#### Volume 34, Issue: 1

June 15, 2016

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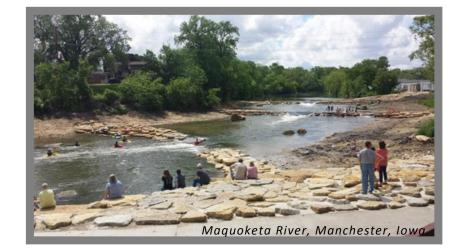
Iowa Chapter of the American Fisheries Society

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15 Oldest well-documented Blanding's

Turtle recaptured at reserve at age 83



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### Our Mission:

To improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals.



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## **President's Corner**

Spring is here and for many of us walleye brood stock collection is quickly approaching. Slab crappies, strutting turkeys, shed antlers, mushrooms, and asparagus are a few of the other activities rolling around in my head. Focusing on report writing and finishing up winter tasks is proving to be difficult with the thought of spending time outdoors so I will do my best to not wander off topic as I write this article.

Many of you attended our annual chapter meeting at Honey Creek Resort this past March. I hope you enjoyed the venue and were able to take something away from the presentations or expand your network with other fisheries professionals. We had a fantastic turnout drawing folks from other states around the Midwest. Dr. Rick Cruse was our plenary speaker



from ISU and gave us a look into the future of water quality and the challenges of managing our water resources on both local and global scales. This was followed by an impressive lineup of presentations from both students and professionals. The chapter business meeting followed the speaking session Tuesday afternoon and we were able to cover a lot of new and old business in a short amount of time. One of the items we voted on was our bylaws revision. Randy Schultz, Southeast

lowa supervisor, has been working with the NCD to see this project to completion and it is almost finished.

The evening activities were centered around a live auction led by the infamous auctioneer Ben Wallace. Even though Ben did a bang up job it just wasn't complete without the "Two Dogs in some Field" artwork. I won't mention names but the Southeast Iowa supervisor should keep an eye on that print, it just might grow legs and walk away someday. The auction ended with retired spotter DJ Vogeler making sure the muskie fishing trip guided by world renowned muskie hunter Pete Hildreth was auctioned off with the appropriate level of enthusiasm. Jeff Kopaska was the high bidder of this fantastic trip and will most certainly put Pete's talent to work! If Pete can put a fish of a thousand casts in Jeff's hands he truly is a master guide.

The meeting would not have been a success without the work of several individuals. I would like to start by thanking Ryan Hupfeld, Jeff Kopaska, and D. Allen Patillo for all of the work they put into planning and running the chapter meeting. The student subunit and several others did a great job collecting items for the live auction and general raffle.

In closing I hope all of you take time to visit the NCD website and scroll through the new content. I would also like to welcome our incoming president Jeff Kopaska, he will take over the presidential duties in August.

Have a great spring!

Lewis J Bruce

# Simplifying Fisheries Data Management and Security

#### *Mike Siepker, Fish Management Biologist ~ Iowa DNR*

As biologists prepare to collect data, many questions arise related to gear types and sampling designs. No less important is how the data will be stored once collected. In this day and age, technologies change quickly and the data storage of yesterday may not be useable tomorrow, jeopardizing long term data security. Planning ahead when storing data will make using the data and sharing the data in the future much easier.

When working on a project examining long-term fisheries data sets for large reservoirs, I encountered an interesting situation. Missouri had been collecting data on some of the reservoirs for over 30 years, and had plenty of data to show for it. The only problem was that the data was stored on technologies spanning 30 years, making a quick analysis impossible. Data was stored on paper sheets in filing cabinets, on a variety of disks, CD-ROMs, and on the C or D drives of several biologists, even though an agency-created fish data management program existed. The problem with the existing program was that it was based in Access, a program very few field biologists used. The program was not user-friendly, often crashed during data entry, required queries to sort data, and did not allow biologists to easily export their own data. Because of these weaknesses, few biologists used the Access-based program. The magnitude of the problem wasn't apparent until we tried synthesizing 30 years' worth of data.

Luckily, Fisheries Leadership of the Missouri Department of Conservation (MDC) understood the challenges facing biologists when it came to data entry and storage, and set aside funding to develop a new and improved fish data management program. To lead the development of the program, the Fisheries Division developed a special committee of field biologists managing everything from wadeable streams to large rivers, in-house IT personnel, and external IT consultants. After meeting every two weeks for nearly a year, the committee was pleased to release the Fisheries Information Network System (FINS) to MDC Fisheries staff. FINS is a software package developed by MDC to 1) manage and record fish management and research data and 2) provide detailed analysis and reporting of these data. FINS is a web application housed on MDC's intranet with all program data being stored on MDC's central servers, and does not require other program such as SAS or R to operate. The decision to develop a web based application over a desktop application was based on the web's advantages of easily shared data, efficient and complete updates of the program as needed, and long term data security. FINS is a .net application written in C# with an MSSQL database. The reports are developed on SQL Server Reporting Services (SSRS) and T-SQL stored procedures.

The software package details information for individual fish and metadata about the sample; 1) WHY the Collection was made, 2) WHEN it was made, 3) WHERE it was performed, and 4) HOW it was done (what gear). Having this metadata entered into FINS is extremely valuable for future biologists who need to understand the whole story behind the fish data.

The primary categories recorded within FINS are:

- Water Body The water body the fish sample was obtained from.
- Collection A grouping of related fish samples. Usually all the fish samples performed on a body of water for a particular year.
- Sites Description of the physical location on the water body where the fish sample was performed. This includes UTM information.
- 4) Runs Records each "run" or event when fish were collected. Records 1) date of run, 2) portion of the site where the run occurred, and 3) the method used to capture the fish (electrofishing, netting, hooking, or observation).
- 5) Fish Data Detailed information such as length, fre-

quency, weight, tags, population estimate marks, and age for each fish can be entered into the program, or can be uploaded via an Excel data sheet template.

6) Bony Part/Annuli – Record age/growth information from the bony part of a fish.

Fig I: Example of Fish Data Entry Page

/ O D 3	Page: 1 🌩 Results per Page: 5 💽 Save All   0	Cancel All			
- 5 of 13					
Number	Species 💠	Length (inches) 💠	Weight (pounds) 🗢	Frequency 🔷	Action
<u>11</u>	BLACK CRAPPIE	10.00	3.00	1	⊗ X
<u>10</u>	BLACK CRAPPIE	9.00	2.00	1	8 X
(none) (Removed)	BLACK CRAPPIE	10.00	3.00	1	8 1
<u>9</u>	BLACK CRAPPIE	7.00	2.20	1	8 X
8	BLACK CRAPPIE	5.50	1.00	1	⊗ X

For biologists collecting hard structures from fish for ageing, FINS contains a special screen called the "Heads Up Display" (HUDS) to view bony structures and measure the distance between annuli on the screen. HUDS allows an image of a Bony Part to be loaded on the screen where a biologist can "click" on each annuli. HUDS then saves the distance between each annuli and uses those measurements to create several different age reports.

Once information is stored in FINS, a series of reports are available within the program that allows detailed analysis of the fish samples. The report generator allows users to filter data by input parameters such as date, waterbody, fish species, sites, runs, and tag information. Reports currently available in FINS are:

#### Age - Growth Summary

Average Annual Increments of Back Calculated Lengths for Each Age Class

Average Back Calculated Lengths by Age

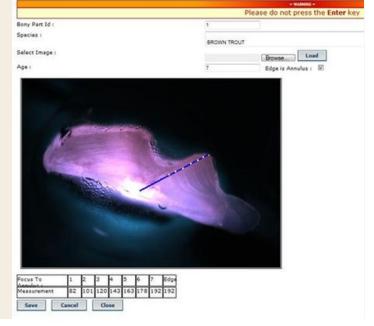
- Individual Back Calculated Annual Increments
- Individual Back Calculated Lengths
- Length Frequency by Age Class
- Length Frequency Listing
- Length Frequency Summary
- Population Estimate Chapman Method
- Population Estimate Schnabel Method
- Relative Weight by Length Category
- **Relative Weight by Size Increment**

#### Fig 2: Heads Up Display in the FINS program

#### MDC applications



2004 - Current River (L) - (main stem) - Blue Ribbon Trout Area - Dave Mayers



Fish sample data can also be exported in Excel for quality control analysis and individualized graph and table creation. This allows biologists to easily share information or allow research staff to access their fish sampling data from anywhere in the state. All reports generate a cover sheet showing all the input metadata used to generate the report. Exportable tables and graphs are part of most reports.

#### Fig 3: Example of Length Frequency Report

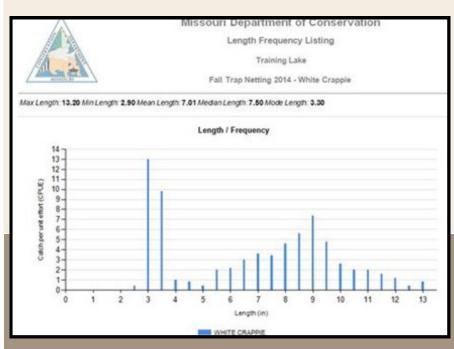
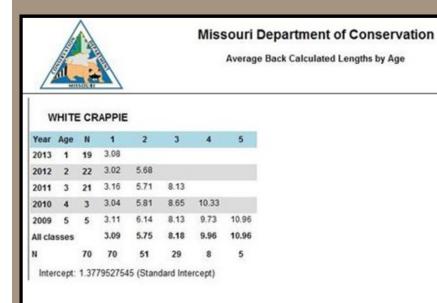


Fig 4: Example of Average Back Calculated Length at Age Report



One common question from new FINS users is, "if everyone on our intranet can see my data, how do I know it will not be deleted or changed?" Only approved FINS users can access the application and the creator of the collection can designate up to three additional users with editing rights. After a collection is quality checked, the collection coordinator "Approves" the collection which locks down the data set, thus preventing any editing. Only the coordinator can unapproved a collection so it can be edited again. Once the collection is approved, other users can still view, run reports on the data, and export data for further analysis. This system assures long term security of the data. Another good information archiving feature of FINS is the option to add notes and attachments to most levels (Collection, Site, Run, and Fish Data). Attachments can include any file type. Common attachments are sample site maps, research proposals, final reports, and bony part images.

Yes, there is an app for FINS too! MDC has also developed tablet apps that allow biologists to enter data in the field, and once connected to the internet, upload their data directly into the FINS program. This drastically reduces time requirements and errors by streamlining the data entry process. The app has been successfully field tested by MDC staff for the past two years.

Since completion, FINS had undergone several upgrades and is now available to other state agencies for free from MDC. Several states including Arkansas, Oklahoma, and Virginia have already realized the power of FINS and have signed user agreements with MDC so their staff can begin to streamline data entry and analysis. For aquatic professionals interested in learning more about FINS, MDC is hosting a FINS workshop at this year's American Fisheries Society meeting in Kansas City. They can also contact me to learn more about simplifying fisheries data management with FINS!

## WHY I LOVE FISHING!

Chris Clouse, Hatchery Biologist ~ Iowa DNR



I got into the fisheries profession because I love fishing! Our constituents, the licensed anglers of lowa, share this same passion for their sport. There is no doubt, that it is easier to serve our customers if you can relate to them on a personal basis. The love of fishing is experienced differently by individual anglers. For me, I love the mysteries hidden below the water surface. I certainly love the excitement of the strike and the fight that ensues. Recalling and telling "fishing tales" is one of my favorite conversations. I treasure the memories, friendships, and discussions that seem to happen while fishing.

As a fishery professional, I believe it is critical to understand our stakeholders and to be able to relate to their concerns on a personal level. Exploring a new fishing destination with unknown results is exciting. Travelling to neighboring states to go fishing is a great way to compare our professional work and accomplishments to work being done by surrounding agencies. Carefully reading our neighbors fishing regulations and paying for a non-resident fishing license gives one personal insight into our accomplishments as fisheries professionals. Each summer I plan at least one "fishing vacation". I would like to share a few of my recent destinations and observations.



#### #I – Upper Mississippi River

We traveled to La Crosse, Wisconsin to access the Upper Mississippi River by way of Manchester, Iowa last summer in late July. The white water park in Manchester was lots of fun and was well worth the stop. My friend, Brent Knights, guided us the next day on Pool 7 of the Mississippi River. We launched out of Dresbach, MN. We fished many wing dams with crank baits and jigs and caught several small Sauger and Smallmouth Bass. We worked our way upriver to Trempealeau, Wisconsin. We boated up to the Hungry Point Bar and enjoyed a great burger, beautiful scenery, and refreshing beverages at lunch time. Since we were near the dam we decided to try vertical jigging with a variety of baits. After making a couple drifts my son, Sam, thought he was snagged and asked that I move the boat upstream over the snag to try and free the lure. As I manipulated the trolling motor we noted the drag had started slipping and line was zinging off the spool. Sam set the hook hard as his rod doubled over. The fight was on!

The excitement grew as we speculated what might be hooked

to the home made jigging spoon that he had tied on. Brent had experience sampling fish in this area and suggested Sam may have hooked into a Lake Sturgeon, Paddlefish, or Flat Head Catfish. After about a 15 minute battle a large, yellow colored, fish could occasionally be seen about three feet below the water's surface. Soon it became clear to us that this large Flat Head Catfish had indeed tried to eat Sam's jigging spoon and that the dipnet in the boat was pathetic for the job at hand. Eventually we managed to wrestle the 42 lb. Flathead over the gunnel of the boat. High fives were shared all around and a great memory was made! We cleaned the fish at the boat ramp among many envious onlookers. The fish fry which later ensued provided more than enough meat to feed the entire Moravia High School football team and their coaches at the beginning of their season.



#2 Truman Lake, Missouri



It is a short 5 hour drive from Moravia, IA to the Bucksaw Campground at Truman Lake Missouri. The lake is well known for Blue Catfish, Hybrid Striped Bass, Paddlefish, and Crappie fishing. I was invited by my friend Ron Boylan to come along on this trip. Sadly, Ron left this world about 6 months after our fishing adventure. Ron was an avid crappie angler and participated in the Crappie Masters circuit. Our trip was around the middle of August and coincided with a tournament scheduled for that weekend that Ron would be competing in. Believe me, August in Missouri can truly test your desire to fish all day long, the heat and humidity can get to you! Ron had arranged for us to camp in a USCOE campground in tents. I learned that sleeping in a tent in August is really not too bad if you follow a few simple rules each evening. The evening should begin with a cold shower, followed by a light dinner with drinks, before bedding down with a fan blowing on you all night long!

The sheer size of the lake was impressive to me. You really can't compare anything we have here in lowa to this lake. We were able to find good numbers of 12" to 14" white crappies scattered among the miles of tree rows partially submerged in the lake. There is tons of cover to fish in Truman. I think you could spend a lifetime and never cover all of the water.

We didn't catch a lot of fish on that trip but we did make some memories. Ron was the most talented fisherman I ever had the pleasure to spend a day in the boat with. He seemed to always be the first to hook into a fish and had plenty of lively quotations to share during the trip. He was never intimidated by conditions, lake size, or competition. He believed in conservation, the excitement of fishing, and also was a fun guy to be around. I miss my old friend Ron but imagine he is doing just fine wherever he has gone on to.



This is a brief description of some of the reasons why I love fishing! You can decide the people, places, and experiences this great sport will provide.

**Take this challenge:** make it your personal responsibility to take at least one major fishing trip per year. You will gain insight into our professional accomplishments or lack thereof. This small effort might give you the inspiration to improve fishing in lowa in ways you never imagined. You will also harvest memories that can last for a lifetime.

#### Good luck!



# Preliminary Information on Angler Response to a Rehabilitation Project on the Maquoketa River

#### Megan Thul, Fisheries Research ~ Iowa DNR

River restoration is gaining momentum as more lowans ask for improved habitat and recreational opportunities in lowa's rivers. One river restoration technique that can address issues of poor habitat quality, habitat fragmentation, and reduced river recreation is dam modification and/or removal. We know improved river habitat and increased connectivity will benefit river fisheries, but little is known about how rehabilitation projects affect anglers. This type of information is especially important to anglers that primarily fish below dams and perceive their success as a result of a dam.

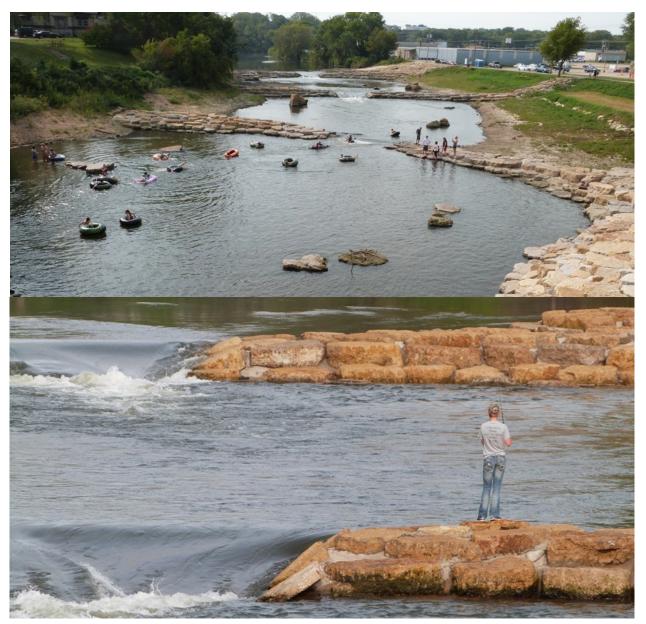
So how do anglers respond to rehabilitation projects in interior rivers? The interior river research team is currently working to answer this question for anglers fishing the Maquoketa River in Manchester. The city of Manchester recently removed a portion of a low head dam and constructed six whitewater structures to improve river recreation and dam safety, and increase economic activity in the community. To ensure the whitewater structures would not act as barriers to fish passage, each structure included a fish passage component (Picture 1).



To assess the effects of the project on angling, a roving creel survey is being conducted from April-October for three years before and three years after whitewater construction. Pre-project data was collected during 2012-2014, and the first year of post-project data was collected in 2015. Anglers were counted to determine use of a 4.5 mile reach of the Maquoketa River near Manchester. The 4.5 mile reach was divided into 5 zones with two zones in the whitewater project area, one directly above and another directly below the dam. Anglers were also interviewed about their fishing trip. Angler use and response to interview questions were summarized for each year in the overall creel area and whitewater project.

Prior to dam modification, the zone directly below the dam was the most popular fishing spot in the study area and the zone directly above the dam was the least popular. More than 44% of angler hours were spent fishing directly below the dam, but less than 5% directly upstream of the dam. After completion of the whitewater structures, relative angler hours dropped below the dam (30%) but were the highest observed above the dam (11%).

Overall, angler effort (hours) decreased somewhat for the Maquoketa River and whitewater project area after dam modification (Table 1). Several factors may have resulted in decreased effort in 2015. Whitewater construction was still ongoing until mid-May and the Grand Opening was not held until late-June. Though some people fished in the project area during April and May, construction activities may have decreased angler effort. These months had considerable angler effort during pre-project surveys in years when river conditions were favorable. Angler effort in July and August may have been suppressed by high recreational use in 2015 (Picture 2). The creel clerk observed very few swimmers and tubes floating in the Maquoketa River in 2012-2014. However, in July 2015 more than 233 people were observed recreating (i.e., swimming, tubing, kayaking, canoeing) at one time! The high amount of recreational activity may not only influence angler effort but also result in anglers changing their fishing trip (i.e., shortened trip length, change in location, reduced number of trips).



Picture 2. Recreational use of the whitewater area above the former Maquoketa River dam.

In 2015, average trip length was shorter, however, more angler trips were made compared to 2014 (Table 1). Shorter, more frequent trips may be explained by anglers catching many, but small Walleye. The 2014 Walleye year class had good survival and resulted in high catch rates for anglers contacted in 2015. Very few anglers reported catching or harvesting larger fish. As the 2014 year class grows into more harvestable size, we may see increased Walleye harvest and longer trip lengths for Maquoketa River anglers.

Lack of experience fishing the Maquoketa River may also explain reduced trip length for some anglers. The number of new anglers was highest in 2015 and more anglers that typically fished lakes or ponds were fishing the Maquoketa River white-water project area. We did see an increase in the distance anglers traveled to fish the project area in 2015 and these anglers are likely not as familiar with the Maquoketa River as more local anglers.

Local anglers make up the majority of people fishing the Maquoketa River. More than 70% of anglers interviewed live within 10 miles of Manchester and >96% live within 60 miles. Angler demographics were similar among years. Over 80% of anglers that fish the Maquoketa River are male and less than 20% are female. Many Maquoketa river anglers are relatively young as the majority (>60%) are less than age 35.

Average money spent fishing the Maquoketa River was low (Table 1). Since the majority of anglers are local, these anglers do not have large fuel expenses incurred by those traveling longer distances or those fishing deeper river reaches from a boat. Maquoketa River anglers primarily fish from shore and use basic tackle to catch fish.

Angler satisfaction is high in the Maquoketa River study area. More than 77% of anglers interviewed are satisfied with their trip and satisfaction increased 9% post dam modification (2012-2014 mean: 82%; 2015: 91%; Table 1).

						Distance			
Area		Angler	Angler	Trip length	Total	traveled	Money	Total new	Satisfaction
Creeled		trips	Hours	(min)	interviews	(miles)	Spent	anglers	(%)
Overall	2012	2878	4748	99	273	29	33	76	77
	2013	3398	6524	115	365	9	9	42	83
	2014	2460	4232	103	320	10	7	58	86
	2015	2596	3945	91	580	16	8	109	91
Whitewater	2012	1665	2364	85	127	11	19	29	80
	2013	2153	4026	112	256	11	8	35	82
	2014	1079	1909	106	148	8	7	29	82
	2015	1312	1613	74	344	17	6	65	89

Table 1. Summary of angler survey data in the overall Maquoketa River study area and the whitewater project area, 2012-2015. Data was collected in 2012-2014 prior to dam modification and in 2015 after dam modification.

During the first year after completion of the whitewater project, angler hours and trip length decreased. Factors like temperature, Secchi, discharge, fish CPUE, and number of recreationists can influence angler hours and trip length and these factors will be considered in future analysis.

Some non-angling benefits exist with these projects. Construction of the whitewater resulted in increased non-angling recreation on the Maquoketa River. With increased recreation, potential to recruit anglers exists if whitewater users observe anglers catching fish. Also, some lapsed anglers may bring their fishing rod to fish the new habitat created from the whitewater structures while their kids swim or tube. Many local businesses have benefited from people using the whitewater, especially businesses that rent kayaks and tubes!

Our results are preliminary and include only one year of post-project data collection. Data collected from surveys over the next two years will provide a better idea of the longer term impacts of the project on angling in the Maquoketa River.



### Iowa State Subunit News

After last years State-wide AFS meeting in Ames, Iowa, all of our officers have changed. Jed Siegwarth moved from president elect to president. Stephen Grausgruber became the new president elect. Trevor Blankman became the new secretary. Kassidy Sitz was our treasurer for the fall semester of 2015, but has now graduated. Thomas Devine was then voted and sworn in as the new treasurer for the 2016 spring semester. During this school year we had many new members sign up for the club at our booth during club fest. Unfortunately only a handful of those new members have been actively coming to meetings and other events. This year as a club we have had members help volunteer at Rathbun Hatchery to pit tag and fin clip fish. For the second year in a row Allen Pattillo has put on a fly tying class for members to show the basics of what it takes to tie your own flies. During one of our scheduled meetings, Nathan Mills, a grad student, gave a talk on his project of testing game fish for mercury contents. Before it became too cold this fall, many of us members took a short trip to the South Skunk river near Ada Hayden to try our hand at fishing and seining the river. One of our newest members from the Philippines got to try her hand at fishing for the first time which was a new experience for her, and by the end of the night she had her cast down pat. Again this year we were lucky to have Jason Euchner and Kim Bogenschutz put on a resume workshop before the DNR started conducting the application process for this next

summer's positions. With the upcoming Statewide AFS meeting approaching, we have begun soliciting business for donations to go towards the annual banquet raffle. February 6th the club will be helping stock trout and aid kids that will be fishing there for the event at Ada Hayden lake as done in years previous. Later February Allen Pattillo led the club on a tour of his Aquaponics facility. In March our club had 4 undergrads attend the Statewide AFS meeting at Honey Creek Resort, where our treasurer Thomas Devine presented a poster. A handful of grad students also gave presentations at the meets as well as a few posters. During the event, the club sold previous years t shirts as well as AFS coffee mugs. Future plans for the rest of the year are to tour the Big Springs Fish Hatchery in Northeast Iowa, gill net with the DNR for broodstock at Spirit Lake, and to hopefully line up a tour of the Berkley factory.



## New Technology Projects to Improve Services to Iowa Anglers.

Jeff Kopaska ~ Iowa DNR

The Iowa DNR Fisheries Bureau collects data, lots of data. We sell licenses. We count fish and plants. We put fish and habitat structures in the water. We oversee fishing clinics and tournaments. We count them, record them, document them, enter them, and then what? We exist in a results driven environment, and one thing we have not done is provide this type of information for our constituents to consume. The time has come to change that, and the tool to do so will soon be online: Your License Dollars at Work!

This data system was designed to allow stakeholders and policymakers to see the return on their investment in the lowa Fish and Wildlife Trust Fund. The Fish and Wildlife Trust Fund is the constitutionally protected depository of all fishing and hunting license sales receipts for lowa, and it is the funding source that provides for fish and wildlife management activities in lowa, including fish stocking and fish and game law enforcement.

The initial version of the system provides information regarding the work accomplished by the Fisheries Bureau. It was designed to aggregate and disseminate locationspecific information regarding the work accomplished by the Fisheries Bureau. This project pulls together existing data sources, develops queries, and provides information via a query-based web page that lists available fisheries accomplishments for each county in Iowa.

The data currently being provided includes fishing licenses sold, income from licenses sold, trout privileges sold, fish stocking data, fishing structures and boat ramps, fish and vegetation surveys, dollars invested by the lake restoration program, total miles and acres of water being managed, and the names and contact information for the staff who manage and patrol these resources. life and law enforcement data, and refining the presentation of the data to provide even better information for our constituents. Keep your eyes peeled for the roll out of this system.

#### Master Angler updates and improvements.

Since the Master Angler program debuted 5 years ago, two relevant things have happened. First, it has become pretty popular with our anglers. Second, our anglers have moved a lot of their internet activity to mobile devices. The intersection of these occurrences led to a pretty obvious conclusion – we needed to update the Master Angler system so that it is more mobile friendly.

The updated system will allow for easier data entry from a smartphone, and will display much better on these smaller devices. In addition to these technological updates, we are also undertaking some functional updates. We are adding a new Species Specialist award, and integrating a variety of comparative reporting functions. The new reporting page will provide lists of annual and overall angler rankings based on total award-worthy catches, which species have the most award qualifying catches, and which water bodies have the most award qualifying catches. This information should allow anglers more insight into where they can go in lowa to catch big fish. It is getting me ready get out there and start fishing!

Future prospects for this system include integrating wild-

# Oldest well-documented Blanding's Turtle recaptured at reserve at age 83

May 25, 2016—University of Michigan



Researcher Justin Congdon with an 83-year-old Blanding's turtle at U-M's E.S. George Reserve.

Credit: Roy Nagle

A female Blanding's turtle believed to be at least 83 years old was captured at a University of Michigan forest reserve this week. Researchers say it is the oldest well-documented Blanding's turtle and one of the oldestknown freshwater turtles.

The turtle was captured Monday at U-M's Edwin S. George Reserve, about 25 miles northwest of Ann Arbor in southwestern Livingston County, near Pinckney. This individual, known as 3R11L, was first captured and marked in 1954, one year after the start of the reserve's long-running turtle study. It has been recaptured more than 50 times since then.

Blanding's turtles reach sexual maturity at around age 20. Since 3R11L was sexually mature when first captured in 1954, she is believed to be at least 83 years old, according to turtle researcher Justin Congdon, who began studying the E.S. George turtles in the mid-1970s.

"There was a lot of excitement and a lot of high-fives when we caught it, and we celebrated with a bottle of Cabernet," said Congdon, a professor emeritus at the University of Georgia who studied the E.S. George turtles every nesting season from 1975 through 2007. He came out of retirement to return to the reserve this month.

"We knew that we were down to fewer than 15 of the turtles that were marked in the 1950s," he said. "We figured we still had a chance to catch one, and it has been one of our goals to do so."

The previous longevity record for a Blanding's turtle was a 76-year-old individual from Minnesota, he said. Other types of turtles, including box turtles, wood turtles and sea turtles -- as well as tortoises -- are thought to live longer.

"This is just one example that shows the importance of our multigenerational investment in the biological sciences," said Andrew Martin, dean of the U-M College of Literature, Science, and the Arts.

"If we hadn't continued this work over the decades, we would have no idea how long-lived these turtles are or how they respond to ecological changes," said U-M biologist Christopher Dick, director of the E.S. George Reserve.

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Congdon said that when he examined 3R11L, he felt what he believes are soft-shelled eggs inside of her. In his decades of research at the E.S. George Reserve, Congdon found that the oldest female Blanding's turtles he captured had more egg clutches than the younger ones, as well as more eggs per clutch.

"Reptiles basically reproduce until something kills them," Congdon said. "So if it turns out that this individual is gravid, it would not come as a total surprise. Even so, this would be quite a bit older than has been documented in many other snakes and turtles."

In addition to Blanding's turtles, painted turtles and snapping turtles are also studied at the 1,297-acre E.S. George Reserve, which was established in 1930. There are an estimated 1,500 painted turtles at the reserve, along with about 250 Blanding's and 250 snapping turtles, Congdon said. While the population of Blanding's turtles at the E.S. George Reserve appears to be stable, that's not the case in other parts of the animal's range. It is protected by Michigan law as a special concern species. And about a year ago, the U.S. Fish and Wildlife Service said it would assess the status of five reptiles and amphibians to determine whether Endangered Species Act protection is warranted. Blanding's turtles were one of the five species; the study is ongoing.

Dick said the reserve has initiated a restoration program to improve historically important nesting habitat for Blanding's turtles. They prefer to nest in open, sandy locations with lots of sunlight.

But over the years, a non-native shrub called autumn olive has invaded many longtime nesting sites in the reserve. During the past year, autumn olive was removed to restore nesting habitat, Dick said.

### Iowa Chapter of the American Fisheries Society Annual Business Meeting Iowa Chapter AFS Meeting – Honey Creek Resort Moravia, IA 4:00 PM, Tuesday, March 1, 2016

#### CALL TO ORDER

The meeting was called to order by President Lewis Bruce. Allen introduced EXCOM: Secretary/Treasurer: Ryan Hupfeld, Past President: Allen Pattillo, President Elect: Jeff Kopaska, Student Subunit President: Jed Siegwarth. In attendance at the beginning of the meeting were 88 chapter members.

#### **TREASURER'S REPORT**

Treasure's report was given by Ryan Hupfeld. The chapter started report period (2/12/2015) with a balance of \$22,100.88 (\$3,229.22 in the Warm Water Account and \$4,572.80 in Mike Mason Memorial Fund, resulting in 14,298.86 available for AFS). Disbursements since the last financial report equaled \$4,933.11 and receipts equaled \$6,720.60. The continuing education class resulted in a profit of \$600.00. The annual meeting, dues, raffle along with parent society returns resulted in \$6,120.60.

The US Bank account was closed due to issues in the past and having the ability to see North Central Division's finances. A Wells Fargo account was opened on 8/28/2015. Noteworthy expenditures included memberships in Iowa Environmental Council and REAP Alliance. Expenses associated with the annual meeting totaled \$2,927.84. Savannah Fernholz was the \$500 IA AFS scholarship recipient at ISU. IA AFS gave \$100 towards the 2016 Walleye Technical Committee Sander Travel Award. Raffle and auction proceeds from the 2015 IA AFS meeting were split with the ISU Student Subunit for an amount of \$567.50.

All account activity resulted in a balance of \$23,888.37 on 2/3/2016. The Warm Water Account has \$3,229.22, Mike Mason Memorial Fund has \$4,572.80, resulting in an AFS available balance of \$16,086.35.

Proposed budget keeps payments to Iowa Environmental Council, REAP Alliance, Iowa Conservation Alliance, and 2016 ISU scholarship.

Randy Schultz moved to approve treasurer's report, Dan Rosauer 2<sup>nd</sup>. All were in favor.

#### **Committee Reports**

Committee reports were sent to membership prior to business meeting for review.

Mike Steuck moved to approve committee reports, Gary Siegwarth 2<sup>nd</sup>. All were in favor.

#### Awards:

Past President: Allen Pattillo Past Secretary/Treasurer: Dan Rosauer "Best Paper" winners from AFS 2015. 9 judges served on the Scoring Committee.

- Best Professional Paper: Mark Flammang, Iowa Department of Natural Resources, "Use of low-concentration rotenone for biomanipulation of Iowa lakes".
- Best Student Paper: Christopher Sullivan, Iowa State University, "Seasonal variation in catch rates and size structure of Silver Carp in southeast Iowa Rivers".
- Best Student Poster: Kevin Haupt, Southeast Missouri State University, "Age-0 Silver Carp and Gizzard Shad daily growth and hatch date timing in the Middle Mississippi River".

The same categories were judged at 2016 IA AFS.

Andy Jansen was awarded a \$1,000 grant that will be used to analyze Walleye otoliths for presence of an Oxytetracycline mark to evaluate the most effective stocking method to help increase Walleye densities in Iowa reservoirs.

#### **Old Business:**

Lewis Bruce gave an update on investment opportunities for state chapters through the Parent Society. IA AFS would need to invest a minimum of \$10,000 and expect ~6% return annually. This money would need to be set aside indefinitely.

There was discussion on the Mike Mason Memorial Fund. Randy Schultz gave an update on the potential to use some of these funds to renovate the aquariums at the Iowa State Fair. He suggested we wait for the contractors to present a price before moving forward on this. Mike McGhee informed membership of two of Mike Mason's guns he has received. He discussed his plans to get them ready to sell what we should do with the profit.

EXCOM ability to distribute funds was discussed and how changes in the bylaws were made to make this easier. Jeff Kopaska gave an update on the Maynard Reece Prints. Funds have been distributed and the prints are near completion. A set of prints will be displayed at Rathbun Fish Hatchery, and the original set will be stored at the state historical society.

The IA AFS website update responsibilities have been taken over by Ryan Hupfeld.

#### **New Business:**

IA AFS Chapter bylaws were revised and sent to membership for review prior to business meeting. Alan Johnson moved to approve bylaws changes. Mike Hawkins 2<sup>nd</sup>. All were in favor. The bylaws will now go to the Management Committee of the Society for approval.

Mike Siepker discussed a "Managing Centrarchids in Rivers and Streams" symposium at the National AFS meeting in Kansas City, MO. Siepker and Jeff Quinn are requesting funds to help a student make it to the symposium to present. MICRA has contributed \$800 thus far. Chris Larson discussed how he would like to see a student who is part of IA AFS receive the award if funding is provided. Mike Stueck moved to provide \$200 to an Iowa student deciding to present. Alan Johnson 2<sup>nd</sup>. Motion did not pass.

The Education Section of the American Fisheries Society (AFS) would like to increase the funds in the AFS Skinner Memorial Fund to provide deserving students travel support to attend the AFS meetings. They are requesting a contribution of \$500 from each state/regional chapter of AFS. Jeff Kopaska moved to have the EXCOM committee assist with forming a committee to develop a travel grant program. Kim Hawkins 2<sup>nd</sup>. All were in favor. Mike Weber, George Scholten, and Chris Larson volunteered to participate in committee.

Jeff Kopaska gave an update on potential IA AFS joint meetings with other states/organizations. Missouri, Nebraska, Wisconsin, Illinois, and Dakota chapters are all unable to collaborate. Minnesota Chapter, Wildlife Society, and Soil and Water Society are possibilities. Dakota Chapter is a possibility in 2018.

Caleb Schnitzler discussed using Promotive to receive discounts on goods by up to 70% for IA AFS members. Caleb agreed to do more research and report additional information.

Mike Hawkins discussed the Prairie Lakes Conference in August and was looking for individuals who may be interested in attending. A sponsorship from IA AFS was also discussed.

Allen Pattillo asked if anyone was interested in getting the Iowa Aquaculture Society developed. Four members were interested. Allen will contact those individuals following the meeting.

Allen Pattillo also discussed the Fisheries Pocket Reference Guide and asked for volunteers to help turn it into a digital app. No one was interested at this time.

Lewis Bruce moved to adjourn. Allen Pattillo 2<sup>nd</sup>. All were in favor.