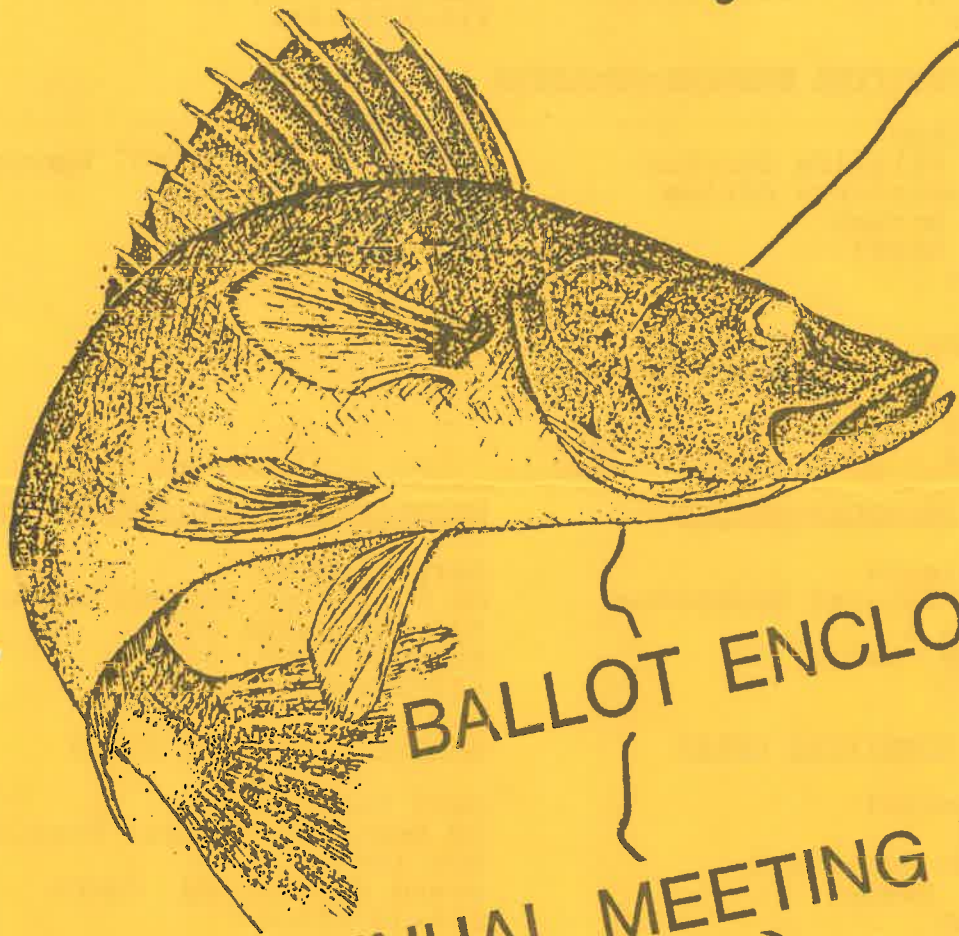


**American Fisheries
Society**



BALLOT ENCLOSED

ANNUAL MEETING ISSUE

Minnesota Chapter

FEBRUARY 1990

**A
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Minnesota Chapter American Fisheries Society

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Unless otherwise stated, the opinions expressed within this newsletter are those of the author(s), not official policy of the Minnesota Chapter of the American Fisheries Society. Material submitted for inclusion in the newsletter is subject to editing at the discretion of the editor.

PRESIDENT'S NOTES

In late November we received a letter from Carl Sullivan, AFS Executive Director, stating that all of the MN Chapter Bylaw changes addressed at our 1989 meeting were turned down at the Anchorage meeting. It is both a disappointment and a relief that this happened. As you know we have been debating these amendments for many years. A lot of time and thought went into the proposals that were brought before you last year. The proposals were a good compromise on tough issues. None of us thought our rotation language was inappropriate in our Bylaws, but we all questioned whether the Parent Society would accept our "Associate" language.

Many chapters have been struggling with the "associate" issue and some were also considering bylaw changes to address the same problem. We tried the direct approach. Our Chapter was a test case on this issue to the Parent Society. We forced a policy stand; now it is time to move on.

Because of all that has happened, the EXCOM is proceeding on the development of a Chapter Procedural Manual. Bylaw language is meant to be

very general, whereas a Procedural Manual can be as detailed as is necessary. The manual will contain the duties of all officers and committee chairs plus the carried motions on Chapter procedures that have been developed over the years. It will contain our election rotation protocol and our awards criteria. If needed it can be amended by vote. It is not subject to Parent Society review. This document, in conjunction with our Chapter Bylaws, will insure continuity of Chapter business in the years to come. If you would like to contribute to this process, I invite you to write down your thoughts about the duties of the offices you have held and send them to Greg Busacker.

We still need minor changes in our Chapter Bylaws, and the EXCOM is recommending that two proposed changes be brought before the general membership at the International Falls meeting. They are published in this issue of the newsletter. Please review them.

Darryl Bathel
President, MN Chapter AFS

NORTH CENTRAL DIVISION MEETING

North Central Division President, Lee Redmond, held an excom retreat on the subject "Implementing the AFS Long Range Plan by Divisions and Chapters". AFS Officers of the Parent Society in attendance were Paul Brouha, Joe Dillard, Larry Nielson, Carlos Fetteroff, and Ray Hubley. Jack Wingate (Past Divisional President), Greg Busacker, and I attended from the MN Chapter.

The Retreat proved to be a very motivational four hours of discussion among Parent Officers, Division Officers, and Chapter representatives. Many ideas were expressed and the long range plan as presented in Fisheries Vol. 14, No. 1, was discussed extensively. I feel President Redmond did a great job of setting forth goals for Chapter leadership for the next year.

At the EXCOM meeting as well as the Annual Business Meeting, President Redmond outlined the major objectives of his term:

- 1) An AFS office in Canada and greater representation in Canada.
- 2) Implement the long range plan at the Chapter and Division levels.
- 3) Obtain facts on values of fish and fishing.
- 4) Use active members to implement change, affect issues, increase visibility and strength of AFS.
- 5) Give more recognition to the hard work of Chapters and Officers.
- 6) Seek a higher level of professionalism and credibility.
- 7) Increase communication between Division and Chapters.

Highlights from the committee reports included: election of Dave Willis (SD) as first Vice-President, passing resolutions supporting Great Lakes Coastal Barriers, the proposed Ohio River Island Refuge System, and the proposed Large Rivers Resources Initiative. Chapters gave detailed reports at the EXCOM meeting. These were summarized by President-elect Bill Taylor at the Annual Business Meeting.

BIOENERGETICS WORKSHOP A MODEL FOR SUCCESS

In late October - early November the Minnesota Chapter of the American Fisheries Society sponsored Workshop III at Deep Portage Conservation Reserve near Hackensack, MN. The workshop was split into two sessions with 14 participants in the in the cold water session and 15 participants in the cool water session. One outstate and nine instate organizations were represented. Barry Johnson and three colleagues from the Center for Limnology in Madison, WI conducted the workshop, which was a good mix between classroom lecture and hands-on computer modeling. Each participant applied the bioenergetics model to original or

borrowed data on a species of interest. Evening activities were informal and got livelier as the night progressed. All participants indicated that the content and facilities for the workshop were excellent. The workshop was again profitable for the Chapter. Participants received a copy of the bioenergetics model, a good understanding of its operation, AFS continuing education credits, and a few even left with some grouse! Stay tuned for Workshop IV.

Don Schreiner
Continuing Education Chairman

ATTENTION ALL MN/AFS MEMBERS:

**BALLOT
1990 MN/AFS CHAPTER OFFICERS**

Please complete the following ballot and return it by mail if you wish to vote for candidates to serve as MN Chapter Officers in 1990. Mail ballots must be received by March 9, 1990. You may also turn in your ballot at the annual meeting in International Falls prior to the business meeting.

Ginny Snarski
Nominating Committee Chair

President Elect: (Vote for one)

- Jeff Gunderson (University of Minnesota-Duluth)
 Peter Sorensen (University of Minnesota-St. Paul)
-

Secretary Treasurer:

- * Rod Pierce (MN Depart. of Natural Resources-Grand Rapids)
-

Executive Committee Members at Large: (Vote for one in each category)

Federal: * Hannibal Bolton (U.S. Fish & Wildlife Service-Winona)
 Dave Pederson (U.S. Fish & Wildlife Service-Ft. Snelling)

MN DNR: Dennis Anderson (Grand Rapids)
 Ron Payer (St. Paul)
 * Dennis Schupp (Brainerd)

Academic: David McConville (St. Mary's College-Winona)
 Don Pereira (University of Minnesota - St. Paul)
 Steve Williams (St. Cloud State University)

Open: * Dan Helwig (Minnesota Pollution Control Agency-St. Paul)
 Dwight Wilcox (White Earth Tribe - White Earth)

* Incumbent

Executive Committee Members-at-Large: Please vote for one candidate from each of the four affiliation groups. The top vote-getter in each group will be presented at the annual meeting for a second election which will choose three of the four to serve on the Executive Committee in 1990. This run-off election is necessary because the Parent Society rejected our Chapter by-law changes voted on last year. The number of ExComm members-at-large remains at three.

STAMP

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Tentative Program Agenda for 1990 Meeting

- March 14** 8 to 9 AM: Registration
- 9 to 4:30: Program
- 4:30: Business Meeting
- 7PM: Cash Bar and Banquet

FISHERIES RESOURCES AND PUBLIC POLICY (SPECIAL SESSION)

1. Mr. John R. Vellin, Commissioner, Legislative Commission on Minnesota Future Resources.
Public attitudes regarding future resources.
2. Mr. Nilam Bedi, Ontario Ministry of Natural Resources, Toronto.
Ontario Perspective.
3. Dr. Ed Mahoney, Michigan State University.
Resource marketing for sportfish vs commercial fish with reference to underutilized species.
4. Mr. Ed. Eaton, U.S. Engineer Advisor to the International Rainy Lake Board of Control, US Army COE St. Paul District.
The role of the International Joint Commission in regulating water levels in the Lake of the Woods and Rainy Lake systems.

INDEX ANGLERS AND STOCK ASSESSMENT (SPECIAL SESSION)

1. Les Stramko, OMNR, Lake Erie FAU.
Lake Erie Angler Diary Program, comparison with other stock assessment methods.
2. Bruce Thacker, OMNR, Lake Superior Fisheries Unit.
North Shore Angler Diary Program.
3. Nick Baccante, OMNR Walleye Research Unit, Thunder Bay.
Indices of quality for walleye angling fisheries.
4. Walter Lysack, Manitoba DNR, Winnipeg.
Title Unavailable for Newsletter.

EXPERIMENTAL MANAGEMENT APPROACHES FOR FISHERIES IN MINNESOTA AND ONTARIO (CONTRIBUTED PAPERS)

1. Kim Armstrong, OMNR Cochrane.
Experimental management in Ontario.
2. John McDonald, OMNR Sioux Lookout.
Non-resident angling validation tag program.
3. Dave Reid, OMNR Sioux Lookout.
Lac Seul experimental walleye slot size management program.

- March 15** 8 AM to 5 PM: Program

BORDER WATER ISSUES (SPECIAL SESSION)

1. Paul Radomski, MDNR Int. Falls.
Water levels and year class strength on Rainy and Namakan Reservoirs.
2. Larry Kallemeyn, Voyagers National Park.
Regulated lake levels: an overview of everything in addition to fisheries.
3. Dave Friedl, MDNR Int. Falls.
History of border water management, Canadian & American perspectives.
4. Terry Bills, USFWS, La Crosse.
New approach to treating off shore populations of sea lamprey in the Great Lakes.

BORDER WATER ISSUES continued

5. Bruce Barton, UND Grand Forks.
Distributional studies of rainbow smelt in the Hudson Bay drainage waters: historical, recent range extensions, and present distribution in northern Minnesota and northwestern Ontario.

WALLEYE FISHERY (Cost Effective Management and Stock Assessment) (CONTRIBUTED PAPERS)

1. Brad Parsons, Donald Pereira (MDNR Glenwood) and Dennis Schupp, MDNR Brainerd.
Population estimates using tagged fish and sampling results using additional data from the gut bucket of resorts.
2. Tim Goeman, MDNR Brainerd.
Walleye mortality during a live-release tournament on Mille Lacs Lake, Minnesota.
3. Don Pereira, U of MN St. Paul.
Application of multivariate time series analysis for determining potential species linkages in a percid community.
4. Al Stephens, MNDNR Lake City.
Walleye habitat in Wisconsin streams.

GENERAL SUBJECTS (CONTRIBUTED PAPERS)

1. Chris Domeier, MDNR Metropolitan Area.
Commercial minnow traps as an alternative to a beach seine for sampling fresh water Age 0 sport fish.
2. Ray Newman, U of MN St. Paul.
Chemical defense in aquatic plants: an example with watercress.
3. J.S. Denny, K.E. Mead, & C.P. Wilson. USEPA Duluth.
Culture of the Japanese Medaka, Oryzias latipes for development as an animal model for the study of carcinogenesis.
4. J.H. McCormick, K.M. Jensen, W.A. Swenson, T. Simonson & R.L. Leino. USEPA Duluth.
Overwintering, key to the 1st year large mouth bass recruitment in acidified northern waters.
5. Verdel Dawson, USFWS La Crosse.
Effects of the lampricide TFM on dissolved oxygen in aquatic systems.
6. Dennis Shupp, MDNR Brainerd.
Lake Classification continued.
7. Jeff Rach, USFWS La Crosse.
Aspects of the paper shell crayfish's life history that effect control strategies. (Life history/ecology)
8. Bill Thorn, MDNR Lake City.
Evaluation of special regulations on the southeastern Minnesota trout streams.
9. Bruce Ranta, OMNR Kenora.
Angler education program, N.W. Region of Ontario.
10. Al Dextrase, OMNR Thunder Bay.
Proposed cottaging development on a lake trout lake in N.W. Ontario.
11. Jim Rusak, OMNR Kenora.
Lake of the woods sturgeon study.

POSTERS

1. Al Dextrase, OMNR Ignace.
Pulse fishing strategy on a small lake trout lake.
2. Bev. Richie, OMNR Thunder Bay.
Experimental harvest study on a polyphagous lake trout population: Squeers Lake.

1990 Meeting Highlights

The 1990 Annual Meeting will be held March 14 & 15 at the Holiday Inn in International Falls. This year, we are meeting jointly with the Western Ontario Chapter. A copy of the tentative agenda is given below. Registration including the banquet will be approximately \$22.00.

Holiday Inn Registration

The Meeting will be held at the International Falls Holiday Inn which is located at the intersection of Highways 11 and 71 on the west edge of the city.

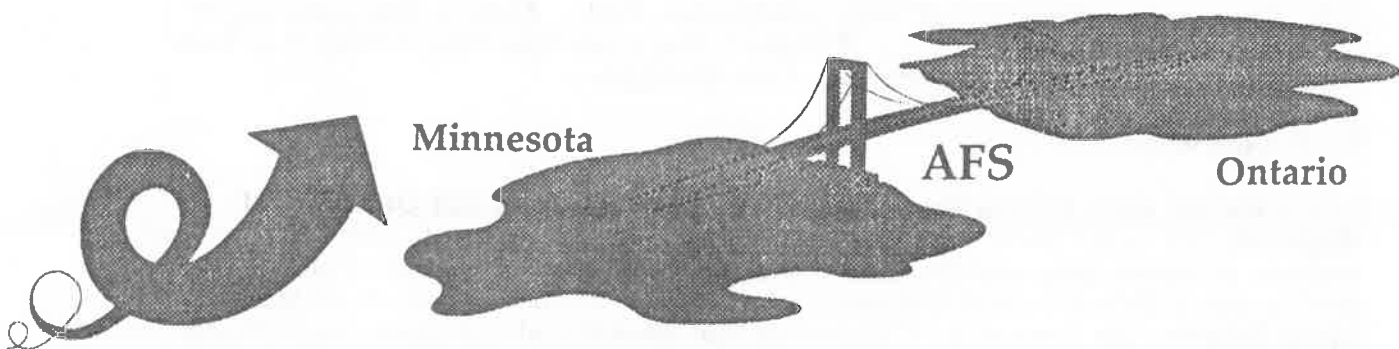
Rates: \$42.00 single, \$52.00 double with a limit of 5 persons in room.

Reserve Rooms by March 6th to receive guaranteed rates.

Telephone number is (218) 283-4451.

Break the Ice - Social Gathering

A social gathering will be held at the VFW, 236 Third Avenue, in downtown International Falls. The festivities will begin at 7:30 PM and last till ????? Beer, pop, and munchies will be provided. Mixed drinks can be purchased from the bar downstairs. MARCH 13!



North to the Falls.

PROPOSED BYLAW CHANGES TO BE CONSIDERED AT ANNUAL MEETING

The EXCOM recommends the following two changes to Section 6 of our Chapter Bylaws. The first change would allow a fourth Member-at-Large on the EXCOM. The second change would allow the EXCOM to carry a motion at 75% instead of requiring six votes. The percentage would allow more flexibility but still allow for accountability.

Section 6 - Executive Committee

The Executive Committee of the Chapter shall consist of the elected officers, the immediate Past President, and three {PROPOSED CHANGE # 1: change to "four"} additional members elected for one-year terms at the annual meeting. That portion of the committee consisting of the officers and Past President is authorized to act for the Chapter between meetings and to perform appropriate duties. The entire committee is authorized to act on initiative petitions, if requested. The decision of the Committee is as binding on the Chapter as one voted in open meeting of the Chapter. Six affirmative votes {PROPOSED CHANGE # 2: change to "A 75% affirmative vote"} will be necessary for a decision to carry.

Jeffrey L. Gunderson

American Fisheries Society

I have been a member of the American Fisheries Society since 1975 and a Minnesota Chapter member since 1980. I served as the secretary/treasurer of the Minnesota Chapter from 1985 to 1987. I also chaired the Chapter Awards committee from 1985 to 1989. Having served as secretary/treasurer under two chapter presidents, I'm quite aware of the commitment that goes along with being Chapter president. While the commitment is somewhat intimidating, I think it is important that Chapter members try their best to make a contribution to the Chapter when they can. It was in this spirit that I excepted the nomination. My goal for the chapter is to promote understanding of fishery management issues among decision makers and users and to continue the excellent work of current and past Chapter leaders.

Education

B.S., December 1975, University of Wisconsin-Stevens Point. Biology major; Chemistry and Environmental Studies minors.

M.S., August 1978, University of Wisconsin-Stevens Point. Natural Resources major; emphasis - Fisheries Biology. Title of Masters thesis was The Vital Statistics of Lake Whitefish in Three Areas of Green Bay, Lake Michigan.

Work Experience

I have worked since 1979 as the Fisheries Extension Agent for the University of Minnesota Sea Grant Extension Program. Responsibilities are to: develop, execute, and evaluate extension programs for Great Lakes fisheries, seafood utilization and aquaculture; provide timely fishery-related information to the mass media; and act as an information liaison between the University of Minnesota and recreational and commercial fishing organizations.

During the spring quarter of 1982 I was a Guest Lecturer at the University of Wisconsin Superior. I taught an undergraduate level Fisheries Management Course. The course was taught in addition to my Sea Grant responsibilities.

Prior to coming to Minnesota I worked as a Fishery Specialist and Fishery Biologist for the Missouri Conservation Department. Before that I worked briefly for the Fish and Wildlife Service compiling information used in the development of the Habitat Evaluation Procedures Handbook as I was finishing my Masters Degree at UW-Stevens Point.

Memberships

- * American Fisheries Society
- * International Association for Great Lakes Research
- * Sea Grant Advisory Service Association -- Great Lakes Network
- * Minnesota Association of Extension Agents (MAEA) -- President of the Community Economic and Natural Resources Development Professionals' Section of MAEA 1989-90
- * International Association of Astacology

Peter W. Sorensen

Born in Montana and raised in New Jersey, I fled to Maine for my undergraduate education. I received a B.A. in Biology from Bates College in Lewiston in 1976. After graduating I tried my hand as an aquaculturalist at salmon farms on both the east and west coasts but soon discovered that a career feeding fish was not for me and in 1977 I entered graduate school at the University of Rhode Island. In 1984 I received a Ph.D. in Biological Oceanography. My thesis research was on the behavior and sensory biology of migratory American eels; I also conducted studies on the population dynamics of this species. Armed with considerable oceanographic experience, I headed inland to a postdoctoral fellowship at the University of Alberta in western Canada. There I conducted basic research on the physiology and behavior of the 'lab rat' of the fish world, the goldfish. Last year I joined the Fisheries faculty at the University of Minnesota (Twin Cities) where I continue my research on the reproductive hormones and pheromones of goldfish while slowly expanding my work to include local species such as the brook trout, carp, and sea lamprey. I also teach a course on fish physiology and behavior.

I have been a member of the American Fisheries Society since 1978 and was certified as a Fisheries Scientist in 1987. During this time I have been a member in the Atlantic International, Mid-Canada and Minnesota chapters and have presented papers at many of their meetings. Impressed by the Minnesota Chapter, and hoping that I will be here for some time, I am pleased and honored to run for Chapter president. In the short time that I have lived in Minnesota I have been impressed with the beauty of the land and diversity of fishes found here. As president I would like to stress public education to increase appreciation of these species and the delicate ecosystem which supports them. This is particularly important because it is unlikely that intensified stocking and management practices can keep pace with increasing fishing pressure on just a few species. I would also like to encourage research activities on all fish species, and promote interaction between academia and the private and public sector. Student participation in the Minnesota AFS must be encouraged. Education appears to be a particularly appropriate focus given the new educational initiatives planned by the D.N.R. and the fact that the 52nd Midwest Fish and Wildlife Conference is being held in Minneapolis this December.

AN OPINION: ARE WE MISSING THE POINT OF COMPUTING? EVEN WITH ALL OUR TECHNOLOGY

LET'S NOT IGNORE FOUNDATIONAL FISHERIES PRINCIPLES

by Tim Goeman

Sometimes we forget what we really bought our desktop computers for. We get all caught up with marvelous spreadsheet formulas, 3-D rotations, and pop-up menus that just won't quit. And as for planning, why we can generate long-range plans, budgets and work units with such ease that they are no longer even typed, now they are "word processed." Too often, it seems we forget that the real purpose of our existence as fisheries professionals is trying to learn enough about what's really going on so that we have half a chance of doing what's right.

In other words, what we're talking about is data. Or, if you will, facts. Our computer technology has greatly simplified analyzing and summarizing the data that we collect. We can now compile in one hour the graphs, tables and summary statistics that would have taken a week or two only a few years ago, not even considering the potential sacrifice of accuracy with hand calculations. The potential problem, however, exists on both sides of our computerized analyses; that is in data collection, and in management decisions.

The lesser of these two potential problems is data collection. In Minnesota, our lake and stream survey program has come a long way. Most waters are now surveyed regularly providing respectable fisheries data. I hope the days are over where an area fisheries office would conduct so many lake surveys in a season that there was no time for analyzing fish age and growth, so even if bony structures were collected the information was soon lost into eternity past. Adequate sample sizes for length frequencies and age and growth also seems to be a problem that is behind us. This concept is not only spelled out in our survey manuals but is generally well understood by field personnel. Hopefully we have avoided the trap of producing a multi-color, computer-generated histogram based on a sample size of six. One specific area of data collection we have failed to address adequately in Minnesota is the necessity of appropriate baseline data prior to application of special fishing regulations. As a famous Swede once said, "Any

direction will get you there if you don't know where you're starting." Any special regulation that initially has public support is "doomed to succeed", at least in the eyes of the angler, unless there is appropriate data collection before the regulation goes into effect, thus allowing for sound evaluation of the success or failure of the venture. This foundational fisheries principle cannot be neglected.

The greater potential problem exists when sound principles are disregarded following the computerized analyses as the facts are spread before us in elaborate statistical summaries and breathtaking graphics. Our technology has made it very easy to lie with statistics. We can simply keep testing and graphing the data until we get the answer we prefer. This, however, is not our major problem. A much more serious problem is when we ignore the facts and sound fisheries principles, and make resource decisions that are wrong. At this point, computer technology fades into the background and we start talking ethics. Because we have sound, factually-based fisheries principles on which to operate, we have a standard of right and wrong for most management decisions. If our decisions are based on these foundational principles, they are right. If our decisions diametrically oppose sound principles, they are wrong. Since fisheries professionals exist to manage, protect, conserve, enhance and improve the public fisheries, to make decisions that are wrong violate the public trust. Reasons for making what I have termed "wrong" decisions abound, including politics, special interest groups, or perhaps so we are at least doing "something"; but none of these arguments will make a wrong decision right. There are, of course, special situations or "grey areas" where foundational fisheries principles are unclear or leave a wide latitude for professional judgement, although we should be cautious of using this excuse on a regular basis to justify our actions. The neglect of foundational fisheries principles is not compatible with sound fisheries management, regardless of the number of computer terminals scattered statewide.

WILD TROUT IV

In September Don Woods, Charles Anderson, Mark Ebbers, Bill Thorn, Jerry Wiechman, and Randy Binder attended Wild Trout IV in Yellowstone Park. An informal theme was the effects of the recent fires on the Yellowstone ecosystem. Few negative effects upon fish populations have been documented. The proceedings should be published within a year.

Influences of hydrology, riparian management, urbanization, acid rain, and water laws upon trout populations were discussed in the first session. In the second and third sessions various agencies explained their trout programs and gave specific examples of management. An evening panel session discussed the effects of wild fire and drought upon wild trout. The final session demonstrated the economic and social basis for wild trout management.

More generalities than specifics were obtained from this

symposium. Most important was the perspectives and directions for trout management for other regions. Western states were more aggressive than Midwest and Eastern states in applying special regulations - when habitat has not been degraded and pressure increases, it is the only option. Limited entry on public fisheries is being discussed to maintain or improve quality. Midwestern states place highest priority on habitat improvement, but special regulations are becoming more important. Statewide classification/management systems are being developed (Wisconsin, SE Alaska). Agencies in the West seek to stop habitat destruction on public lands (grazing, logging), while those in the Midwest and East seek to stop agricultural abuse of trout streams on private lands. Drought and water allocations in Western states is presently the top priority for trout management in several states. For further information, contact one of the above individuals.

Bill Thorn

Editors note: The following was sent to me for everyone to preview before the Annual Meeting, where this resolution will be introduced by Tim. Tim also highly recommends the reading of an article by Robert Behnke, "Catch-and-release - The Last Word" from the Catch and Release Symposium in 1987. I have taken selected paragraphs from Behnke's article and reprinted them here to give you a feeling of Behnke's points.

AFS Resolution

WHEREAS, numerous changes in fishing regulations have recently been proposed and implemented by the MN Department of Natural Resources, and

WHEREAS, many of these regulations have not undergone adequate technical review by fisheries managers and biologists, and

WHEREAS, many of these regulations violate principles of sound fisheries management with frequent disregard for the available data,

NOW THEREFORE, be it resolved that the MN Chapter of the American Fisheries Society address these concerns by way of letters to the Commissioner of Natural Resources, the Director of DNR Fish & Wildlife, the Chief of DNR Fisheries, and the Minnesota State Legislature.

FURTHER, be it resolved that the MN Chapter AFS advocates establishment of a policy requiring all proposed fishing regulations by subject to review and approval by a panel of technically competent fisheries professionals. The recommendation of this review process should be included in the letters mentioned above. The attached list of regulations should also be referenced in this correspondence.

Submitted by Tim Goeman

Rainy Lake - reduce the walleye/sauger bag limit to 12, with not more than six walleye and only one over 19.5 inches; make the northern pike bag limit three, with only one over 28 inches.

Saganaga Lake - keep the bag limit at six, with one over 19.5 inches rather than one over 22 inches.

Ontario-Minnesota Border Waters from Saganaga Lake East to Lake Superior - make the lake trout season Feb. 15 to March 15, approximately one month shorter than now.

Lake of the Woods - reduce the walleye/sauger bag limit to 12, with not more than six walleye and only one over 22 inches; make the northern pike size limit one fish over 28 inches.

Mississippi River and St. Croix River bordering Wisconsin - make the walleye limit six, with a minimum 15-inch length limit except in Pool 3 (Hastings to Red Wing); make the bass limit five, with a minimum 14-inch length limit downstream of Highway 70 on the St. Croix, and a 12-inch length limit upstream of Highway 70 on the St. Croix.

Rum River from near Onamia to Princeton - make the smallmouth bass limit three, with no bass possessed between 10 and 18 inches and only one bass over 18 inches.

Mississippi River Between Monticello and Elk River - make the smallmouth bass limit three, with no bass between 12 and 20 inches and only one bass over 20 inches.

Trout Other than Lake Trout and Atlantic Salmon Statewide and in Lake Superior - allow only one over 16 inches in length.

Red River of the North and Tributaries - make the catfish limit five in possession, with only one over 24 inches.

Big Sand Lake, Park Rapids Area - walleye limit includes no more than one fish over 20 inches.

Portions of "Catch-and-release - The Last Word" by Robert Behnke.

Since the first catch-and-release symposium was held ten years ago, a considerable amount of new information has been developed; significant progress has been made. There is yet, however, much to be accomplished, especially in regards to salmonid regulations, agency expertise, credibility, and public education. It is safe to assume that a third symposium in this series can be planned for 1997 without fear that all the issues and problems discussed in the first and second symposia will be fully resolved by then. Comparing the contents of the 1977 and 1987 symposia, it is apparent that there has been increasing interest and use of catch-and-release as a management tool in warm water fisheries.

When the 1977 symposium was held, the use of special regulations in fisheries management was, by and large, viewed by most biologists and administrators as more in the realm of people management rather than fish management. This reflected the general perceptions that sociological aspects dominate over biological aspects of regulations in sport fisheries. I suspect that because of this historical

neglect of the biological or practical fisheries management aspect of special regulations, the organizers of the 1977 symposium entitled the symposium "Catch-and-Release Fishing as a Management Tool." Although the sociological aspect of regulations or people management is an important aspect of a management tool, without the biological evidence and understanding of the factors that determine success or failure of regulations to achieve a goal, an agency will lack the expertise and credibility for leadership; and the people management part of the management tool can become a nightmare of dissatisfaction and divisiveness.

The problem concerns the common attitude of fisheries professionalism the 1970's of relegating special regulations to the domain of sociology rather than biology. What should be apparent with a bit of reflection is that successful special regulation programs cannot treat sociology and biology as unrelated and isolated entities. The key to people management and leadership concerns establishing the facts or the biological basis of special regulations and effectively communicating these facts along with the aura of agency expertise and credibility to the public.

PEOPLE, PLACES, AND THINGS

CONGRATULATIONS DARRYL

Our President, Darryl Bathel, has been promoted to Coldwater Production Supervisor of the DNR Fisheries. The position has even been transferred to French River, so he doesn't even have to move.

SMALLMOUTH SYMPOSIUM

Mike Hayes, DNR Lake City, informs us he has a copy of the abstracts from the First International Smallmouth Bass Symposium held in Nashville, TN last August. A wide variety of subjects were covered, including basic biology, feeding, flow requirements, special regulations, and habitat improvement. Anyone interested in the abstracts should contact Mike.

BASS - SALMONID INTERACTIONS

Information on black bass - salmonid interactions is being sought by Bill Bengeyfield, Global Fisheries Consultants, Ltd., 13069 Maine Dr., White Rock, BC, Canada V4A 1E5, phone (604)531-9769. The information will be used by the British Columbia Ministry of Environment to assess the desirability of introducing smallmouth or largemouth bass in selected waters of the Lower Mainland for sportfishing. Findings of the literature search will be shared with any interested persons.

CHANNEL CATFISH FEVER

Steve Quinn, Chapter member and In-Fisherman staff member, sent along info on Channel Catfish Fever. The book blends science with a lifetime of catfishing experience to sweep myths aside and focus on understanding and catching channel cats, America's favorite sportfish. For more information, call 1-800-232-4225.

FLOODPLAIN RIVERS SYMPOSIUM

This symposium, sponsored by Louisiana State University, will be held in Baton Rouge, LA on April 9 - 11. A wide variety of talks on the benefits of flooding for large and small rivers are scheduled. Proceedings will be published.

CRAPPIE SYMPOSIUM

The "Crapplie Biology and Management" symposium, sponsored by the Fisheries Management Section of the AFS will be held in conjunction with the Annual Meeting of the

Parent Society in Pittsburg in August. It will address a broad range of contemporary issues pertaining to the management, ecology, and genetics of the black and white crappies.

FISH LINES DEBUTS

The following items come from a new "newspaper" type publication from the AFS. Fish Lines contains timely summarized news of non-AFS aquatic resource issues and events which concern the fisheries profession. A subscription is only \$10 per year. There are really some interesting items in there, far too many to reprint here. I think you would enjoy getting this.

BIGHEAD CARP IN MISSOURI

Bighead carp, which probably escaped from a commercial hatchery in 1986, have successfully spawned in the Missouri River. This species can reach nearly 100 pounds, with 60-pound fish having been reported from Missouri. Bigheads feed on the same food as paddlefish, whose numbers are diminishing due to habitat destruction and the illegal take of their roe. MO biologist Bill Pflieger says, "They should never have been brought into this country." For more details, call (314)751-4115.

ANOTHER UNWELCOME AQUATIC IMMIGRANT

The zebra mussel was first spotted in Lake St Clair in 1988; it is multiplying rapidly in Lake Erie and is expected to soon become established in Lake Ontario. Concentrations of 30,000 mussels per square meter have been reported. This organism clogs industrial water intake pipes, and is expected to be detrimental to the area's fisheries including walleye. Pumps are already breaking, and costs are expected to be hundreds of millions of dollars. For details, call (614)265-6300.

BLACK MARKET PADDLEFISH ROE

Three men were recently indicted in Chattanooga, TN for illegally taking paddlefish in Missouri. The eggs from the fish were sold for \$2,500. Assistant US Attorney Gary Humble said Chattanooga is a middle ground for resale to New York and elsewhere. He stated that final retail price is \$350 per pound. For more info, contact the MO DOC.

DEDICATION OF CO-OP-UNIT HELD 11 JANUARY 1990

The dedication of the Minnesota Cooperative Fish and Wildlife Research Unit was held at the Natural Resources Administration Building on the St. Paul Campus of the University of Minnesota. The unit was established in 1988 to facilitate cooperation between the University of Minnesota, the US Fish and Wildlife Service, the Minnesota Department of Natural Resources, and the Wildlife Management Institute. It is affiliated with the Department of Fisheries and Wildlife and is one of 34 such units in the United States. The unit was authorized by the 1986 Congress, and its formation was supported by the Minnesota Chapter of the American Fisheries Society.

The Minnesota Co-op Unit emphasizes research regarding impacts of human activities on aquatic and terrestrial ecosystems, and it addresses the biological, social, and economic aspects of both game and non-game fisheries and wildlife management. The Unit Leader is Dr. Mary Henry, who is also a member of our MN AFS chapter. The position for Assistant Unit Leader for Fisheries has not been funded to date.

RECENT STAFF DEVELOPMENTS

THE AMERICAN FISHERIES SOCIETY

Our Society is clearly in transition as we develop the strategies and organizational structures to implement the Society's Long Range and Visibility Plans. Committees, Chapters, Divisions and Sections are all involved - some by contributing to the Society's Executive Committee and others by holding their own plan development retreats or addressing the subject in business meetings. New plans and procedural manuals that are complementary to those of the Society are contemplated or are in development. At the staff level this transition is exemplified by:

Computerization of Society's headquarters

New capabilities and service for members include producing our own dues bill, membership directory and the Directory of North American Fisheries & Aquatic Scientists.

Software includes word processing, spreadsheet, accounting, membership, order entry and inventory control, manuscript tracking and meeting management.

It has taken a tremendous amount of staff time to install, debug, and learn to use the system. Our staff has approached this task with enthusiastic determination and has maintained normal operations and services while doing it. We expect complete installation by the end of the year and full operation by mid-March. The system clearly will give us a management information base on which the Society can continue its growth.

Editorial and Publishing Expansion

The new Journal of Aquatic Animal Health brings to five our number of peer-reviewed serial publications. This fall our managing editor, Bob Kendall, adopted a schedule of getting one issue of a journal to press every nine days. He couldn't maintain it but will likely get all 1989 volumes to press by the year's end or shortly thereafter.

We have more than ten books in preparation - Common and Scientific Names of Aquatic Invertebrates From the United States and Canada: Decapod Crustaceans, two new fish lists: 1990 edition of A List of Common and Scientific Names of Fishes from the United States and Canada and World List of Fishes of Interest to North Americans. Methods of Fish Biology - half edited and to press. Design of Fishways is being revised with partial support by the International Association of Fish and Wildlife Agencies (IAFWA) and the Canadian Ministry of Fisheries and Oceans (\$5000 each).

The North American Journal of Fisheries Management will be coedited. Bill Shelton from the University of Oklahoma has accepted but we are still seeking a second editor with quantitative, cold water and marine experience. If you have suggestions for filling this position, we'd appreciate them.

Update of Monetary Values of Freshwater Fish and Fish-Kill Counting Guidelines by our Socioeconomics Section is proceeding under a Federal Aid Grant. As soon as it is published workshops are planned at four Division meetings to get the new information into rapid field use. Most recent use of the old publication was in the Ohio River spill last winter. The company involved agreed to create a \$2-3 million trust fund for Ohio River fisheries work.

Fishline newsletter

A prototype has been prepared by Carl Sullivan to provide current fisheries news. We have gotten agreement from the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) to rotate bimonthly news collection and editing chores. The prototype was included with the first December issue of the Diary. We'd like broad review and comment and will seek a sponsor.

Fish and Wildlife JOBSource

The employment service which AFS and The Wildlife Society provide is too expensive as a contract operation based in Ft. Collins. Use by individuals has been only 200/year for each Society, but more than thirty university fish & wildlife schools are subscribers and it seems to have become a valuable service to employers. We are exploring alternatives to move the service to our offices to cut costs.

World Fisheries Congress

Glen Contreras has joined AFS on an Intergovernmental Personnel Act loan from the US Forest Service. As executive director he will help raise funds and will coordinate arrangements for the Congress which is scheduled 14-19 April 1991 in Athens, Greece. Fisheries scientists from around the world are planning this conference to assess the state of the world's fisheries resource and to promote scientific collaboration to ensure the health and wise use of fisheries resources. The conference will be just the start of better international information exchange and cooperation in pursuit of sustained benefits from aquatic resources. A five volume proceedings is planned.

Fish consumption advisory survey

We have received a grant from the Environmental Protection Agency (EPA) to survey all the states' procedures. More than 170 questionnaires have been mailed out to fish and wildlife, public health, and environmental quality agencies in the states. The survey addresses program responsibility, how fish tissue samples are collected and analyzed, how data are interpreted, and what procedures are followed for the development and communication of advisories to the public. Responses will be validated and information will be summarized or synthesized into one response per state if possible. The annotated and compiled responses will be provided to EPA who will examine the information and develop model procedures and guidelines which may be used in an information exchange and technology transfer effort to the states. We are encouraging involvement of the IAFWA in their process.

Continuing Education

Under the guidance of Gerry Cross at Virginia Tech and Tom Coon at Michigan State, AFS has recently initiated a program of surveying continuing education needs, encouraging development of and approving needed courses, and maintaining records of continuing education units earned by members. We seek IAFWA support of a Wallop-Breaux proposal to provide federally-funded scholarships or contract hours of instruction to the states on a continuing basis. As the fisheries science profession grows and changes we see a critical need to provide a means for professionals to update technical skills as well as to acquire administration, managerial, and communication skills. We will provide the

proposal to the Education, Inland Fisheries, and Marine and Estuarine Committees of IAFWA well in advance of the North American Conference so they may evaluate its merits and make recommendations to the IAFWA Executive Committee.

Membership

As of September we had 1048 new members for 1989 and 970 delinquent 1988 members. We should end the year with 8300-8400 members and may well top last year's net increase which was an all time record.

Resource issues and political activism

We continue to work with the U.S. Forest Service "Rise to the Future" fisheries initiative - "The Second Wave". We hosted an evaluation of progress at our Anchorage meeting. We have also been involved in the Service's Recreational Fisheries Task Force, Southeastern Station review and strategic plan development, and have signed a formal Memorandum of Understanding to develop educational materials and public education strategies.

After our review with the Bureau of Land Management, of their fisheries program, they have seriously set about further developing a fisheries program. Director Cy Jamison has brought Mike Dombeck abroad from the Forest Service to be special assistant for Fish & Wildlife. We will work with other groups to get funding and personnel increases to make program development possible.

Through the Marine Fisheries Section we provided testimony for reauthorization of the Magnuson Fishery Conservation and Management Act. We did not remain involved in the ensuing political debate that ended in a stalemate and have been appropriately criticized for not continuing to publicize and clarify our testimony in order to provide professional perspective. We will rectify this situation by providing more definition on the 17 points in our testimony and by joining the political process as the Congress reconvenes.

We assisted the USFWS's development of a recreational fisheries policy and are delighted that Director John Turner plans to sign it very soon.

We supported the Natural Resource Defense Council's effort to require the Department of Interior to support full NEPA process compliance for recontracting federal water contracts. That effort has been successful.

With Bill Gordon's help we continue to work toward implementation of the recommendations of the Harville Report for reorganization of federal fisheries responsibilities. At this point we are stressing the importance of increased coordination among federal agencies with fisheries responsibilities and would like to investigate the recombination of the National Marine Fisheries Service and the fisheries functions of USFWS. We recently presented our ideas to Grey Castle, Deputy Undersecretary of Commerce and to Max Peterson at IAFWA and received a sympathetic and encouraging response in both cases.

We continue to support federal agency fishery budgets as we have in the past. We continue participation in ALAB, the American Legion of Anglers and Boaters to defend the Wallop-Breaux Trust Fund and to work with the group to plan a June 1990 conference on the successes of the program.

Finally, Paul Brouha is serving as chairman of the National Fishing Week Steering Committee. For 1990 we will provide information packets for distribution through our committee members to middle schools and, with federal aid funding, will provide video news releases and public service announcements that state agencies can easily customize. A national youth ethical anglers (YEA) fishing tournament is planned. We are encouraging all AFS chapters and federal and state resource management agencies to plan activities during National Fishing Week 1990. Our AFS challenge is to make visible to the public the fisheries science professional's role in providing increased angling opportunity.

In closing we thank you for your guidance and cooperation during this past year. We look forward to working together in the New Year to multiply our capabilities.

RIVERS AND STREAMS COMMITTEE UPDATE

The MN AFS Chapter Rivers and Streams Committee is assembled and functioning. We will have our first formal meeting just before the start of the 1990 Annual Meeting in International Falls, MN. We will meet at 5:30 PM on Tuesday 13 March. A firm meeting room is not yet determined, but the location will be posted in the Holiday Inn. The meeting will consist of organizational details, reports of the subcommittee chairs (1. Dirk Peterson (MN DNR) and Greg Busacker (MN DOT): Transportation Impact Guidelines; 2. Gary Fandrei (MN PCA): water quality issues; 3. Luther Aadland (DNR Eco. Serv.): water quantity - instream flow issues; 4. Rich Domingue (DNR Waters) and Howard McCormick (US EPA): public policy and information), needs for additional subcommittees, and whether the committee should develop position statements or guidelines to send to agencies. The formal meeting will adjourn at 6:30 so several members can attend the EXCOM meeting; however, several subcommittee chairs will be continuing subcommittee meetings. We will have additional time to meet at the mixer (ca 7:30 - ?) which should make for lively discussion.

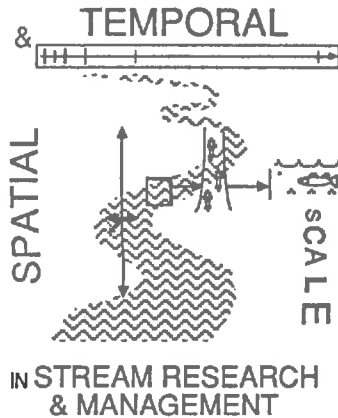
Lastly, the North Central Division RSC met at the NCD meeting in Springfield in December. A report on "Stream habitat assessment in states of the North Central Division, AFS" was distributed by Lew Osborne. The report is a compilation of assessment practices used by the states. Mark Ebbers (MN DNR) contributed the Minnesota portion. Copies are possessed by myself, Mark Ebbers, and Dirk Peterson. Also distributed were copies of "Who's Who in river and stream management in the NCD states and provinces," edited by Steve Hurley and Vaughn Paragamian. This document provides information on contacts associated with state and federal management and regulatory personnel within the division and is an extension of the information given in the last MN Chapter newsletter. Limited copies are available. Remember that the RSC will be sponsoring two symposia at the December NCD meeting in Minneapolis. Your help may be needed with abstract review and we hope to get your contributed paper.

Ray Newman, Chair, Rivers and Streams Committee

Two Symposia on Streams & Rivers at the

52nd Midwest Fish and Wildlife Conference, 2-5 December 1990, Minneapolis, MN

Sponsored by the North Central Division AFS Rivers & Streams Technical Committee



Spatial and Temporal Scale in Stream Research & Management

Explicit consideration of temporal and spatial variability is essential for correct management. Fish recruitment, growth and density respond at different spatial and temporal scales. Local habitat and drainage basin conditions both need to be considered in stream improvement projects. Methods to link observations at differing temporal and spatial scales will be needed for efficient stream management.

The symposium addresses the importance of temporal and spatial variability at different scales from four perspectives: a) sampling considerations and interpretation of management manipulations ("experiments"), b) identifying, assessing and mitigating human impacts, c) methods of linking differing spatial and temporal scales, and d) understanding how streams and stream fisheries function.

Suitable topics include: Use of Geographic Information Systems to link temporal and spatial scales; Ecoregions – an appropriate scale?; Local vs drainage basin effects on stream fish; Accounting for temporal (within and between years) and spatial variation in assessment of management actions; Long-term vs short-term variation in recruitment or growth.

Persons with data from long-term studies, related multiple sites, or linkages of scales from micro-habitat to reach or whole stream are strongly encouraged to submit papers.

Contact Ray Newman or Lew Osborne for further information.

Ray Newman, Fisheries & Wildlife
University of Minnesota, 1980 Folwell Ave.
St. Paul, MN 55108
(612) 625-5704

Lew Osborne, Center for Aquatic Ecology
Illinois Natural History Survey, 607 E. Peabody Dr.
Champaign, IL 61820
(217) 244-2139

Restoration of Midwestern Stream Habitat

In response to the degradation of lotic ecosystems, fisheries professionals of the upper midwest have pioneered many approaches to stream restoration now used nationwide. Although most restoration has involved trout streams, attention has recently shifted to enhancement of previously neglected warmwater fisheries. This session will address stream habitat improvement in its historical perspective as well as its rapidly evolving present and future applications.

Invited speakers will provide an overview of the theory and principles governing stream restoration, covering topics such as: a) stream habitat and its importance to fish communities, b) fluvial considerations in restoring stream habitat, c) role of the watershed and riparian zone in stream restoration, and d) assessment of stream improvement projects. Invited speakers will then participate in an "open discussion" emphasizing audience input.

Contributed talks should complement the invited program with a "hands on" perspective. While this session will highlight well-documented case studies in warmwater stream improvement, a wide range of applied topics (innovative coldwater work, new habitat assessment methodologies, citizen's involvement programs, etc...) is encouraged. The two half-day sessions should merge into a comprehensive treatment of the present "state of the art" while providing direction for future midwestern stream restoration efforts.

For further information contact:

Randy Sauer
Streams Program
Illinois Department of Conservation
Hazlet State Park
Carlyle, IL 62231
(618) 594-3627

Deadline for abstract submittal is 16 July 1990.

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