

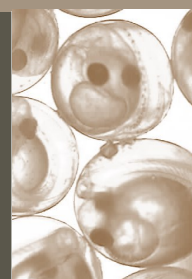
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Iowa Chapter of the American Fisheries Society

Lateral Lines



current topics >>>

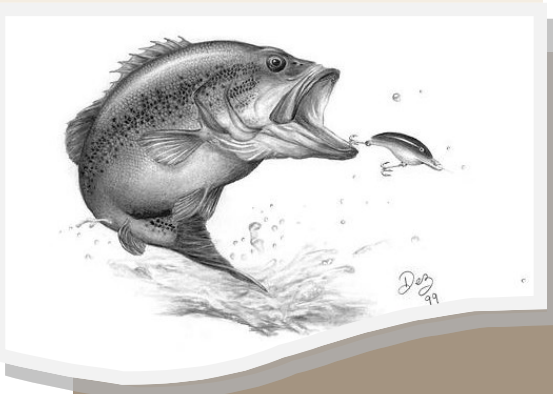
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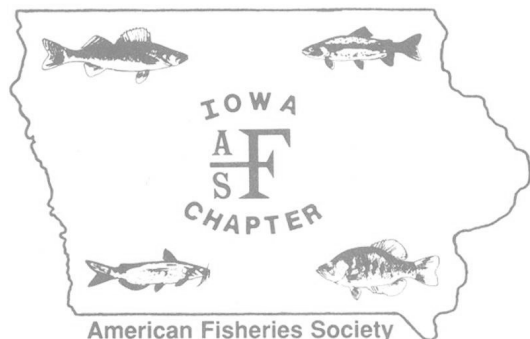


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<http://www.fisheriessociety.org/iowa/index.html>

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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

Jeff Kopaska

Our society, the American Fisheries Society, presents an annual award for outstanding contributions to the conservation of fishery resources, and that award is named for Carl Sullivan. Carl Sullivan stated that someone has to speak for the fishes, and the Society is that voice. In Iowa today, the legislature is in session, and life continues to be interesting for both fish and for fisheries professionals.

As you have seen from chapter emails, I have been working to represent you as a voice for the fish via the Iowa Conservation Alliance, as well as directly to legislators. Noodling for catfish has become a topic of interest again. License fee increases for hunting and fishing privileges are being discussed, as are mechanisms for dealing with water quality issues in Iowa. All of these topics are relevant to the fish.

Additionally, requests have come to our chapter to consider making statements regarding turtle regulations in Missouri and Canada, and on the management of the Missouri River. Since these topics may be more controversial, we will pre-



sent resolutions on the topics to the membership prior to providing input. Look for correspondence regarding these issues in the near future.

I attended the Midwest Fish & Wildlife Conference February 5-8, and attended the North Central Division Business Meeting on February 7. One thing I learned is that we are not alone in facing challenges in our work as fisheries professionals. There is a federal hiring freeze, and many state agencies are understaffed. Around forty percent of the meeting attendees were students, because travel is very limited for many public employees – even the Assistant Leader for Wildlife at the Nebraska Coop Unit was not approved to attend the meeting, right in Lincoln! The good news is that there are still many interested and decided people out there working on fisheries issues. There are also a number of students who are bright and energetic and doing some interesting work.

At the conference, I was able to attend some interesting presentations. There were three Topeka Shiner presentations by ISU students that we will be able to hear at our chapter meeting. Two Michigan State students presented

on cold water stream systems, and an Oklahoma student talked about a statewide survey of fish passage issues he was researching. The folks in Nebraska are still busy with their creel work, assessing hunting and fishing license sales, and determining if fish catchability/behavior changes when a new fishery is opened up to the public. Jonathan Meerbeek talked about the musky telemetry work, and there were some other good talks from South Dakota in his session. Rebecca Krogman participated in a reservoir symposium, and Darcy Cashatt presented in a water quality session – be sure to ask them about what they learned!

The Iowa Chapter meeting is coming up in about a month. Despite some challenges coming up in the planning, we are still proceeding. There are a number of interesting talks and posters that have been submitted. The student subunit is working on prizes for a raffle, I know a musky fishing trip will be available, and I have some inside information that some new flavors of salsa might be coming out. Make sure to plan on attending. See you next month in Ames!

Jeff Kopaska

Iowa Chapter of AFS Annual Meeting

ISU—Memorial Union

Friday, March 10, 2017

- **1-day meeting**
- **Lunch will be on your own, and there will be no registration fee.**
- **Presentation will be conducted in the morning, with a business meeting in the afternoon.—Agenda—next page**

Iowa Chapter of AFS Annual Meeting Agenda

ISU—Memorial Union

Friday, March 10, 2017

			Presenter	Title
9:00	9:15	Welcome and Introductions		
9:15	9:35	Paper	Robert Weber	Fall Movement and Habitat Use of Walleye in Big Creek Lake, Iowa
9:35	9:55	Paper	Emily Ball	Effect of hauling distance on stocking stress and mortality of advanced fingerling Walleye Sander vitreus
9:55	10:15	Paper	Trevor Blankman	Efficiency of pulsed gastric lavage for evaluating fingerling Walleye Sander vitreus diets
10:15	10:35	Break		
10:35	11:15	Plenary Jennifer Terry		
11:15	11:35	Paper	Darcy Cashatt	A Cooperative Study of Mercury Contamination in Iowa Fish and Implications for Angler Consumption
11:35	11:55	Paper	Tim DeKoster	Wild or farmed? Nutritional value of farmed vs. wild white-fleshed fish is comparable
11:55	1:00	Lunch		
1:00	1:20	Paper	Alexander Bybel	Status and Genetic Analysis of Topeka Shiners in Three Basins in Iowa and Minnesota
1:20	1:40	Paper	Nick Simpson	Status and Habitat Use of the Topeka Shiner in the Boone River Watershed, Iowa
1:40	2:00	Paper	Courtney Zambory	The Use of Landscape Variable Associations with Topeka Shiner Occupation of Off-Channel Habitats to Prioritize Potential Restoration
2:00	2:20	Paper	Andrea Sylvia	Effects of Angling on a Largemouth Bass Population with High Fishing Pressure
2:20	2:40	Paper	Aaron	Tributary contribution of larval production in the Upper Mississippi River
2:40	3:00	Break		
3:00	4:00	Business Meeting and Raffle		
4:00		Adjourn		

Final Thoughts

~Jim Wahl, recently retired NW Iowa Fisheries Supervisor

By the time you read this I will have been “put out to pasture” and retired from my fisheries career. As I’ve often stated I was blessed to have worked in a profession that I truly loved. Not many employees can say that, and I’m guessing most of you feel the same way.

As I reflect, a big part of what shaped my career, were early mentors that influenced me and helped me advance from undergraduate to graduate student to full-time fisheries professional. A common message from these mentors was join and get involved in the American Fisheries Society.

I joined in 1978. Along the way I’ve been a member of the Dakota, New York, Bonneville, and Iowa Chapters. I’ve been an officer at the Chapter and Division level and served on a variety of committees. I’ve attended National meetings in places like West Yellowstone and Albuquerque, NM; Division meetings in Toronto; and of course Chapter meetings in Council Bluffs. These were not only fun places to visit, but great opportunities to learn and communicate with colleagues.

Consider giving presentations at future AFS meetings. As a young professional it’s a way to “show your skills” and gain confidence in speaking in front of your peers. Any one of us can “bluff” the local service organization we know what we’re talking

about, but not so much when presenting to other fisheries professionals. Long-time biologists challenge yourself by presenting and passing on your practical knowledge gained from working in the trenches.

Many years ago, Jim Mayhew, Iowa DNR Fisheries Bureau Chief, encouraged staff to present at the Midwest Fish and Wildlife Conference in Omaha, NE. Jim’s goal was to have someone from the Iowa Chapter receive the Best Paper Presentation Award. Prior to the meeting we went to Des Moines and videotaped our talk. Viewing yourself on camera is not easy and accepting constructive criticism not so great either. I wasn’t awarded best paper, but I came away from that experience a better public speaker.

Contacts you make through the American Fisheries Society, if utilized, will make you a better fisheries employee. You may believe you’re the first to try something, but if you search hard enough there are others who’ve been there before and you can learn from their experience. That’s what the Technical Committees are all about. In my day if you wanted to know more about walleye, you went to Dubuque in the summer and rubbed shoulders with Denny Schupp (MN DNR), Mike Staggs (WI DNR), Larry Mitzner (IA DNR), and all the others who had an interest in walleye.

Don’t fall into the trap that you know all you need to manage the fisheries in your 10 county District, or research

Iowa’s natural lakes, or supervise the NW Region of the State. The American Fisheries Society has shown me that I’m just a small part of a much greater challenge – managing, preserving, and protecting fisheries throughout the Midwest, throughout North America, throughout the World. If you are open to learn and understand fisheries from a much larger perspective it will make you a better scientist, researcher, manager, supervisor, administrator – right here in your own state.

Get involved. Give something back. Participate in your professional organization. Others will benefit and you will be rewarded many times over.

Jim Wahl,
**retired, AFS Certified
Fisheries Scientist**



Using Science to Search for Slab Bluegills

Jonathan Meerbeek, Fisheries Research Biologist ~ Iowa DNR

Technology advances in GPS and sonar have allowed for instantaneous mapping of lakes, rivers, and impoundments across the country and theoretically have improved the ability for anglers to target their favorite fish species. Although these contour maps have greatly improved our ability to pinpoint seasonal fishing locations, a combination of depth, habitat, and food availability often define fish presence rather than just depth alone. More specifically, depth and vegetation density is especially important for species that belong to the Centrarchid family (bass and bluegill), and information on habitat conditions prior to lakes freezing can be the key to successful ice fishing trips. With that in mind, the Natural Lakes Fisheries Research Team set out to evaluate whether or not summer vegetation mapping data could be used to systematically identify bluegill winter fishing “hotspots.”

A recent study conducted in Enemy Swim Lake in Northeast South Dakota found that large bluegills were often in shallower (4-8 feet), more vegetated areas than where ice anglers targeted, thus avoiding much of the harvest predation. We applied winter bluegill habitat data observed in this study to our West Okoboji Lake mapping data to isolate specific fishing locations where the depth, bottom substrate, and vegetation density were suitable for large bluegill presence. To test whether or not fishing was actually better in these predefined “hotspots,” we also fished in areas that were moderately vegetated and areas where bluegill were unlikely to call home so that angler catch rates among the three groups could be compared.

During January and February 2016, we conducted 10 angling events in West Okoboji Lake bays (Miller’s, Emerson, Smith’s, and the North Bay). For each angling event, each angler was given the same type of fishing equipment and navigated to pre-drilled holes. They fished each hole for ½ hr. The angler was instructed to record and measure their catch, as well as any fish that were observed but not captured. In addition, depth and vegetation data was collected at each hole fished.

In all, 184 holes were drilled and anglers captured

322 bluegill (from 5.0-9.5 inches) and observed 392 bluegill. From this study, we found that our summer mapping data did not accurately describe winter habitat conditions. For example, large weed beds that were present in late July/early August were sometimes not present during our winter angling. Also, summer depth data was often misrepresented since vegetation presence during the summer often prevented adequate sonar penetration to the bottom substrate, thus resulting in inaccurate depths. Due to these inconsistencies in characterizing habitat conditions, we could not detect any difference in bluegill angler catch rates among the three habitat types. However, the mapping data obtained during winter fishing events showed a strong relationship between winter vegetation density, depth fished, and bluegill catch, with higher amounts of vegetation in deeper areas (8-12 feet) resulting in more and bigger bluegill. This trend was especially true for angling that occurred in Miller’s Bay as higher bluegill catch rates were often associated with good vegetation and deeper water (Figure 1).

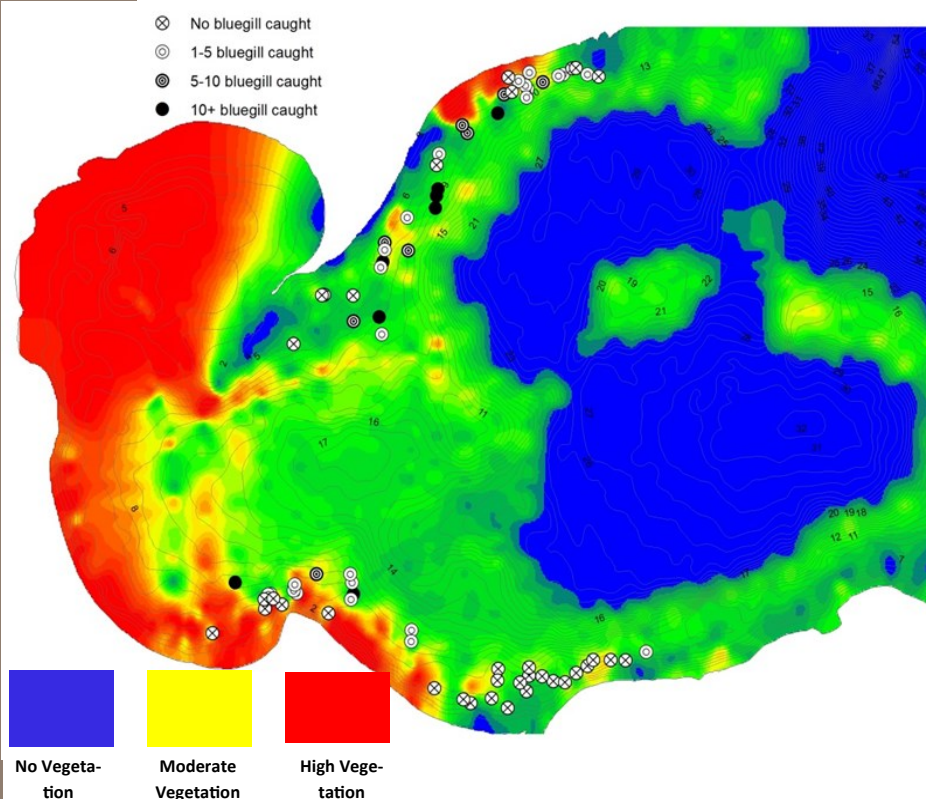
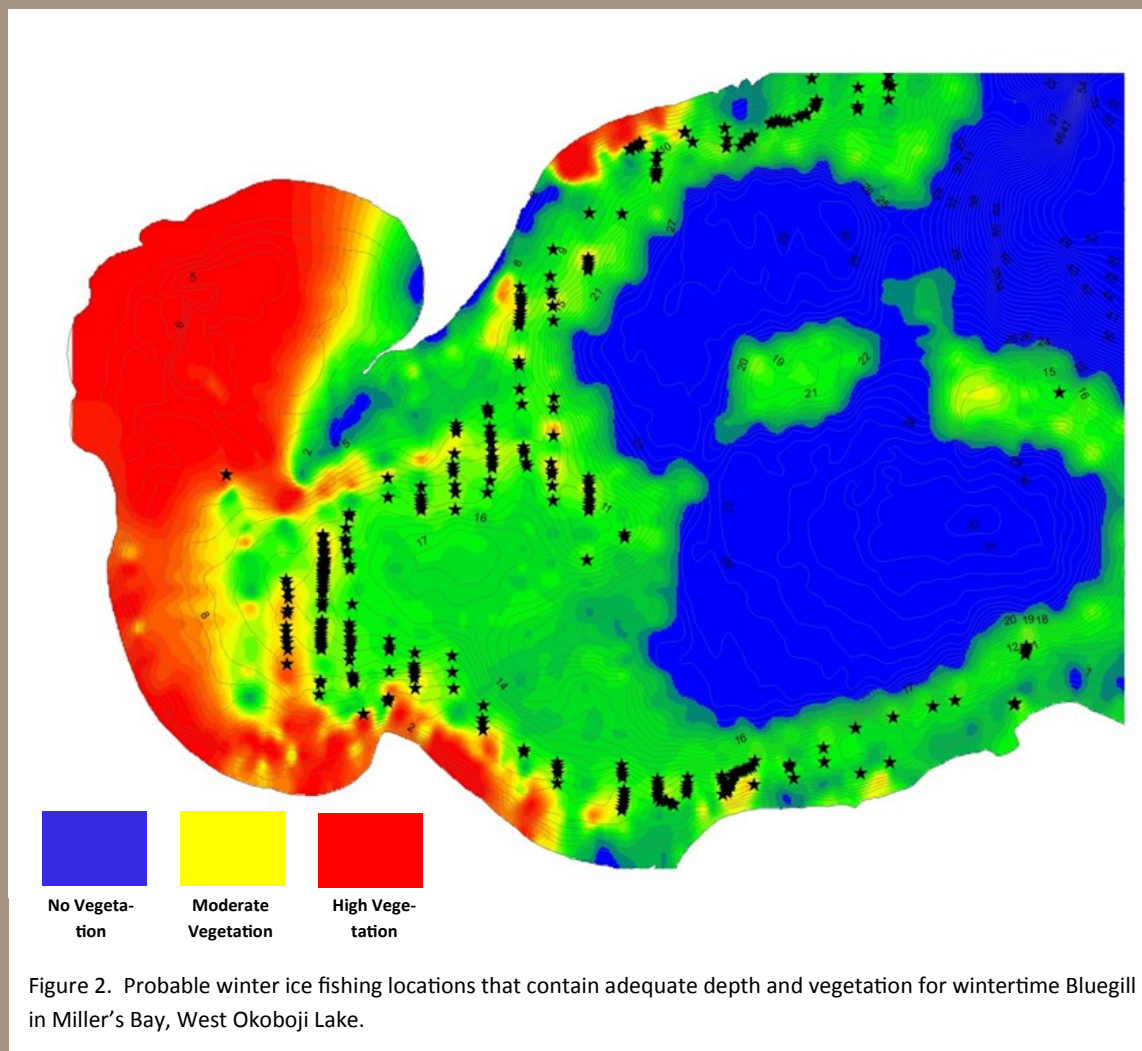


Figure 1. Numbers of Bluegill caught at randomly selected ½ hr angling locations in relation to summer submersed aquatic vegetation density and depth in Miller’s Bay, West Okoboji Lake.

Although our summer mapping data wasn't a great predictor of winter habitat and bluegill presence, it does provide some general locations where winter bluegill fishing may be exceptional in Miller's Bay (Figure 2). One common trend that we also noticed during our angling study was that if you didn't see bluegill within the first 5-10 minutes of angling, you were likely not going to see or catch one for the remaining 20-25 minutes. Often times, the next hole you visited that had some vegetation below or near your hole, you would start seeing or catching fish almost immediately. What this solidified for me was the concept of "keep moving" for successful bluegill fishing trips. Also, to take your winter bluegill fishing to the next level, spending time in the fall taking mental notes or GPS coordinates of healthy vegetation beds could be the key to a more productive winter angling season.



Spring Branch Trout Fishery Summary, 2016

Dan Kirby, Fish Management Biologist ~ Iowa DNR



We completed a roving creel survey on Spring Branch Creek near Manchester, Iowa during the summer of 2016. Spring Branch is a high quality coldwater stream that is popular with avid trout anglers that are attracted to the dense population of “wild” Brown Trout—along with stocked Brook Trout and Rainbow Trout—managed with a

14-inch minimum length regulation and artificial lures only restriction. Spring Branch offers more than 2 miles of public fishing on a combination of State land, permanent public easement, and private land open to public fishing. The purpose of this survey was to assess fishery use and angler attitudes and to contrast this information with creel statistics last gathered during 1993. Survey techniques were modified to accommodate using a temporary employee stationed at Manchester with AIS duties. This modification fixed “angler count times” at 2 periods during the beginning of the work day and end of work day. The creel completed during 1993 was for the period March – November (275 days) while the 2016 creel was for the period May – July (82 days). The shortened creel period and fixed count schedule introduced unknown bias to the sample and this should be considered as part of result interpretation.

Table 1. Angler effort, 1993 and 2016.

	1993	2016
Hours/Day	20.9	15.7
Angler Trips/Day	8.6	3.4
Trout Caught/Day	23.1	15.0

Table 2. Catch per hour, all species, 1993 and 2016.

	1993	2016
Trout < 14 inches	1.07	0.91
Trout > 14 inches	0.04	0.04
All Sizes	1.11	0.95

Table 3. Catch per hour, Brown Trout, 1993 and 2016.

	1993	2016
Trout < 14 inches	0.60	0.58
Trout > 14 inches	0.03	0.03
All Sizes	0.63	0.61

Table 4. Catch per hour, Rainbow Trout, 1993 and 2016.

	1993	2016
Trout < 14 inches	0.37	0.18
Trout > 14 inches	0.01	0.01
All Sizes	0.38	0.19

Table 5. Catch per hour, Brook Trout, 1993 and 2016.

	1993	2016
Trout < 14 inches	0.10	0.15
Trout > 14 inches	0.00	0.00
All Sizes	0.10	0.15

Table 6. Angler gear composition, 1993 and 2016.

	1993	2016
Flyfishing Gear	52%	68%
Spinfishing Gear	46%	32%
A combination of Fly and Spin	2%	0%

Table 7. Angler hometown, 1993 and 2016.

	1993	2016
Cedar Rapids/Marion	36%	21%
Other Iowa Towns	19%	35%
Waterloo/Cedar Falls	15%	3%
Iowa City/Coralville	12%	15%
Manchester	6%	2%
Quad Cities Area	3%	5%
Dubuque	3%	0%
Des Moines Area	3%	6%
Out of State	3%	13%

Table 8. Angler fishing experience, 1993 and 2016.

	1993	2016
Average years of trout fishing	13.9	18.9
Average years fishing Spring Branch	7.3	8.8

Table 9. Angler age, 1993 and 2016.

	1993	2016
<16	4.2	0.0
16-29	25.2	30.6
30-49	46.2	32.3
50-64	14.0	29.0
>64	10.5	8.1

Table 10. Angler satisfaction (trout numbers and size), 1993 and 2016.

	1993	2016
Highly Satisfied	45.8	25.0
Satisfied	53.5	71.2
Dissatisfied	0.7	3.8

Table 11. Angler overall experience satisfaction, 1993 and 2016.

	1993	2016
Highly Satisfied	51.4	63.5
Satisfied	48.6	34.6
Dissatisfied	0.0	1.9

Discussion

It has been our perception that fishery use at Spring Branch has waned during past decades along with catch rates of Rainbow Trout. This creel survey supports these perceptions. After more than 20 years of restrictive regulations there has not been an increase in the catch rate of large or small trout of any species. The population of Brown Trout has trended up over the past decades, but catch rates appear similar now to what they were more than 20 years ago. Spring Branch continues to attract anglers from around Iowa and other states, but few local anglers use the fishery and the gear used by anglers has shifted towards fly fishing. Most anglers remain satisfied with the fishery in terms of trout numbers, trout size, and overall experience. It appears that anglers have shifted use (where they fish) at Spring

Table 12. Streams type fished, 1993 and 2016.

	1993	2016
Put and Take	85.3	75.0
Other Special Regulation	96.5	57.7
Other (put and grow, natural, etc.)	8.4	41.0
Only Spring Branch	1.4	15.0

Table 13. Location fished at Spring Branch, 1993 and 2016.

WHERE FISHING AT SPRING BRANCH	1993	2016
Spring Run	5%	3%
Upper Public Area	5%	2%
Bennett/Willits	2%	13%
Trap House Pasture	3%	3%
Upper Hatchery	4%	3%
Lower Hatchery	55%	39%
Tibbotts	18%	27%
Bennett Upper	5%	6%
Bennett Lower	3%	3%

Table 14. Suggestions for improving fishing, 1993 and 2016.

HOW TO IMPROVE FISHING	1993	2016
No suggestions	76.2%	50%
Restrict harvest/regulations	11.2%	7.7%
More habitat improvement	8.4%	23.1%
Stock more fish	2.8%	1.9%
Increase special regulation area	2.1%	0.0%
Law enforcement	1.4%	3.8%
Keep artificial only	0.7%	0.0%
Improve water quality	0.7%	0.0%
Access improvement		7.7%
Aquatic vegetation control		3.8%
Open to bait		1.9%

Branch over the years with effort now spread more evenly—this has probably resulted from habitat and access improvements through much of Spring Branch. Anglers at Spring Branch today are less likely to also fish other special regulation streams and much more likely to fish other trout streams (put and grow, streams supported by natural reproduction, private property streams) than 20 years ago—this is consistent with a trend of decreasing use of special regulation streams found in the “Iowa Trout Angler Survey” as well as increased opportunities to catch “wild” or “natural” trout in many locations throughout northeast Iowa.