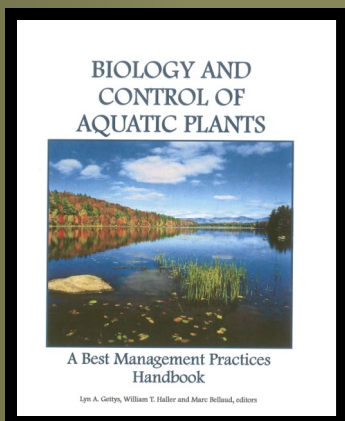


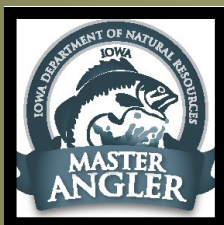
IOWA CHAPTER OF THE AMERICAN FISHERIES SOCIETY NEWSLETTER

December 20, 2011

LATERAL LINES



Aquatic Plant Handbook Updated ~page 6



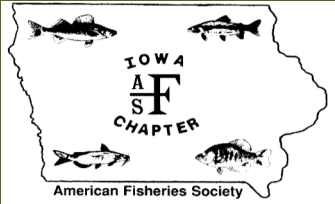
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Newsletter of the Iowa Chapter
of the American Fisheries Society
Volume 29, Number 3

Chapter Officers

Committee Chairs

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

PRESIDENT-ELECT:
Kim Bogenschutz
Boone Fisheries Research Station
1436 255th St
Boone, IA 50036
(515)432-2823
Kim.Boogenschutz@dnr.iowa.gov

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

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

AuditBen Dodd

MembershipAndy Fowler

Resolutions.....Don Herrig/
Donna Muhm

Continuing Education.....Clay Pierce

Student AffairsClay Pierce

Nominations.....Donna Muhm

REAP.....Ben Dodd

Best PaperChad Dolan

Newsletter Editor.....Kim Hawkins



PRESIDENT'S CORNER—Chad Dolan



The 72nd Midwest Fish and Wildlife Conference (MFWC) came to a close on Wednesday, December 7, 2011. What a conference! The comments I received from numerous fish and wildlife professionals from throughout the Midwest substantiated the fact that Iowa did a superb job in planning, organizing, and implementing this meeting. Thanks to all of the Iowa Chapter of the American Fisheries Society (IAFS) members that contributed to such a successful event; especially, George Scholten, for his overall coordination efforts. The joint IAFS/Wildlife Society (TWS) raffle, held in conjunction with the MFWC, was a huge success. Many IAFS members tended to the raffle table during the MFWC, and your efforts were very much appreciated! The Iowa State AFS Student Subunit stepped up to provide additional staffing at the raffle table in times of need. Melanie Harkness and Ken Snyder deserve special recognition for their efforts aimed at increasing raffle ticket sales. Their unique styles of salesmanship increased profits and will, ultimately, strengthen the financial position of IAFS moving forward. The gross profit from the raffle was over \$6,700. After expenses, both IAFS and TWS should net well over \$2,000 to use for chapter expenses, student travel grants, student scholarships, and fish or wildlife habitat projects.

The IAFS Business Meeting was not well attended. I suspect that the meeting time (i.e., scheduled at 4 pm when symposia were still ongoing), the meeting location (i.e., Polk County Convention Center), and the numerous work responsibilities of the membership in support of the MFWC all contributed to the lack of attendance. Twenty-one members were needed for a quorum; however, only eight members were in attendance. The meeting was ultimately postponed. The ExCom and Statewide Planning Committee discussed the possibility of holding the IAFS Business Meeting in conjunction with the 2012 Statewide Fisheries Meeting; subsequently, it

was scheduled for Monday, March 5, 2012 at 11 am. One benefit of the delay is that the ExCom will have more definitive numbers (i.e., profits minus expenses) regarding the financial standing of the Chapter following the MFWC Raffle. Please attend the IAFS Business Meeting in March! Your attendance is imperative in order to facilitate Chapter business. Stay tuned for more information regarding the IAFS Business Meeting.

Recently, the IAFS membership was given the opportunity to vote on a position statement for the use of lead in fishing tackle. After reviewing two opposing position statements, members were given the following choices: 1) I do not support a change in the use of lead fishing tackle, 2) I do support a change in the use of lead fishing tackle, or 3) neither position statement is acceptable. The IAFS membership voted, overwhelmingly, to adopt the position of no change in the use of lead fishing tackle (do not support a change=71%, do support a change=26%, neither statement is acceptable=3%). The IAFS position statement outlines the need for population-level data on lead exposure that demonstrates widespread problems exist rather than localized problems solely with individuals; moreover, the statement conveys that currently available data on lead exposure suggests that no change in the use of lead fishing tackle is needed at this juncture. The ExCom is presently working closely with members of the IAFS Lead Position Statement Committee, notably Mark Flammang and Ben Wallace, to ensure that the newly adopted IAFS Position Statement on the Use of Lead Fishing Tackle is conveyed to all stakeholders.



A Look Back: Constructed Fishing Structures in Iowa's Man-made Lakes ~ Jeff Kopaska

One of the simplest goals of fisheries research and management is to shorten the time between bites. There are a variety of ways this goal can be accomplished, and fisheries managers employ many tactics – stocking, population assessment, water quality improvements, and fish habitat installation. “Fish habitat” is a term that is quite popular these days. The newest section in AFS is the Fish Habitat Section. The big initiative to improve fishing and fish funding nationwide is the National Fish Habitat Initiative/ National Fish Habitat Action Plan. But what do we mean by fish habitat, and why is it important. I think it's time to take a step back, and look at a project one of our predecessors undertook.

In the late 1970's, the Chariton Research Team undertook a project to catalogue the different types of fishing structures that were being constructed and deployed in Iowa's man-made lakes. This article is a brief summary of the findings from that study. For more information, contact Jeff Kopaska or Randy Schultz for a copy of the completion report.

The team started by selecting comparable lakes, with various structure types. They used a variety of methods to sample areas in the lakes with and without structures. The idea was to compare sampling results between lakes, structure types, and fish species. The management implications from this research project were to develop guidelines for what types of habitat were most effective, and where should these habitat projects be placed to increase angler success.

Table 1. Study Area

Attribute Lake	Area	Max. Depth	Mean Depth	SA:WA	Bluegill (lb/ac)	Crappie (lb/ac)	Bass (lb/ac)
Red Haw	64	40	14	1:14	168	16	98
Green Valley	428	26	10	1:12	382	306	52
Wapello	289	34	13	1:17	118	68	35
Hawthorn	177	33	13	1:19	--	--	--

Study Methods:

Bluegill, crappies and bass were sampled from the four study lakes using both active and passive sampling gear. Gear used included trap nets, experimental gill nets, electrofishing gear and conventional fishing gear (angling). Each gear type was fished at a structure and a designated control area on the same day with equal effort. Control sites at each lake were located 100-300 feet away from the structure site, in an area with similar depth and bottom substrate. Passive sampling was discontinued during the study, due to ineffectiveness in determining differences regarding fish use of structures. Only the results of the angling portion of this study will be discussed in this article.

Angling gear used during the study were identical 5' light action rods with openface spinning reels and 4 pound test line. Angling effort was evenly split between using a nightcrawler on a no. 8 hook, and fishing a 1/16th oz. leadhead jig. Over 1,200 hours of angling effort occurred, evenly split between fishing structures and control sites.

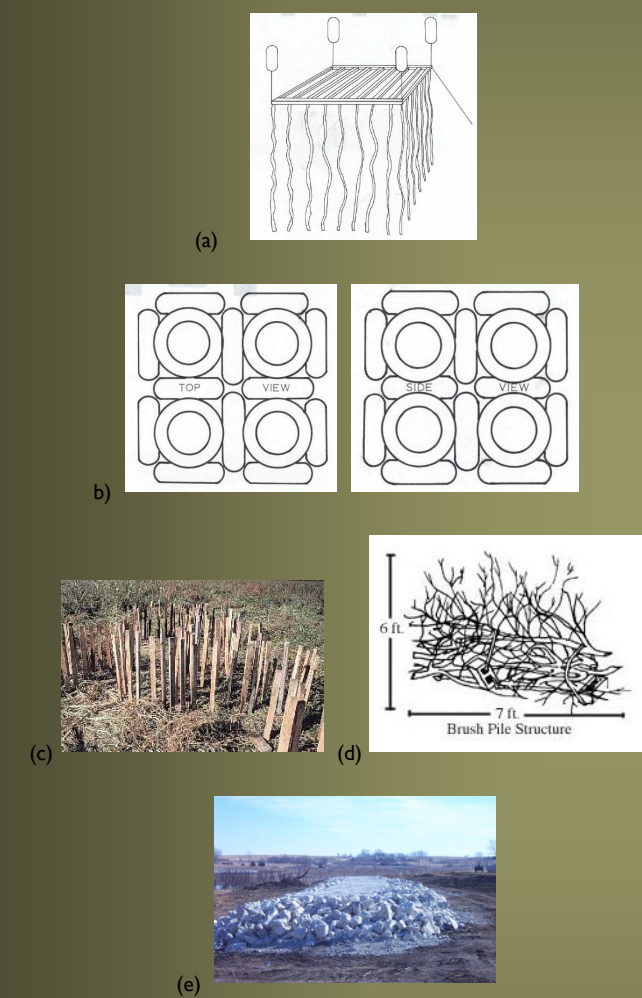
All sampling (angling, netting and electrofishing) occurred between July 1 and October 8.

Structure types:

Figure 1 illustrates the variety of structures investigated during this study. These included: (a) floating reefs, (b) tire reefs, (c) stake beds, (d) brush, and (e) earthen ridges/mounds.



Figure 1. Fishing structures. Note: item (e) illustrates the current versions of fishing mounds that are constructed by the Iowa DNR. Mark Richardson indicates that the earthen ridges/mounds from this study “were small ‘rice-paddy’ like earthen dikes if you will. Not armored or protected in any way. The berms were maybe 2 feet off the bottom and you could cast all the way across one easily with light tackle and no weight. The outside edge of these were less than 30 ft from shore and not over 4 ft deep, with 12 to 18” of water over the top.”



Results:

Bluegill, crappie and largemouth bass were the most commonly sampled fish during this study, with over 24,000 fish sampled. Over 18,000 of the fish sampled were crappies, and 59% of these fish were sampled from structure sites (versus control sites). Bluegill were the second most abundant fish sampled, numbering just under 5,000 fish, and 75% were taken at structure sites. Nearly 650 largemouth bass were sampled during the study, and 87% of these fish came from structure sites. Catch rates while angling showed a wide disparity

between structure sites and control sites. On average, per hour catch rates of largemouth bass were 5.6 times higher on structure versus control sites. Crappie catch rates were 4.3 fish per hour higher, and bluegill were 5.3 fish per hour higher on structure sites. The maximum differences were up to 30 times higher on structure sites for bass. Bluegills caught on structure were up to 1 inch smaller than fish caught at control sites, but there was no difference in the size of crappies or largemouth between structures and control sites.

Substantial differences existed for catch rates between lakes. The author suggests that these differences exist due to the variety of fish densities at these lakes (Table 1), and the amount of fish habitat (natural and artificial), in these lakes.

Hawthorn Lake was the only lake with more than two structure types present. Table 2 shows directly comparable catch rates for each species at Hawthorn Lake. All values are adjusted such that control catch-effort is unity.

Table 2.

	Control	Brush	Stakes	Tires	Ridges
Bluegill	1.0	1.7	2.5	3.0	6.9
Crappie	1.0	1.9	1.1	0.6	2.5
Bass	1.0	1.8	2.6	5.6	1.3

Discussion:

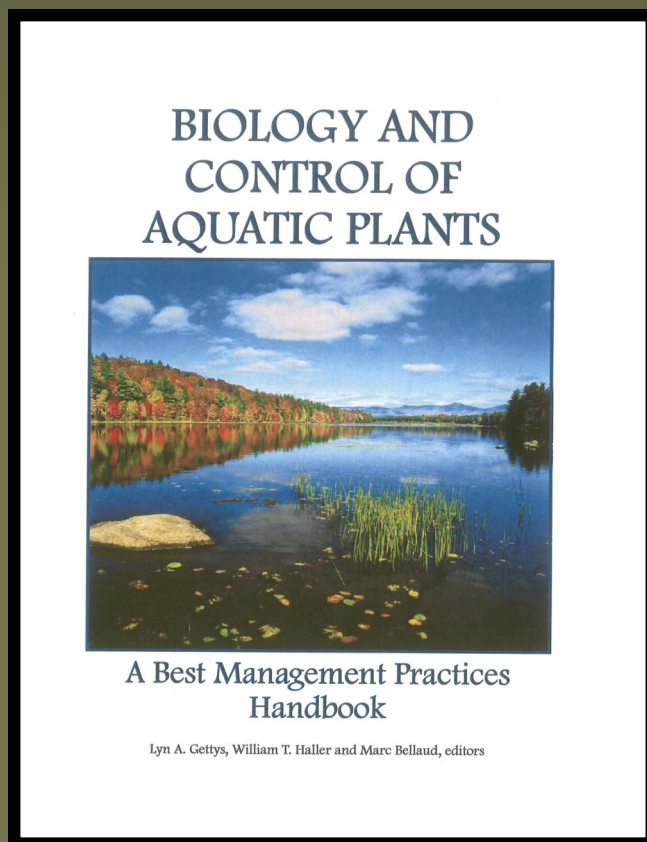
As you might guess, no one structure type was the best at all times, for all fish. Earthen ridges/mounds produced the best overall results, followed by brush and stake beds. The recommendations from the study were that multiple habitat types be installed in lakes, especially during construction or renovation. Shoreline and bottom contour modifications were of primary importance.

Some folks who reviewed this article indicate they think this might have been the greatest summer job ever. Be careful what you wish for. Study participant Mark Richardson indicates the time spent fishing the control sites was downright painful. Another study participant, Gary Sobotka, said “it was the summer of 1981. It was hot and a solid month of fishing with Leo [Schlunz] can have permanent affect on one’s psychological state. I don’t I am right even to this day.”

In reality, though, improving fish habitats paves the way for better fish production, and higher concentrations of fish on structures. The bottom line is that habitat enhancement increased fishing success. And predictable, concentrated fish result in happy, successful anglers – because we shorten the time between bites.



Updated Aquatic Plants Handbook—Darcy Cashatt



Over the last decade our view of both lake vegetation and the use of grass carp for vegetation control have changed dramatically. In short, the Iowa Department of Natural Resources' Fisheries Bureau now has a more tolerant view of dense growths of submersed and emergent plants and sees the use of grass carp as undesirable. In part this change in management is due to the findings of several research studies completed during this time period.

Over the years, the DNR's one-on-one communications with the public has changed to reflect this new approach; however, until recently literature distributed by the Iowa DNR remained unchanged. When the Iowa DNR website format changed this summer, so did the content of the DNR's popular pond handbook. Updates are most notable in the section on aquatic plants. The changes in this section are due to the efforts of more than one person, I just have the privilege of bringing it to everyone's attention. So please check it out, and let me know your ideas and concerns (<http://www.iowadnr.gov/Fishing/AboutFishinginIowa/IowaFarmPonds/FarmPondPlants.aspx>). Thanks to Kim Bogenschutz, Joe Morris, Lewis Bruce, Vance Polton and Mark Boucher for their thoughtful suggestions on the plant section. Mark Boucher, Vance Polton and Jeff Kopaska made additions and changes to the rest of the Pond Handbook.



Lake of Three Fires 'Plant Blitz' ~ Darcy Cashatt

With lake restoration efforts it is assumed that aquatic plants will readily colonize in the clearer water. At Lake of Three Fires this was only the case for the lotus, which had been present before the renovation and had been a serious barrier to anglers. Lotus had no problem re-colonizing the entire upper end and most of the arm, shoreline and small coves on the west side of the lake. The post-renovation vegetation sampling showed no or very minimal growth of other floating-leaved or submersed species.

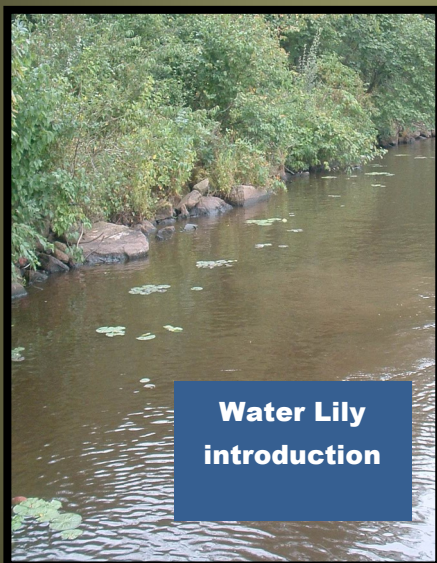
Our goal for this project was to severely reduce the abundance of lotus and establish plants that would be less of a barrier to anglers while providing fishery and



Heavy lotus infestation at Lake



Open water which used to



**Water Lily
introduction**

water quality benefits (lilies, wild celery, largeleaf and longleaf pondweed, and water stargrass). With cooperation from the Mt. Ayr crew, we introduced these species to a few small areas and began annual spraying of the lotus in fall of 2008. Though many of these introductions were doing well, our work at other ponds and lakes in the area showed that it would take three years to become firmly established and begin spreading outside the fenced enclosure. We wondered if a large-scale effort could overcome the herbivory that we were trying to avoid by using fenced enclosures and result in a quicker lake-wide establishment of a diverse species mix. This effort, also referred to as the "Plant Blitz", took place in mid-July of 2010. With the help of 18 people from 3 agencies (DNR Fisheries, IDALS and NRCS) just over 2,000 individual plants were planted into the lake in a single day. Our evaluation this past July found lilies present in all the introduction areas. At least one live plant and often more plants than had been introduced in a given area were found at each site. The same cannot be said for the submersed species. Only one area still contained living plants when the lake was surveyed this past July. We suspect that heavy, lake-wide algal blooms in both 2010 and 2011 were at least partially responsible for the demise of introduced submersed species.



New Building at the Decorah Fish Hatchery

A new building is being constructed at the Decorah Fish Hatchery. The state fish hatchery was in dire need of a visitor's center, but due to budget restraints, the state could not build one. With overwhelming support from the community, money was raised to start construction. The building is located on hatchery grounds, and sits across from the 'Decorah Eagle Nest'. The main function of the building will be to provide a place to display educational information as well as provide a public restroom. The public will also be able to reserve the building for events.

This is the first building of its type in the state. When it is finished, the DNR will have contributed no money to the project. The estimated cost of the building when completed will be \$350,000 - \$400,000. The community is still looking for donations to complete the project. Once finished, the building will be donated to the DNR.



Eagle Viewing Platform at Otter Creek



The eagle viewing platform is nearing completion and will also have a viewing scope and four interpretive panels. It will get painted in the spring with dedication April 21, 2012. This was the result of numerous contributors including the Caroline Donovan Estate, USFWS, National and Iowa Audubon, Iowa Ornithologists' Union, and Carpenter Chad Eells. The key DNR staff involved included Pat Schlarbaum (Wildlife Diversity Program), Jason Kruse and Don Labate (DNR Engineering Bureau), and the staff at the Iowa River Wildlife Unit.

Directions to platform: From hwy 30 east out of Tama, go about 4 1/2 miles then turn right onto E66 blacktop road to Chelsea. Platform is on the right side about 3/8 of mile from hwy 30 on E66.



IOWA DNR NEWS

IOWA DEPARTMENT OF NATURAL RESOURCES

CONSERVATION AND RECREATION DIVISION | NEWS.IOWADNR.GOV

DNR to Eliminate Gizzard Shad at Five Lakes



Posted 10/25/2011

picture: www.iowadnr.gov

Five Iowa lakes were treated to eliminate gizzard shad in November using a low level chemical application that will not require eliminating the entire fishery.

The Iowa Department of Natural Resources will use cooler water temperatures and a smaller amount of the fish toxicant, Rotenone, to kill gizzard shad, while sparing most of the game fish.

Lakes receiving treatment are Don Williams in Boone County, Badger Creek in Madison County, Lacey Keosauqua State Park Lake in Van Buren County, Humeston Reservoir in Wayne County, and Lake Fisher in Davis County.

Lake Fisher is a water supply and the application rate of Rotenone is 85 percent below the limit of what is allowed for a water supply. The city of Bloomfield uses chlorination treatment which will deactivate any remaining traces of Rotenone before entering the water supply system.

Gizzard shad were illegally introduced recently in the lakes, with the exception of Lake Fisher, where they have been present for some time. They cause problems in Iowa lakes by over populating and squeezing out game fish. As a filter feeder, gizzard shad remove important food from the water necessary for survival for newly hatched bluegills, bass and other species. It is illegal to possess live gizzard shad in Iowa.

Gizzard shad are susceptible to low levels of Rotenone

and the cooler water temperature allows the chemical to stay active a little longer than normal to draw out the targeted fish kill.

"In the past, once gizzard shad were in a lake, it was only a matter of time before we would have to eliminate the entire fish population to make sure we got all of the shad. With this new method, we can preserve most of the game fish so the fishery can rebound more quickly," Flammang said. "We will monitor the lakes during 2012 to see if we were successful or not."

Low dose treatments have worked to varying degrees in the past and the process continues to be refined.

At Lake Sugema in Van Buren County, the treatment worked for shad, but also for the walleye population. At Badger Creek, some shad made it through the treatment.

"We are partnering with Iowa State on some experiments to find the exact dosage that kills shad with minimal impacts to the game fish. These trials are part of a proactive approach to preserve fishing where it would otherwise eventually be lost," Flammang said.

MEDIA CONTACT: Mark Flammang, Fisheries Biologist, Iowa Department of Natural Resources, 641-647-2406.



Don Williams

picture: Boonemerchantgs.com



Bighead Carp Caught in East Okoboji Lake

Iowa DNR Press Release

08/10/2011

SPIRIT LAKE, Iowa - The Iowa Department of Natural Resources has verified the presence of bighead carp in East Okoboji Lake after two fish were collected Tuesday during the DNR's annual fish sampling effort.

Bighead carp, native to Asia, are present in the Missouri River, Mississippi River, Des Moines River and the lower reaches of their tributaries. It is not known for certain how bigheads got in to East Okoboji Lake, but fisheries experts believe that the flooding on the Missouri and Little Sioux

rivers allowed these fish to pass over the Little Sioux Dam in Harrison County and the Linn Grove Dam in Buena Vista County.

Bighead carp were found in the Little Sioux River below the Linn Grove Dam in 1996, and the samples collected Tuesday was the first time bighead carp had been found above that barrier. Bighead carp are part of a group of fish known as Asian carp, which includes silver carp, grass carp, and black carp.

Silver carp are best known for their ability to jump out of the water when startled, however, bighead carp do not exhibit this behavior.

"At this time, we do not know if silver carp migrated into the lakes along with bigheads," said Joe Larscheid, chief of the fisheries bureau for the Iowa DNR.

Bighead carp feed on plankton and may compete with native fish, like buffalo, some panfish and larval sport fish, for food.

"We do not anticipate much angler interaction with these fish because they are a plankton eater and will most likely need to be snagged to be caught," said Larscheid.

"We also believe these fish will have a difficult time reproducing in a large natural lake because bighead carp require large river systems to spawn. If this is the case, it is unlikely the population will increase unless we receive additional fish through future high water events," he said.

The two bighead carp, one 14 inches and one 15 inches, were collected in seine hauls near the narrows on East Okoboji Lake on August 9. Spirit Lake was also sampled at the same time and did not have any bighead carp among the fish collected. It is unknown how many fish entered the lakes, but the DNR will continue to monitor the status of Asian carp populations in the Iowa Great Lakes and the Little Sioux River watershed.

"Asian carp continue to adapt and spread in their new environment which poses significant challenges to managing our aquatic systems in the future not only in Iowa, but throughout the Midwest," Larscheid said. "More research will also lead to a better understanding of their life history and impacts on our natural lakes."

For more information contact Iowa DNR Fisheries Biologist, Mike Hawkins at the Spirit Lake Fish Hatchery, 712-330-1849.



Invasive Carp Species Found in Lost Island Lake



Photo www.miseagrants.urmich.edu

Iowa DNR Press Release:

December 2, 2011

SPIRIT LAKE – State fisheries experts have confirmed the presence of silver carp in Lost Island Lake after a commercial fisherman collected several in a recent seine haul when they were removing common carp and buffalo.

This is the third collection this year of invasive carp species in northwest Iowa lakes. In August, DNR personnel captured two bighead carp in East Okoboji while conducting routine sampling. In September, a commercial fisherman captured bighead and silver carp in nearby Elk Lake.

Bighead and silver carp are included in the Asian carp family and are non-native species that have invaded the Missouri and Mississippi rivers recently. Extreme flooding that occurred this summer allowed these fish to travel past barriers on the Little Sioux River that would normally prevent their passage.

DNR fisheries personnel will continue to monitor waters that have been invaded to assess their populations and impact they might have on these lakes. Much remains to be learned about these species; however it is unlikely that they will reproduce in lakes, since they require large river systems to successfully spawn.

For more information contact Iowa DNR Fisheries Biologist, Mike Hawkins at the Spirit Lake Fish Hatchery, 712-330-1849.



DNR Awards Watershed Improvement Projects

Iowa DNR Press Release: December 22, 2011

Six contracts with the Iowa Department of Agriculture and Land Stewardship Division of Soil Conservation for five watershed improvement projects and one water quality-farming education project were approved Dec. 20 by the Environmental Protection Commission.

The projects are funded by Section 319 of the Clean Water Act Amendments for nonpoint source management programs through the U.S. Environmental Protection Agency. Nonpoint sources of water pollution are usually caused by rain or snowmelt moving over and through the ground. As the water moves, it picks up and carries natural and human-made pollutants that end up in lakes, rivers, wetlands and ground waters.

The projects were selected by grant proposals and a DNR committee review process. Each selected watershed project is part of a wider effort with other partners to work within an approved Watershed Management Plan.

Approved watershed projects:

Clear Lake Enhancement and Restoration Project — \$384,320 to work with watershed residents to switch to practices that reduce phosphorus and debris going into Clear Lake for the purpose of improving water clarity. Funding will also partially pay for a watershed coordinator position and public outreach activities. This project is part of a larger effort to restore and enhance Clear Lake.

Black Hawk Lake Watershed Project Phase I — \$454,332 to target farm, urban and public lands within the watershed to adopt practices to reduce phosphorus loading to Black Hawk Lake by 12.5 percent. Terraces, water and debris control basins, pasture management, grass waterways, stream bank stabilization, no-till, managing fertilizer so it stays in the soil and rain gardens are some of the practices that will achieve this reduction. A Black Hawk Lake project coordinator position will also be funded.

Water Quality in Rathbun Lake 2011 — \$290,055 to enable Rathbun Lake Project staff to target four new sub-watersheds to reduce debris and phosphorus

delivery from priority land used primarily for row crop production from Jan. 1, 2012 to June 30, 2013. Project activities will assist landowners to apply best management practices including terraces, grass waterways, grade stabilization structures and debris basins.

Duck Creek Watershed Management Plan — \$177,640 to reduce E. coli bacteria loading to Duck Creek through cost share to help priority urban areas with projects that help absorb rain in the ground and a pet waste disposal campaign. Funds will also pay for a Duck Creek watershed coordinator position. Additional project funding will be provided by Partners of Scott County and the cities of Davenport and Bettendorf.

Price Creek Watershed Project Phase I — \$366,453 to accomplish about 30 percent of the best management practices that will help with bacteria problems and reduce soil and debris erosion. Target practices are reducing livestock access to waterways, managing fertilizer to stay in the soil, using terraces, methods to keep soil in place, and vouchers for septic cleanouts, among others. Funds will also be used to provide funding for a Price Creek watershed coordinator position.

Iowa Learning Farms: Building a Culture of Conservation — Farmer to Farmer: Iowan to Iowan — \$132,636 for an Iowa State University educational project that uses farmer volunteers in five primary soil regions in Iowa to demonstrate and discuss innovative conservation practices on their farms that minimize nonpoint source pollution. Among the practices to be demonstrated include cover crops, no till, strip till, perennial plantings and wetlands.

MEDIA CONTACT: Steve Hopkins, DNR nonpoint source program coordinator, 515-281-6402 or Stephen.Hopkins@dnr.iowa.gov



'Twas the Night before First Ice

From <http://www.nodakoutdoors.com/poemphp.php>, By Nick Simonson

'Twas the night before first ice, and all through the lake, not a fish had been stirring, not even a splake. The buckets were filled with my rods and my tackle, in hopes that the perch would like jigs trimmed with hackle.

The tip-ups were strung with nylon and leaders, to deal with the teeth of big predator feeders. The minnows were purchased and set on the steps, the Vexilar charged to read various depths. When out under the ice there arose such a clatter, I sprang into my coveralls to assess the matter. In the dark to the pickup I flew like a flash, and drove to the station to fill the auger with gas.

The full moon on the breast of the new-frozen water, meant the ice-season action could not get much hotter. Alone toward the lake I started to steer, soon the roar of the auger was all I could hear. Setting tip-ups and jigging on the ice all around, searching for fish like a veteran bloodhound. More rapid than lightning to my baits they came, I hooted and hollered and called them by name. Now, NORTHERN, now WALLEYE, now BLUEGILL and CRAPPIE! Come, RAINBOW and YELLOW PERCH and you don't have to stop-pie! To the treble of tip-up, to the jig or the spoon! Now bite good and hard and I'll be here past noon!

The excitement, the passion, the fins and the tails, impossible to measure with rulers and scales. The colors of fishes of varying size, the wonder of nature that lit up my eyes. And then, in an instant, I set the hook hard, I looked down and saw her – she must measure a yard! In gold and silver and tipped with white, she promised to battle me into the night. Rolling and twisting with her strength she did brag, as from my reel she pulled on the drag. I cranked and it squealed as her head neared the hole, grabbing her quickly, I achieved my goal. Her eyes – twinkling silver, her gills how they flared, sharp curved white teeth, her pointy mouth bared. I unhooked the spoon with a twist of my plier, and gazed at a walleye anyone would admire. Better suited she was for story than plate, watching her swim away, I had to feel great.

To let free such a whopper to catch one day again, is a thing that is done by the greatest sportsmen. In the picture I took she was preserved for all, and the photo was enough for me to hang on the wall. The sun was then setting, and the day felt complete, to the truck I went packing with snow at my feet. Though cold all around and night beginning to fall, I was warmed with a memory that could top them all. As I drove away, the lake leaving my sight, I thought long and hard of that day and that night. And the next time I'm bothered with everyday chores, I'll just remember this time, spent in...our outdoors.

MASTER ANGLER AWARDS



Jim Gelwicks (son of Greg Gelwicks - Rivers and Streams Research Biologist) caught this Rainbow Trout in Spring Branch Creek in Delaware County using a spinner. The fish weighed 3 lbs 5 oz and was 19.5 inches long.

Jim Wallace (retired CO for Sac and Ida and grandfather of Ben Wallace—Management Biologist at Lakeview) caught a master angler yellow bass out of Arrowhead Lake (Sac). Of course it was caught on the famous Norm's Leadhead (the lures that we tie) It weighed in at 16.4 ounces. His dad was actually the first person to hold the state record for yellow bass, but it only lasted a few years.



Scott Grummer (Management Biologist—Clear Lake) 11 inch yellow bass from Clear Lake in May



Kirk Hanson (Mississippi Research Biologist) caught this 9.7", 0.75 lb, Rock Bass from Pool 13 of the Mississippi River. Caught on a jig and minnow on November 22, 2011.

George Scholten (Fisheries Research Supervisor) caught this Shovelnose Sturgeon May 2011. The fish was caught on the Cedar River in Linn County with a night crawler. The fish measured 28.5 inches (fork length)



Martin Konrad (Fisheries Bureau Executive Officer) caught this 15" white crappie from a Warren County Farm Pond on May 7, 2011. Martin landed the fish after a "15 second arduous fight".

For information about the program, the criteria, and the forms, please go to:
<http://www.iowadnr.gov/Fishing/MasterAnglerFirstFish.aspx>



IN THE NEWS

Cyclops Shark Joins Ranks of Cryptic Creatures

By Stephanie Pappas and LiveScience | October 21, 2011 | 8



SCIENTIFIC AMERICAN™

In this world of Photoshop and online scams, it pays to have a hearty dose of skepticism at reports of something strange—including an albino fetal shark with one eye smack in the middle of its nose like a Cyclops.

But the Cyclops shark, sliced from the belly of a pregnant mama dusky shark caught by a commercial fisherman in the Gulf of California earlier this summer, is by all reports the real thing. Shark researchers have examined the preserved creature and found that its single eye is made of functional optical tissue, they said last week. It's unlikely, however, that the malformed creature would have survived outside the womb.

"This is extremely rare," shark expert Felipe Galvan Magana of Mexico's Centro Interdisciplinario de Ciencias del Mar told the Pisces Fleet Sportfishing

blog in July. "As far as I know, less than 50 examples of an abnormality like this have been recorded."

Pisces Fleet, a sportfishing company, rocketed the Cyclops shark to viral status online this summer with their photos of the creepy-cute creature. But this isn't the first time that reports of a mythical-seeming creature have spurred media sensations — last week alone, Russian officials announced "proof" of a Yeti, and paleontologists spun a theory about an ancient Kraken-like squid. Few reports of mythical beasts, however, come with proof.

Cyclops shark

The Cyclops shark is an exception. While rare, "cyclopia" is a real developmental anomaly in which only one eye develops. Human fetuses are sometimes



affected, as in a 1982 case in Israel reported in 1985 in the *British Journal of Ophthalmology*. In that case, a baby girl was born seven weeks early with no nose and only one eye in the center of her face. The infant, who lived only 30 minutes after birth, also had severe brain abnormalities.

In 2006, a kitten born with one eye and no nose (a rare condition called holoprosencephaly), created a stir online as news organizations and bloggers tried to determine if the bizarre photos of the animal were real. A veterinarian confirmed the kitten's condition; "Cy," as the cat was known, lived only a day. The remains were sold to the creationist Lost World Museum.

The fisherman who discovered the Cyclops shark is reportedly hanging on to the preserved remains, news outlets reported. But scientists have recently examined and X-rayed the fish, authenticating the catch. According to Seth Romans, a spokesman for Pisces Fleet, Galvan Magana and his colleagues will publish a scientific paper about the find within the next several weeks.

Romans told LiveScience that the fisherman who caught the strange shark is "amazed and fascinated" by the attention his catch has drawn.

It's not the first strange shark fetus Galvan Magana has found; he and his colleagues discovered two-headed shark embryos in two different female blue sharks. It's possible that one embryo started to split into twins, but failed to completely separate because of crowding in the womb, the researchers reported in January 2011 in the journal *Marine Biodiversity Records*.

An albino fetal cyclops shark, born with one eye, has been authenticated by scientists who examined the creepy but cute creature after it was caught by a commercial fisherman in the Gulf of California.

The shark fetus, which measured "22-inch-long, has a single, functioning eye at the front of its head—the hallmark of a congenital condition called cyclopia, which occurs in several animal species, including humans," according to National Geographic.

The photographs of the cyclops shark went viral this summer after being posted on the Pisces Fleet Sportfishing website in July, causing skeptics to question if the pictures were the result of photoshop and destined to become the next Internet hoax. But shark

experts say they are legit.

"This is extremely rare," shark expert Felipe Galvan Magana of Mexico's Centro Interdisciplinario de Ciencias del Mar told the Pisces Fleet Sportfishing blog in July. "As far as I know, less than 50 examples of an abnormality like this have been recorded."

Fisherman Enrique Lucero León discovered the cyclops shark fetus after he legally caught a pregnant dusky shark near Cerralvo Island in the Gulf of California and sliced open her belly. The male fetus was one of ten found inside the pregnant shark and the only one with any visible deformities.

Magana and his colleagues have announced they will publish a scientific paper documenting the find in November.

Live Science reports the researchers have determined "the single eye is made of functional optical tissue." Scientists seem to agree that the deformed shark would not have survived outside the womb. "Jim Gelsleichter, a shark biologist at the University of North Florida in Jacksonville, told National Geographic, "The fact that none have been caught outside the womb suggests cyclops sharks don't survive long in the wild."



The cyclops shark is pictured next to one of its siblings, which is normally colored, with a blue-gray back and white underside.



Evolution of a Stream: Plants and sea-life claim new territory as glaciers retreat in Glacier Bay, Alaska



Raven Glacier in Alaska.
(Wikimedia Commons)



Science Daily—October 18, 2011

As tidewater glaciers beat a hasty retreat up Glacier Bay in southeast Alaska, they uncover rocky, barren landscapes and feed cold lakes and streams — new habitat for life's hardy explorers. In the October issue of *Ecology*, researchers from the Universities of Birmingham, Roehampton and Leeds describe the evolution and assembly of a stream ecosystem in newly de-glaciated terrain, from early insect and crustacean invaders to the arrival of migrating salmon.

Sampling began at Stonefly Creek in the early 1990s, after retreating ice, a remnant of the lost Plateau Glacier, began revealing the creek's lower reaches in the late 1970s. Together with work at nearby Wolf Point Creek the study is the most complete and long-running catalog of stream development.

Now originating in a clearwater lake, Stonefly Creek tumbles over falls, fills a second, murkier lake, and merges with a stream from a third pond and wetlands before emptying into Wachusett Inlet. This complex geography, the researchers found, buffers the young stream from abrupt changes in water level and provides a diversity of habitats that welcome species with different specialties. Twenty-seven species of tiny crustaceans, armored aquatic animals from the same big family as barnacles, crabs and krill, arrived without obvious means of transport. Within ten years, pink salmon and Dolly Varden char had established spawning grounds in the stream. Coho (silver) salmon, Sockeye (red) salmon, and other fish species followed.

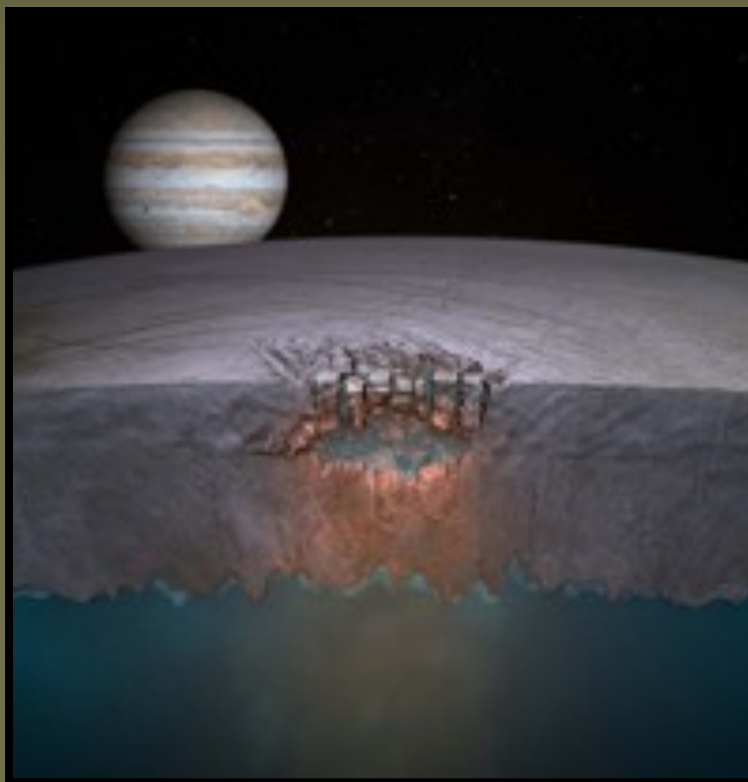
Shrinking glaciers are changing large expanses of northern coastline. The speed and pattern of colonization across Stonefly Creek's watershed will aid our understanding of watershed restoration and conservation of biodiversity in a changing climate.

"Salmon stocks are under threat and decline in many regions of the world due to human activities," said lead author Alexander Milner. "The creation of these new runs has important potential to help balance the losses." Read



Europa's "Great Lake", maybe a Limnologist will go to the Moon After All

From BBC News, Richard Black (<http://www.scientificcomputing.com/news-DS-Europas-Great-Lake-112211.aspx>)



Scientific Computing

In a significant finding in the search for life beyond Earth, scientists from The University of Texas at Austin and elsewhere have discovered what appears to be a body of liquid water the volume of the North American Great Lakes locked inside the icy shell of Jupiter's moon, Europa.

The water could represent a potential habitat for life, and many more such lakes might exist throughout the shallow regions of Europa's shell. Further increasing the potential for life, the newly discovered lake is covered by floating ice shelves that seem to be collapsing, providing a mechanism for transferring nutrients and energy between the surface and a vast ocean already inferred to exist below the thick ice shell.

The scientists focused on Galileo spacecraft images of two roughly circular, bumpy features on Europa's surface called chaos terrains. Based on similar processes seen here on Earth, on ice shelves, and under glaciers overlaying volcanoes, the researchers

developed a four-step model to explain how the features formed on Europa. It resolves several conflicting observations, some of which seemed to suggest that the ice shell is thick and others that it is thin.

The scientists have good reason to believe their model is correct, based on observations of Europa from the Galileo spacecraft and of Earth and from years of studying Earth's ice sheets and lakes below thick polar ice. Still, because the inferred lakes are several kilometers below the surface, the only true confirmation of their presence would come from a future spacecraft mission designed to probe the ice shell. Such a mission was rated as the second-highest priority flagship mission by the National Research Council's recent Planetary Science Decadal Survey and is currently being studied by NASA. On Earth, radar instruments are used to image similar features within the ice and are among the instruments being considered for a future Europa mission.



Less Lakes and Reservoirs for 2012

THE WALL STREET JOURNAL.

by Jim Carlton at jim.carlton@wsj.com

The Colorado Division of Water Resources pulled the plug on Bonny Lake in September of 2011 as part of a legal requirement to send more water to Kansas and Nebraska. Since 1951, when the U.S. Bureau of Reclamation dammed the Republican River, creating Bonny Lake in eastern Colorado, the local community has enjoyed a recreational and economic livelihood.

Now, as the waters recede, Burlington is joining dozens of other communities across the U.S. that must readjust as dams that once gave birth to new waterways and thriving economies based on tourism, irrigation farming, and hydropower are altered or dismantled, reverting landscapes to the way they were decades ago.

Many of the nation's 85,000 dams were built more than 40 years ago when the nation was immersed in a frenzy of infrastructure construction. But since then, many dams have become weakened by age, deterioration, and a build-up of sediment, according to a 2009 report by the Association of State Dam Safety Officials. According to the report, the number of deficient dams has more than doubled to 4,095 as of 2007, the latest period for which it had statistics, from 1,348 in 2001.

In one case, the dam on Iowa's Lake Delhi burst last year, transforming an 11-mile reservoir into a river, threatening a lake-based tourism economy that brought in \$20 million to the community. The community earlier this month passed a \$6 million bond measure to help repair the dam and restore the lake.

In North Carolina, Hope Mills Lake has drained twice since 2003, the first when an 88-year-old earthen dam failed, and last year when a sinkhole opened under a concrete replacement. The town of 2,000, which owns the dam, is seeking funds from private donations and federal grants to repair the dam so the lake can be refilled again.

Back in Burlington, Bonny Lake has been a big draw for anglers and local tourists, generating about \$20

million in annual revenues. Roughly one out of every five jobs in the town of 3,700 is tied to lake-related businesses.

Another problem confronting dams is the threat of lawsuits and government regulations challenging operations on environmental grounds. For example, the federal government has required some dams in the Pacific Northwest to install expensive structures that allow salmon to pass through unharmed, while environmentalists and groups such as local tribes have sued to try and remove dams that they contend lack measures to protect fish runs.

In Washington State, PacifiCorp breached its Condit Hydroelectric Project dam in October to comply with federal rules on fish passage. The result was the draining of the 92-acre Northwestern Lake to restore the White Salmon River to its original course.

The Portland, Ore. utility had agreed in 1999 to punch a hole in the 98-year-old dam to avoid as much as \$100 million in costs to install structures to allow fish to pass. But before doing so, local economic concerns were raised, and PacifiCorp wasn't able to follow through with the plan until agreeing in 2010 to pay two counties, Klickitat and Skamania, \$675,000 to help offset damages, such as impacts to nearby cabin owners from loss of the lake, according to company documents.

On the Klamath River in Oregon and California, PacifiCorp also has agreed to calls from environmentalists and others to dismantle four hydroelectric dams, a move that some critics, including local farmers, say could hurt the local economy. The Interior Department is set to decide by March if the removals will go forward.

The threats are being aimed not only at smaller regional lakes, but massive ones like Lake Powell in Utah and Arizona, the second largest man-made lake in the U.S. Although Lake Powell serves as a backup to the nation's largest man-made reservoir, Lake Mead, on the Colorado River, some environmentalists want it drained to restore scenic canyons and wildlife. However, that effort has gained little traction so far.



Up the Crick

By Tom Reed Art work by Brian Maebius

Kids & Bugs

My second godchild, a boy, was born this April, a blessing to his parents and to this world.

This world needs little boys and girls who grow up to parents like Henry and Mary Katherine, people of the Earth, who live right with the land, who pause in the chaos that is life to take in the song of a warbler or the croak of a woodland frog. These are good people who live right and do right and I'm honored that they have trusted me to be a protector and mentor to their young lad, the second such honor they have bestowed on me. Little Jeremy's older sister, Lucy, was the first.

Their parents must be thinking that these children need someone to teach them about frogs in mountain streams, about fishing and horses, how to drink Coors Original, how to build a fence or buck beetle kill into firewood, shoot shotguns, row driftboats and stoke campfires. Maybe they just need someone to get their children out on the ground in a place other than Colorado's Front Range, or maybe they just need to know that someone out there will show their children something real instead of asphalt, something tangible instead of virtual.

My connection to the wild world came in the place where these children are growing up, but it was a different earth back then. Then my world was huge and it stretched for miles over wild country in the foothills west of Denver. My own parents knew they wanted something real for their children and so I became a child of the land. And more than that, I was a hunter, a hunter of bugs, first. Only later in life did the hunt become something with fur, hair, or gills.

My first memories are of chasing bugs in our backyard; it helped that our backyard was hundreds of acres of ponderosa pine and bunch grass, chokecherries and prickly pear.

And the bug collector collected. An ant farm. Butterflies of all stripes—tiger swallowtails and blue coppers and many more. I kept a bug collection, my Dad's discarded dress shirt boxes covered with plastic wrap, with the bugs and butterflies all carefully mounted on pins, and labeled in my child handwriting. Here, on this ground, I learned. I learned about insects and guidebooks, and later, this obsession switched to song birds, reptiles, and amphibians.

It seems to me that the true hunter is one who knows the ways of the earth, who grows up with it, and learns about all things, not just the quarry itself. Who can actually enter the elk woods and not know the names of the plants that elk eat? Not I. I need to know the names of the flowers that sprinkle the spring hillsides, the songbirds that flit between willow stem, the butterflies that float on summer breezes.

Were I not raised in an environment where one can get out and get dirty, I don't think I would know the true rightness of the world. The woods are an escape, a rescue, a haven, a harbor. I have friends whose early lives were marred by tragedy and pain, but to whom the woods became a savior. Were it not for nature, they would be on some street corner in some dank city, or dead. The woods saved and protected.

And so the bug collector became a fly fisherman, which if one really knows fly fishing, is a natural progression of life. Perhaps no other sport combines the twin skills of observation and stealth as sweetly as fly fishing. Fly fishermen are born

into a passion for fly fishing—and the aquatic and terrestrial bugs that are fish food—at an age rapidly approaching five decades.

So Jeremy joins Lucy as godchildren of a guy in Montana with too many horses, too many bird dogs, too many guns and not enough fly rods or time. First thing we're going to do is go find some bugs.

Tom Reed lives outside Pony, Montana, with many mountain ponies, a herd of English setters, and the occasional neotropical migrant visitor. He is the author of four books; visit www.tomreedbooks.com

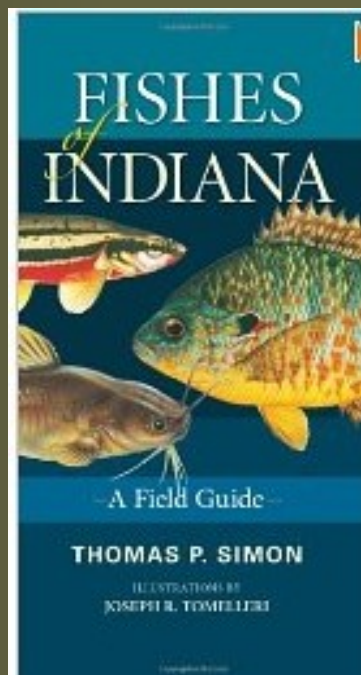


**"These are the places they go
where their boots get dirty and
their souls get clean."**

—Walt Gasson, *The Home Place*



INTERESTING READS



Fishes of Indiana: A Field Guide (Indiana Natural Science)

Thomas P. Simon (Author)
(Author), Joseph R. Tomelleri (Illustrator)

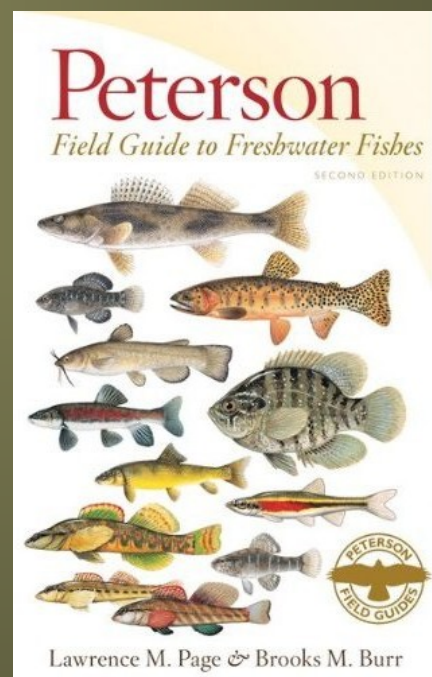
Indiana has more fish species than any other state north of the Ohio River. This rich variety of fish fauna is on display in this informative and beautifully illustrated guide. From the large freshwater species like the Paddlefish, Lake Sturgeon, and Mooneye, to Great Lakes species like the whitefish, Lake and Brook trout, and Longnose sucker, this book has them all -- plus lesser-known species and a few thought to have disappeared from the state. Each species is represented by a descriptive entry containing diagnostic information, conservation status, habitat preferences, diet, reproductive biology, and other facts to assist in identification; a map showing the geographical distribution of the species across Indiana; and a taxonomically accurate and precise illustration.

Peterson Field Guide to Freshwater Fishes, Second Edition

Lawrence M. Page (Author), Brooks M. Burr (Author), Eugene C. Beckham (Illustrator), Justin Sipiorski (Illustrator), Joseph Tomelleri (Illustrator), John P. Sherrod (Illustrator)

There are nearly 1,000 species of freshwater fishes in North America alone, and identifying them can sometimes be a daunting task. In fact, in just the twenty years since publication of the first edition of the *Peterson Field Guide to Freshwater Fishes*, the number of species has risen by almost 150, including 19 marine invaders and 16 newly established nonnative species. This second edition incorporates all of these new species, plus all-new maps and a collection of new and revised plates. Some of the species can be told apart only by minute differences in coloration or shape, and these beautifully illustrated plates reveal exactly how to distinguish each species.

The guide includes detailed maps and information showing where to locate each species of fish—whether that species can be found in miles-long stretches of river or small pools that cover only dozens of square feet. The ichthyologic world of the twenty-first century is not the same as it was in the twentieth, and this brand-new edition of the definitive field guide to freshwater fishes reflects these many changes.



Biology, Management, and Culture of Walleye and Sauger

Bruce A. Barton, editor

570 pages, index

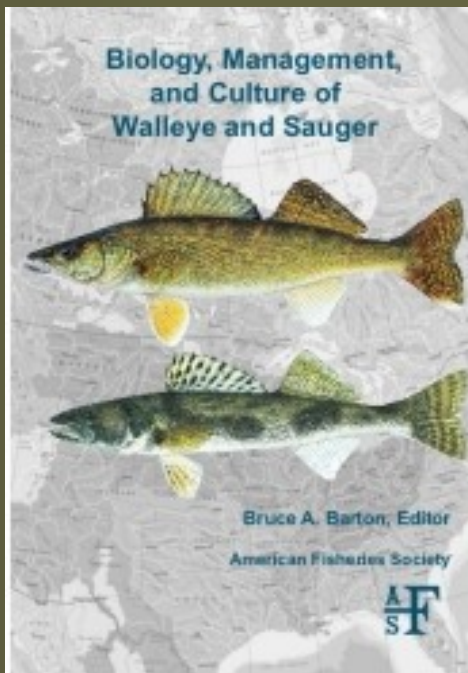
Published by the American Fisheries Society

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To order: www.afsbooks.org/55065P



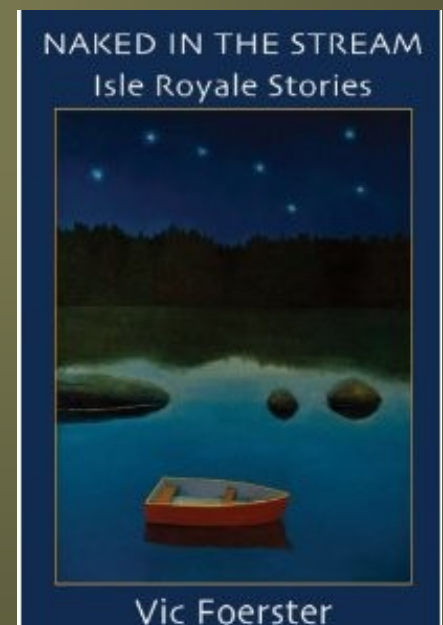
This new compendium serves as a single comprehensive source of information on the biology, ecology, management, and culture of walleye and sauger in North America.

Early chapters cover Sander systematics, including osteological evidence and molecular and population genetics and recent advancements in stock identification. Extensive information is documented on habitat requirements for various life history stages and how these stages can be influenced by environmental perturbations. Other chapters describe environmental biology and feeding energetics, and provide details on walleye and sauger life histories, walleye population and community dynamics in lakes that reflect the influence of lake size, fishing methods, and various management techniques using case histories, and exploitation from recreational, commercial, aboriginal, and mixed fisheries. Harvest regulations, sampling procedures, and their effectiveness are also reviewed and evaluated. Final chapters review and analyze stocking procedures, marking techniques, ecological effects of stocking, and the state of the art of walleye and hybrid walleye culture.

Naked in the Stream: Isle Royale Stories

Vic Foerster (Author)

A wilderness island in Lake Superior calls Vic Foerster to cross the world's largest Great Lake, land on the island's Rocky shore, hike its bony spine, fish its shoal embedded coves, camp in harm's way, and fall in love with it all, bugs included. After thirty years of visits to Isle Royale National Park, Foerster records his experience and wonderment in this narrative. Funny and poignant, riveting and heart-thumping, Foerster describes his first Isle Royale hike with humor and humility. Beautifully illustrated by former Isle Royale Artist-in-residence, Joyce Koskenmaki, this wonderfully crafted book takes an intimate look into what it means to find and revere wildness.



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.

