fisheries Society, and is a current member and Best Scientific Paper Committee Chair of the Iowa Chapter of the American Fisheries Society. Chad also serves as a reviewer for the North American Journal of Fisheries Management. He has compiled nearly 30 peer-reviewed publications in both fisheries and herpetological journals.



President's Corner—Andy Fowler

Greetings everyone, it is always wonderful to begin to feel the change of the seasons. Despite a warm and overly wet summer, lately an unfamiliar cold nip of a brisk fall morning has been in the air which reminds me of three things:

- 1) my last little pile of firewood needs splitting,
- 2) squirrel hunting season is starting, and
- 3) most important for many of the American Fisheries Society members, the fall sampling rush is underway.

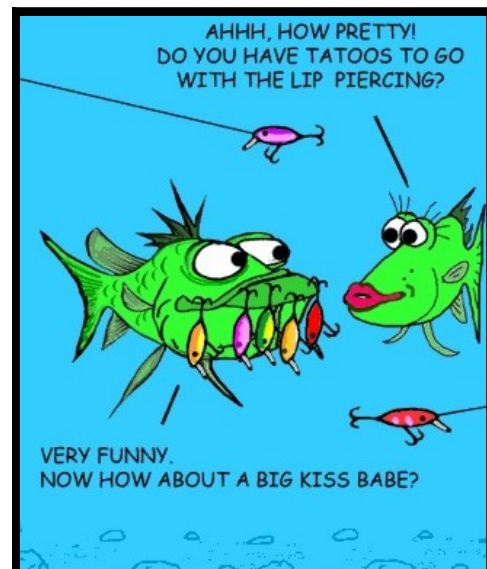
Fall fyke nets, shoreline electro-fishing, and gillnets will keep most of us busy for the next few weeks right up until the water is ready to freeze in sometimes horrible conditions. Fall sampling memories bring me back to last fall when Mark Richardson, Randy Schultz, and I were assisting the Boone Management Station with gill netting in late October on Red Rock Reservoir with air and water temps both in the 40's with 20 mph winds in heavy, cold rain. I believe my fingers still are a little stiff from that experience, so I hope that all of you will be able to finish your field work this season before the weather turns for the worst.

I want to welcome three new members to the executive committee for our chapter, Chad Dolan - our new president-elect, Andy Otting - our new secretary/treasurer, and Chris Smith - the president of the student sub-unit. They are great additions to the team. I also want to take the time to thank our past-president Bryan Hayes and our past-secretary/treasurer Kim Hawkins for their great work. They have kept the chapter running smoothly and it makes the transition to a new team a very easy one. Additional kudos need to go to Kim Hawkins and Mike Colvin for staying on as the newsletter editor and chapter webmaster, respectively. They are doing an awesome job in those positions!

As your new IA AFS president, I feel I must let all of you non-believers (meaning reading non-members) out there know about why you should join the AFS. What does \$10 get you these days? The answer is usually not much. However, your

IA AFS dues are only \$10 per year and they give you access to a lot of resources. I know many of you non-members reading this out there don't believe me, but the fact is that you can give your career a shot in the arm with a membership to AFS. Access to the continuing education classes that are offered is invaluable. Speaking for myself, just in the last few years I have been able to learn how to use the new, free statistics package 'R' instead of paying for the expensive SAS statistical program, how to identify many more species of aquatic plants, and I had the opportunity to be exposed to some of the new technologies and techniques used in aging fish structures. What other organization could offer anything like this for your career? The answer is none. Join the IA AFS today!

Our annual meeting plans, agenda, and presentation lineup is being prepared as I write. I encourage members to contribute to the meeting and the chapter in the general by being on a committee, judging papers, serving in office, presenting oral presentations or posters, etc. Speak to anyone on the executive committee if you would like to present, assist with the meeting, or help contribute to the chapter in any other way. A great annual meeting and chapter only occur for all when everyone takes an active part in them. Thank you to all for giving me the opportunity to serve you and I will see you soon at the annual meeting this winter (more details to be announced shortly).





Standardization, Fish Structures, and Digital Images.

Lewis Bruce



Today's world is truly in the fast lane and real time data is the new flavor. As soon as the data are collected in the field it needs to be summarized and distributed quickly. Last quarter Andy Fowler reviewed the use of a tablet PC so I decided to follow suit with the technology topic and discuss age-and-growth equipment and methods that the Fisheries Section will be using more of in the near future.

Data summaries are not only wanted instantaneously they also should come from a standardized method of collection. "Standardize" seems to be the buzz word lately or at least it is one term I have heard a lot over the past few years. How is this term summed up other than the possibility of changing how things have been done in the past? Standardized methods are typically widely accepted and reduce variability, i.e. they provide the ability to compare apples to apples. The Fisheries Section within the Iowa Department of Natural Resources has recently standardized many of the methods used to survey fish and is currently in the process of taking another necessary step to standardize techniques to calculate fish age and growth.

Where we were

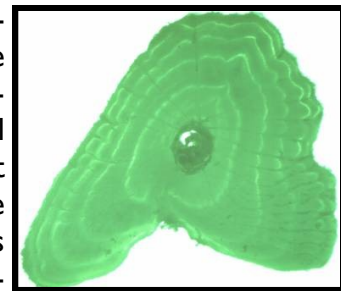
When I first started working with the Iowa DNR I aged fish structures in a dark closet using an Eberbach projector, and by the way I started in 2003 so that was not too terribly long ago! I had the company of a furnace and hot water heater so concentrating on the fish scales that took me several days to prepare and age was an easy task. After I emerged from the dark coffin I had a pile of measurements I would enter into a computer program called DISBCAL. DISBCAL was not a windows based program which made it difficult to navigate through. After a few days of entering and proofing numbers the program would produce a basic summary. If there were structures you wanted to look at again to work through discrepancies the process started all over. This process had lots of chance for

both measurement and transcription error. This little trip down memory lane might send me back to therapy.

At one point we had several Eberbach units around the state for measuring fish structures. Heated presses made by Larry Squibb were used to make impressions of scales on acetate sheets and most everyone was using DISBCAL to back calculate fish growth. Over the years technology has advanced giving us more options to process and read structures along with summarizing age and growth information. We as fishery professionals in Iowa have taken advantage of these new advancements which is both good and bad.

Current Status

The problem with having a multitude of new gadgets available is that everyone is using different methods and standardization is not as complete as it could be. We have a few scopes with digital cameras scattered around the state along with a few of the old Eberbach projectors and all of the stations are using different software packages and techniques to process and age fish structures. Some stations are using the actual fish structure to collect measurement data while others are using imprints on acetate sheets. Readers are also taking measurements at different locations on certain structures. Sectioned spines can have many lobes and not everyone will measure from the focus to the edge on the same lobe. Readers are consistent at picking the same line to measure when analyzing scales. As you can see we have a wide range of equipment and techniques being used to process

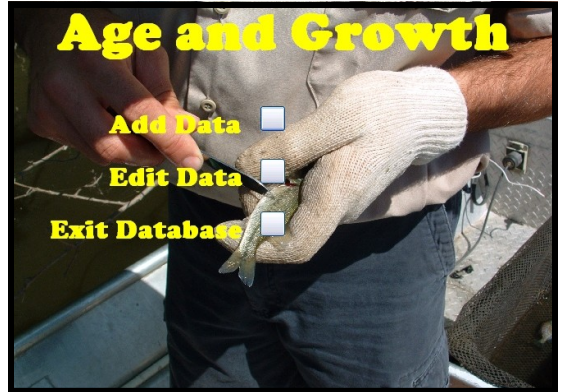


and age structures along with a huge mass of software summary options. In recent years one person in the Northwest district was aging most of the structures in the state using a scope and camera, having the one reader was good to standardize procedures but having one person aging fish for the entire state backlogged data summaries that managers needed. However, the phrase “no data is better than bad data” should be in the back of our heads because without quality control this could be a real issue if we have multiple readers that are not properly trained. One of the other issues we face is a push to have all of our data in a centralized database. Due to all of the different software packages being used it would be impossible to have a central database for our age and growth data at this point.

What we are working towards

Standardizing the process of aging fish is not only important for regional comparisons of data but also for data storage, more efficient and accurate analysis, and better statewide access. We will have four aging stations around the state and all of the data will be entered into one database. A committee will set up standard methods to process and age structures and digital images will be cataloged along with the measurements of each structure for future reference.

Training sessions will be conducted to familiarize all readers with the equipment and quality control procedures. Training readers to use the equipment will be relatively easy compared to setting up the quality control measures. One important tool we need to work through the quality control issue is known-age-fish. Known-age-fish exist for some of the species we will be aging, but gaining access to these structures may be difficult. According to some of the regional aging gurus Iowa has a great catalog of known age walleye so this will be a starting point. Lots of time will be spent on this endeavor but in the end we will have an efficient system to process, age, and catalog our age and growth data across the state.



License to Fish

A couple of young boys were fishing at their special pond off the beaten track. All of a sudden, the Game Warden jumped out of the bushes. Immediately, one of the boys threw his rod down and started running through the woods like a bat out of hell. The Game Warden was hot on his heels.

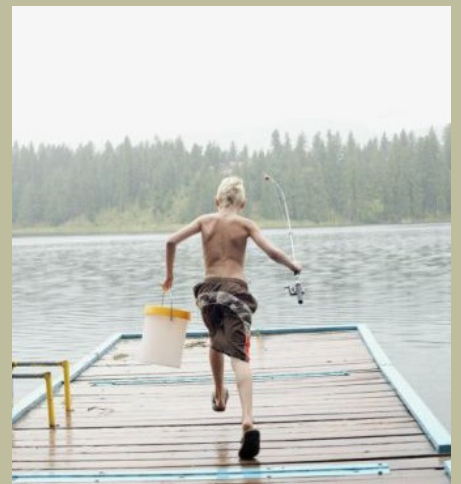
After about a half mile, the young man stopped and stooped over with his hands on his thighs to catch his breath, so the Game Warden finally caught up to him.

"Let's see yer fishin' license, Boy!" the Warden gasped.

With that, the boy pulled out his wallet and gave the Game Warden a valid fishing license.

"Well, son," said the Game Warden, "you must be about as dumb as a box of rocks! You don't have to run from me if you have a valid license!"

"Yes, sir," replied the young guy, "but my friend back there, well, he don't have one."



Age and Growth of Flathead Catfish from Pools 12 and 13 of the Upper Mississippi River

Caleb Schnitzler



In Bellevue we have been working on a flathead catfish project over the last ten years in collaboration with the Manchester Interior River Research crew of Greg Gelwicks and Greg Simmons. We have been working on the Mississippi River portion of the study. One of the main objectives of the project was to describe the age and growth of flathead. We also evaluated the structures and methods used to describe age and growth. Multiple methods were used to calculate age and growth of flathead catfish. Length at age was determined using sectioned otoliths and pectoral spines cut on the articulating process (Thanks to Greg and Greg for aging the spines!). Visual implant tags were also used to describe actual growth. Most research has shown that otoliths provide the most accurate age when compared

to other structures. Otoliths require the sacrifice of many fish including very large fish (ie: > 762mm). Otoliths and pectoral spines were collected from commercially harvested flathead catfish from Pools 12 and 13 (Rkm 841.0 to 938.3), Upper Mississippi River, aged and compared. When we compared the two structures, the spine articulating process accurately aged fish up to 17 years old (mean TL=907mm) before loss of annuli occurred. Spine articulating processes provide an accurate, reliable, affordable, non-lethal ageing technique that may be preferred in many situations as opposed to otoliths. Age structures were collected from 525 flathead catfish ranging in size from 86 to 1143 mm TL in Pools 12 and 13. The oldest fish aged with an otolith was 30 years old and 1072 mm TL. Mean length at age was calculated from 462 otoliths and from 518 spines. Annual growth from fish aged with otoliths was 30 mm/year ($R^2=0.83$) and spines was 31 mm/year ($r^2=0.89$). Similar to previous flathead catfish studies, growth was highly variable in the UMR. Growth was similar between sexes and there was little difference in growth predicted by the two aging structures. Spine articulating processes and otoliths both showed a high variability in growth starting at age 1. Some fish exhibited little or no growth, while others grew more than 152 mm/year. Predicted growth parameters from this study show that UMR flathead catfish ($L_{\infty} \cdot k = \omega = 116.1$) are slightly above

average when compared to 14 flathead catfish populations in the U.S. (ω mean = 102.7, range 38.6-178.2). For example, flathead catfish from this study grew faster to stock, quality and preferred lengths than those in Lake Wilson, AL by 0.71, 1.7, 2.5 years respectively. The growth coefficient k for was also slightly above average ($k = 0.121$) when compared to other native populations (k mean = 0.101, range 0.014-0.200). Annual and seasonal growth was calculated from flathead catfish captured from Pool 13 (Rkm 841.0 to 895.9), Upper Mississippi River, tagged with a visual implant tag and subsequently recaptured. Actual growth over the summer was estimated to be 0.25 mm/day and growth from year to year was estimated to be 32 mm/year. The actual growth calculated from tag returns validates estimates of growth derived from otolith and spine ageing techniques.

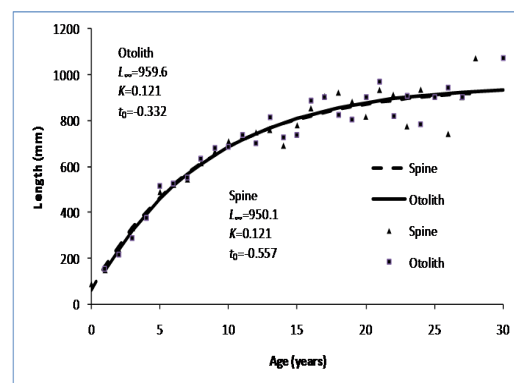


Figure 3. Mean length at age and the von Bertalanffy growth models were plotted to compare otoliths to spine articulating processes for flathead catfish from UMR Pools 12 and 13.



Potential State Record Falls Short

Glenn McCune of Coralville, Iowa caught this 51 $\frac{3}{4}$ inches longnose gar in the middle of the night on 7/13/2010 off his brother's dock in Harpers Ferry. He fought this fish for 20 minutes on his ocean reel fitted with 80-pound braided line. Glenn used a bluegill head as bait that evening. He and his wife were adamant that bluegill heads out-fish other "fish scraps" such as freshwater drum heads.

This was not their first encounter with these trophy-sized prehistoric fish. Just last year, his wife Karyla caught one that they believe was much larger. Unfortunately, the trophy longnose gar she landed flopped out of the hands of her husband after slapping their son in his face with its tail. As Glen tried wrestling the fish, Karyla noted its relative position on the dock, which she later measured as 71 inches. That same year Glenn harvested a 48 inch longnose gar that he barely landed by hand. Since then, the two purchased the mammoth -sized net that came in handy for Glenn's fish this year.

The state record longnose gar measured 51 inches and weighed 17 pounds 8 ounces. Glenn's fish measured longer by $\frac{3}{4}$ inch. Unfortunately, the fish weighed in at 14 pounds 4 ounces. Glenn didn't seem too disappointed though. He said that he already received a big fish award last year, and he reminded me of "the one that got away". His wife Karyla told him not to get his hopes up, as she will be the one to catch it.



State Record Flathead Catfish

Jim Mayhew, retired Fisheries Chief

In June 1958, Joe Baze from Chariton, caught the Iowa record flathead catfish in Ellis Lake, a 70 acre secondary water supply reservoir, for the city. At the time I was the fisheries biologist assigned to man-made lakes and reservoirs for the Iowa Conservation Commission. I heard about the fish through a local friend of mine, Everett "Pud" Parsons. The fish had been caught early evening and I accompanied Pud to Joe's home so I could measure and weigh the fish even though there was no record list compiled in this era. The fish was 52 inches in total length and weighed 81 pounds. We had to take the fish to Steinbach's Locker Plant and weigh it on their commercial meat scale since the largest capacity scale that we used in fisheries work was 50 pounds. I had never before seen a flathead catfish of this size.

After Joe indicated that he was going to have a fish fry with it, I asked if I could take a couple vertebrae from the spine to determine its age. More out of curiosity than anything. These were the days in fisheries science when aging fish without scales was probably inaccurate at best and impossible at the worst. Techniques for reliably aging catfish species with bony body structures was yet to be developed, so the best estimates were established by magnified examination of vertebral annuli. Not long after this a biologist with the Missouri Department of Conservation developed a superior method of aging catfish by using

a thin cross sectioned portion of the pectoral spine and projecting a light source through the section much like that used to determine age by a scale.

I easily counted 36 annuli in the vertebrae; however, I believe this should be considered the minimum age of the fish, since there was substantial evidence that annuli in early years of life tended to erode over time. The older the fish, the more eroded. I kept these vertebrae for many years, but when we moved our office from the state forestry headquarters building in Chariton to Red Haw State Park in 1971, they were lost.

Over time I believe there were four or five other large flatheads caught from Ellis Lake. The record fish that Joe Baze caught was not by accident: he was actually targeting this species. I talked with him many times on the West shoreline of the lake, sitting in a folding chair, and fishing with heavy tackle (two poles) using live bluegill or warmouth for bait. If my recollections are accurate I believe Joe caught two others in the 40 pound range from the lake.

The first one caught, I believe in 1949, was taken by Jerry Threlkeld, who was a partner in the Threlkeld Oil Company with two brothers. This fish weighed 47 pounds and he had it mounted. The fish mount hung for years above the main office door in their business on South 7th Street (I believe the building is now

occupied by a church). I talked with Sam Irving, who had a gas station next door, and he remembered the mounted catfish but couldn't tell me much more. The company went out of business many years ago and I have no idea what happened to the mounted flathead. A long time friend of mine, Glen Fowler, hooked into a large fish in Ellis Lake in the early 1950s and fought it for more than 10 hours before it broke loose. He was in a small boat fishing with conventional casting gear and was never able to get the fish to the surface before it broke off. He always said that it had to be a flathead catfish.

Most of the story of how flathead catfish were introduced into Ellis Lake was told to me by Pud Parsons and John Frazier, both residents of Chariton and ardent fishermen. This is the story that I heard from these two. Shortly after World War II (late 1940s) some local fishermen were camping, fishing, and taking and occasional sip out of the jar in the lower Skunk River in the vicinity of Salem, in Henry County. I remembered the name of Jerry Wells as one of the group. He lived just east of Ellis Lake and owned the Lake Vista Supper Club. I know that he was an avid fisherman, and I think his interest in fishing centered on catfish. Another name that I heard years later was Bob Patterson, but I only heard that he was part of the party once. As the story line went the group caught several huge flathead catfish and loaded



them in river water in a stock tank in the back of their pickup and headed home. En route they supposedly continued a bit of drinking and when they came down the hill on Highway 34 between Red Haw and Ellis Lakes they lost control of the truck and ran off the road into Ellis Lake. The tank upset and the flatheads escaped into the lake. That might have been 10-14 years before Joe Baze caught the big one.

Over the years that I worked in southern Iowa I saw perhaps a half dozen or so large flathead catfish, most during routine fisheries surveys. I can recall one that weighed 35 pounds or so that we took while operation in the outlet structure of Lake MacBride prior to dam reconstruction to raise the spillway elevation by 27 feet, so when Coralville Reservoir was impounded it would not overflow into MacBride. This project increased the surface area of the lake from 138 acres to the present 812 acres. I also recall taking a large specimen in Upper Albia Reservoir during a routine electrofishing survey.

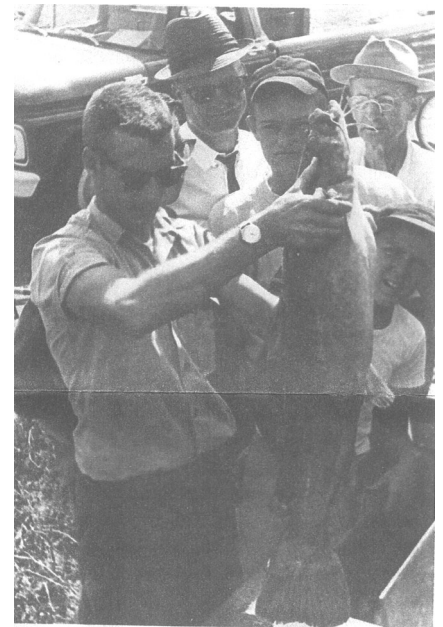
I think perhaps flathead catfish were a bit more widespread and abundant in man-made lakes than we realized at the time. No doubt moving of fish by anglers played a role in their distribution. Other possibilities are that they were inadvertently stocked into these lakes by the Fisheries Section itself. To my knowledge there has been never been a specific stocking program of flathead catfish in Iowa man-made lakes. However, I believe that flatheads might have been incidentally stocked as part of the channel catfish stocking program that went on for years.

The ICC had fisheries stations prior to the late 1960s at Lansing and Sabula on the Mississippi River. Part of their work program was to net channel catfish from the river, then transport and stock them in lakes, including man-made lakes and reservoirs. To believe that these plantings were wholly channel catfish, given the abundance of flathead catfish in the river, might be wishful thinking. As an example, I will always remember the mystery of a numbered jaw tagged channel catfish that we captured during a fisheries survey at Lower Pine Lake in Hardin County. The tag had a number and the letters WDOC. On a hunch, I wrote Ed Schneberger, who was then chief of fisheries in the Wisconsin Department of Conservation inquiring if it might have been tagged by one of their people. His answer was affirmative. The fish had been captured and tagged in Pool 8 in the Mississippi by the fisheries personnel at their La Crosse station. It would have been impossible for this fish to move down river to the confluence of the Iowa Cedar River, move upstream into the Iowa River, then travel upstream to below the Upper Pike Dam, traverse a 25 foot high concrete structure to enter Pine Lake. I believe the better scenario is that it was caught by the Lansing Station crew in a baited hoop net, hauled overland in a stocking truck, and planted in the lake.

There is one additional possibility that comes to mind. Channel catfish culture by the ICC was historically done at the Humboldt Fish Hatchery before construction of the Rathbun Hatchery. This was an extensive pond culture facility that

produced fingerling stock. The hatchery manager, Ernie Thune, was experimenting with the pond culture of flathead catfish and had moderate success. These fish were stocked into some of the streams in northern Iowa, such as the Racoon, Little Sioux, west fork of the Des Moines, etc for several years. I believe it was reasonable to speculate that some of these fingerlings made their way into the recreational lakes in southern Iowa.

What a story.



Jim Mayhew - September 1960 during fish population renovation at Lake Keomah



ISU Subunit Update

Current officers are:

President – Chris Smith - cdsmith@iastate.edu

President Elect – Evan Newman - newmane@iastate.edu

Our web address is: <http://www.stuorg.iastate.edu/isu-afs/>



Proposed activities for the 2010 school year:

- ♦ Assist the Iowa DNR:
 - Electrofishing and gillnetting on local lakes and reservoirs
 - Night electrofishing on the Mississippi River
 - Carter Lake renovation volunteer work
- ♦ Send students to the Iowa Chapter annual AFS meeting
- ♦ An ice fishing tournament for Subunit members
- ♦ Spring canoe-fishing-camping trip
- ♦ Public outreach display at VEISHEA on campus (one of the nation's largest student-organized events)

Brief summary:

The Iowa State University Student Subunit was a co-winner of the most active student subunit in the North Central Division last spring. Since receiving this honor, our ~25 members have continued to be very active. For example, last spring our organization hosted a fishing clinic/derby on Ada Hayden Lake for area children. The associated fishing clinic included: an overview of fish identification skills, knot tying, fishing regulations, and casting. A fishing derby followed the clinic and prizes were awarded for biggest and most fish. All children involved enjoyed themselves and members of the subunit deemed this outreach opportunity a success. In addition, last spring a "Fish! day" educational program was provided to a local Ames 4-H group. Similar to the fishing clinic associated information on fish identification, knot tying, fishing regulations, etc., was provided to the youth.

The Subunit is continuing to work on the Fishes of Iowa poster project. Last year a series of four post-

ers i.e., conservation need, rivers, streams, and pond and lake systems featuring fishes of Iowa were developed. Recently, the subunit has received Joe Tomellari's high resolution images of the 53 fish featured in the posters. Some additional work will be undertaken by members to insert these images to the final draft of the posters. Upon completion of the posters, printing will begin shortly and subsequently posters will be made free of charge to interested individuals.

The Subunit also hopes to become involved with several volunteer opportunities with the Iowa DNR such as the Carter Lake renovation project and the fall walleye sampling on the Mississippi. Additionally, the subunit will sample the three creeks in the Squaw Creek watershed as part of our long-term dataset on this region.

Other events planned for the rest of the school year include sending members to the National and Iowa Chapter annual meetings, an ice fishing tournament, Fish Iowa! clinic, a float-fishing-camping trip in the spring and possibly a Fisheries Mentor Night in which our advisor, graduate students and upperclassmen will assist younger members with resume/CV construction and general career advice.



Fishes of Iowa Posters

FISHES OF CONSERVATION NEED

DID YOU KNOW?

From small streams to large rivers, Iowa's waters are home to 148 species of fish, of which 88 are considered "species of greatest conservation need" and 2 are federally endangered. Their populations are often threatened by numerous factors, such as habitat loss, habitat degradation, waterway manipulation, land use, overexploitation, or runoff pollution. They comprise a unique group that is sensitive to change in their aquatic environments, making conservation and proper management very important.

FISHES OF RIVERS

DID YOU KNOW?

Large rivers are an integral part of Iowa's water resources. Two major rivers, the Missouri and the Mississippi, form the eastern and western borders of the state, while over 50 tributaries drain the interior. Some of the major interior rivers include the Niangua, Des Moines, Skunk, Iowa, Wapahong, and Turkey rivers. These waterways are important for supplying drinking and industrial water, flood control, river navigation and trade, and recreation.

Large rivers provide many different habitats, including backwater lakes, sloughs, islands, and side channels, and each habitat is characterized by a unique fish community. For example, well-vegetated backwaters serve as a refuge for larval and juvenile fishes, as well as a prime hunting area for snail-eating predators. Rocky banks and riffles provide spawning cavities for catfish, and wing dams create a reverse current where predatory fish like walleye can wait for their prey to wash over the dam. Large rivers often provide source populations of fish for tributaries, thereby enhancing diversity.

Major habitat modifications have been made to most large rivers, including dam construction, levee construction, wetland and backwater drainages, and channelization. These alterations have resulted in habitat loss, reduced water fluctuations, blockage of migration for spawning, increased risk of major floods, and many other issues. Large rivers require unique management strategies to meet the demands of both people and aquatic communities.

FISHES OF STREAMS

DID YOU KNOW?

Iowa has many thousands of miles of streams dissecting the state, draining farmlands, feeding wetlands and ponds, and providing recreational opportunities such as canoeing. These streams are home to an incredibly diverse array of fishes, invertebrates, and other aquatic organisms. The fish communities in streams of the Mississippi River basin are distinct from the fish communities in streams of the Missouri River basin, and while some streams are made popular by trout fishing, they are also home to many smaller and lesser known species.

Many streams in Iowa have been altered through certain farming practices. Some now begin at tile outlets rather than developing naturally, and others have been equipped of riparian vegetation. In combination with extensive channelization, these practices have contributed to higher stream flows and increased runoff. Degraded streams are often characterized by high abundance of very tolerant species, such as bluntnose minnow, creek chub, and white sucker. Healthy streams are often characterized by diverse assemblages including sensitive species, such as rolfus shiner, various darters, and northern hog sucker.

FISHES OF PONDS AND LAKES

DID YOU KNOW?

Iowa's lakes and ponds are an important component of the state's water resources. Over 80,000 farm ponds serve as a water source for livestock and other agricultural uses. However, farm ponds are also used for fishing, swimming, and other forms of recreation. They are often stocked with largemouth bass, bluegill, and channel catfish, all of which are popular sport fish species.

Natural lakes and reservoirs are much larger than ponds, with deeper waters and more complex fish communities. Some species are prone to overpopulation, such as black bullheads and planted shad. Other species are rare, such as the Iowa darter and redear sunfish. Lakes and reservoirs are often stocked with walleye, muskellunge, and other sport fish species.



Continuing Education 2010

Aquatic Plant Identification

Iowa Lakeside Lab, West Okoboji Iowa

Twenty-three people from across the state found time August 10-11 to attend this year's continuing education course - Aquatic Plant Identification. Darcy Cashatt organized the course with help from Lewis Bruce, Robert Kill, and Clay Pierce, and financial support from the Iowa Cooperative Fish and Wildlife Research Unit. Instructors included Darcy, Lewis Bruce and Robert Kill from DNR, Joe Morris from ISU, and Gary Phillips from Iowa Lakes Community College. It was a diverse group of students, with representation from Iowa DNR Fisheries Bureau, Dickenson County SWCD and CCB, and a former ISU student that worked on the Clear Lake project. Though a long trip for some, Iowa Lakeside Lab on the west side of West Okoboji Lake offered a first-rate facility and ready access to a wide diversity of aquatic plants for the 2-day course. Algae, submersed and emergent plants, and invasive species were topics of brief lectures. Hands-on practice identifying specimens in the lab and on West Okoboji and Spirit Lakes filled the majority of class time.



August 20, 2010

AFS-Iowa Chapter

Attention: Bryan Hayes



Bryan:

The organizers of the 2nd International Catfish Symposium sincerely thank you for your support. As a result of your gracious assistance, the Ictalurid Technical Committee of the North Central Division of the American Fisheries Society (AFS) and the Catfish Management Technical Committee of the Southern Division of AFS held the symposium in St. Louis Missouri from June 19-22, 2010.

In the face of major travel restrictions and budget cuts, symposium attendance still reached 205 fisheries professionals from 32 states and five countries. Attendees represented state and federal governments, universities, and non-profits. Without your and other sponsors support, this level of attendance would have simply not occurred. Thank you.

The meeting included a major exchange of information about the biology, ecology, management, and conservation of worldwide catfish populations and their habitat. The plenary session was top notch and included presentations from Dr. Don Jackson on "Advances in Catfish Science during the Last Decade," Steve Quinn on "Human Interactions with Catfish," Dr. John Armbruster on "Global Catfish Diversity," and Dr. Zeb Hogan on "Conservation Issues and Efforts with Large Catfish Worldwide." Overall, nearly 100 presentations occurred (65 oral and 34 posters). More than 65 of which have been submitted for the symposium proceedings. The proceedings will be published through AFS and July 2011 is the target date for publication.

Again, on behalf of the attendees and the entire planning committee, thank you very much for your support of this timely and important symposium. It indeed was a rousing success and only occurred because of your gracious support.

Sincerely,

Tom Lang

Fundraising Chairman



FUN TIMES AROUND THE STATE

YOU BET YOUR SWEET BASS

Captain Royce at your service



"FISHYTAILS" OF LOVE



Application form

Fisheries Project Grant

Iowa Chapter – American Fisheries Society

Project Name: _____

Project Description: _____

Attach map or supplementary information

Project Location:

Water Body: _____

Address: _____

_____ County: _____

Start Date: _____ End Date: _____

Project Personnel: _____

Fisheries Benefits: _____

Iowa Chapter Representative: _____

Amount needed: \$ _____ Total project cost: \$ _____

Money will be used for: _____

Up to \$1,000.00 per project.

Approved by Excom Committee Date: _____



The Iowa Chapter of the American Fisheries Society is offering to help finance worthwhile fisheries related projects. The completed application form needs to be transferred to the Iowa Chapter President by an Iowa Chapter Member.

Project Name – Give the project name.

Project Description – Give a brief review of the intended project. Include the work to be done, the methods and material that will be used in the project.

Attach a map and any supplementary information that you think will help the Excom Committee evaluate the project.

Project Location – Where will the work be done.

Start and End dates for the project. Month and calendar year will do.

Project Personnel – Include organizations and or individuals who will be directly involved in the work.

Fisheries Benefits – A very important part of the project should be direct benefits to Iowa's fishery. How does the project help and who is the beneficiary?

Iowa Chapter Representative – All projects need to have an Iowa Chapter member as a sponsor.

Amount needed – Tell us how much you need and the total project cost.

Money will be used for – Be as specific as you can. Will the money be used to hire people, buy, equipment, be seed money for a grant, etc.

There is a \$1,000.00 limit for each project.

The Excom Committee of the Iowa Chapter will review the application and approve or reject the request.

