

# American Fisheries Society



ANNUAL MEETING ISSUE  
MAIL BALLOT ENCLOSED

## Minnesota Chapter

DECEMBER 1990



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# Minnesota Chapter American Fisheries Society

**AF** Promotes the Conservation, Development and Wise Utilization of the Fisheries / Organized 1870 • Incorporated 1911

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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.

# ANNOUNCEMENT

## 24th Annual Meeting Minnesota and Wisconsin Chapters American Fisheries Society January 23-24, 1991

The 24th Annual Meeting of the Minnesota Chapter of the American Fisheries Society will be held jointly with the Wisconsin Chapter. The meeting will be held on January 23-24, 1991 at the Hudson House Inn (Best Western) in Hudson, Wisconsin.

**Special Note to State Employees.** State employees can now stay in out-of state lodging if it is within 10 miles of the border. The Hudson House Inn and Comfort Inn are within that limit.

**Lodging.** The Hudson House has blocked off a number of rooms at a special rate. The rate for one person is \$36 per night plus tax and the rate for two people is \$44 plus tax. The block of rooms and special rate will be held until January 8, 1991. The Comfort Inn is within walking distance of the Hudson House. Special rates for our meeting at the nearby Comfort Inn are \$30.36 for one person and \$35.16 for two people plus tax. When making reservations, please indicate you are with the American Fisheries Society.

Hudson House (715) 386-2394 or (612) 436-5858  
Comfort Inn (715) 386-6355

**Please Note:** The room rate and the telephone number for the Comfort Inn was incorrect in the last newsletter.

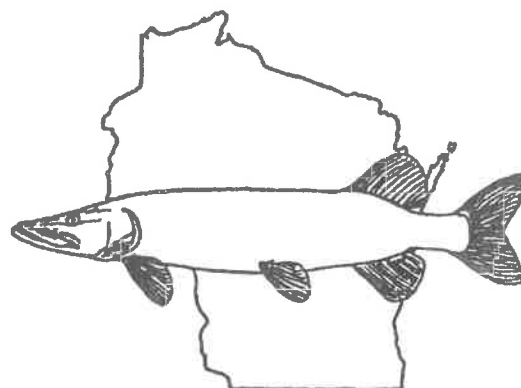
### Tentative Meeting Costs:

<i>Registration</i>	\$6.50
<i>Banquet</i>	10.00 (optional)
<i>Lunch</i>	5.00 (optional)
<i>Chapter Dues</i>	5.00
<i>Total</i>	\$26.50



### Meeting Questions? Call:

Jeff Gunderson  
(218)726-8715 work  
(218)727-0188 home



**Minnesota/Wisconsin 1991 AFS Chapter Meeting  
Hudson, Wisconsin**

**TENTATIVE AGENDA**

**Wednesday, January 23**

7:30 - 9:15           Registration

9:00 - 9:15           Welcome, Agenda, etc.

**Tribal Fisheries Management (Moderator -- Robert Jackson, BIA)**

9:15 - 9:35           **Robert Jackson**, Bureau of Indian Affairs.

                          Overview of tribal fisheries management in Wisconsin and Minnesota.

9:35 - 9:55           **T. R. Busiahn**, GLIFWC.

                          A decade of tribal fisheries management on Lake Superior.

9:55 - 10:15         **Neil Kmiecik**, GLIFWC.

                          Spring spearing practices, regulations, and protests.

10:15 - 10:35       **L. J. Wawronowicz**, Lac Du Flambeau Tribal Natural Resources Dept.

                          Lac Du Flambeau Tribal Fish Culture Facility.

10:35 - 11:00       **Break**

11:00 - 11:20       **John Ringle**, Leech Lake Fisheries Dept.

                          Fisheries management on the Leech Lake Reservation.

11:20 - 11:40       **David Conner**, Red Lakes Dept. of Fisheries.

                          History and status of the Red Lakes commercial fishery.

11:40 - 12:00       **S. M. Shroyer and G. R. Spangler**, U of M Dept. of Fisheries and Wildlife.

                          Growth of Red Lakes walleyes from the 1940's to the 1980's: an application of Weisberg's linear growth model.

12:05 - 1:15         **Lunch**

**Fish Consumption Advisories (Moderator -- Dan Helwig, MPCA)**

1:15 - 1:35           **Pam Shubat**, Minnesota Department of Health.

                          Minnesota fish consumption advisories.

1:35 - 1:55           **Henry Anderson**, Wisconsin Department of Health.

                          Wisconsin fish consumption advisories.

1:55 - 2:15           **S. D. Whitney**, U of W - La Crosse Dept. of Biology and Microbiology.

                          Effects of maternally-transmitted mercury on the survival, growth, and behavior of larval walleye.

2:15 - 2:35           **M. Steingraeber, T. Schwartz, J. Wiener, J. Lebo**, U.S. FWS, National Fisheries Research Center.

                          Polychlorinated biphenyls in emergent mayflies in the Upper Mississippi River.

2:35 - 3:00           **Break**

**Fisheries Management, General (Moderator -- Jim Moore, WDNR)**

3:00 - 3:20           **J. Lyons**, Fish Research Section, WDNR.

                          Annual fluctuations in walleye and sauger reproductive success in the Mississippi and lower Wisconsin Rivers.

- 3:20 - 3:40 **T. Gaemon, MDNR.**  
Evaluation of walleye mortality during professional live-release tournaments in Minnesota.
- 3:40 - 4:00 **D. G. Carty, D. L. Mahony, R. E. Gresswell.** U.S. FWS, Yellowstone National Park  
Application of proportional stock density-relative stock density length-categorization system to managing trout fisheries in streams in Yellowstone National Park.
- 4:00 - 4:20 **R. B. Pierce, MDNR.**  
Exploitation of northern pike in seven northern Minnesota lakes.
- 4:30 - 5:30 **Chapter Business Meetings**
- 5:30 **Social**
- 6:30 **Banquet**

**Thursday, January 24**

**Exotic Species (Moderator -- Dennis Pratt, WDNR)**

- 8:00 - 8:20 **Cliff Kraft, UW Sea Grant Marine Advisory Service.**  
Environmental and economic impacts of the zebra mussel.
- 8:20 - 8:40 **Craig Sandgren, U of W, Milwaukee and J.T. Lehman, Univ. of Michigan.**  
Ecology of the cladoceran *Bythotrephes cederstroemi* (spiny water flea).
- 8:40 - 9:00 **D. H. Ogle, M. G. Henry, R. M. Newman, J. H. Selgaby, U of M Dept. of Fisheries and Wildlife and U.S. FWS.**  
Foods and feeding patterns of ruffe in the St. Louis River Harbor, Lake Superior.
- 9:00 - 9:20 **Jay Rendall, MDNR.**  
Summary of Report and Recommendations of the Minnesota Interagency Exotic Species Task Force.
- 9:20 - 9:40 **N. A. MacKay, Center for Limnology, U of W - Madison.**  
Evaluating the size effects of lampreys and their hosts using an individual-based model.
- 9:40 - 10:00 **P. W. Sorenson and J.R. Cardwell, U of M Dept. of Fisheries and Wildlife and U of Alberta Dept. of Zoology.**  
Wild hybrids of brook and brown trout are not the result of 'accidental' fertilizations.
- 10:00 - 10:30 **Break**

**Open Session (Moderator -- Hannibal Boulton, U.S. FWS)**

- 10:30 - 10:50 **T. F. Waters, U of M Dept. of Fisheries and Wildlife.**  
Productivity of Minnesota's waters: A review and hypothesis
- 10:50 - 11:10 **V. K. Dawson, U.S. FWS, National Fisheries Research Center.**  
Effects of the lampricide 3-trifluoromethyl-4-nitrophenol on dissolved oxygen in aquatic systems.
- 11:10 - 11:30 **W. A. Swenson, Center for Lake Superior Environmental Studies, U of W - Superior.**  
Influence of prey size on gastric residence time, the interpretation of fish diets and estimates of food consumption.
- 11:30 - 11:50 **R. O. Megard and T. N. Halpern, U of M Dept. of Ecology, Evolution, and Behavior.**  
Spatial relationship between populations of cisco and their zooplankton food supply.
- 11:50 - 12:10 **A. T. McClure, and G. R. Spangler, U of M Dept. of Fisheries and Wildlife.**  
The relationship between young yellow perch and zooplankton in the Red Lakes, Minnesota.
- 12:10 - 12:30 **T. Close, MDNR.**  
Dispersal and growth of stocked steelhead fry in Lake Superior tributaries.
- 12:30 **Adjourn**

Editors note: The following article was sent to me by Tim Goeman. It appeared in the 1968 *Abstracts of Fisheries Research Reports* from the Missouri Conservation Commission. The writer was John L. Funk. It is interesting to see how his perspective from 22 years ago is just as thought provoking today. If anyone has any comments on the article, please send them to me and they will be presented in following newsletters.

The results of fisheries research are of practical value only when they are applied and become a routine part of the management program. This is so obvious that it hardly needs to be stated. Almost equally well known is the picture of the research biologist in his white lab coat who has to beseech, beg, badger, and bedevil reluctant or indifferent commissioners, administrators, managers, and sportsmen to accept and apply the shining new truths which his genius has brought to light. This picture, though somewhat exaggerated, is also, unfortunately, true.

There is, however, another side to this picture. Sometimes the public, managers, administrators, and commissioners become convinced that some new management method or a new twist to an old one, will solve the ills of the fishery. They may become so thoroughly sold on the new techniques that it is put into practice immediately on a large scale. Warnings by the research staff that the effects under local conditions have not been evaluated objectively, that the need for such drastic measures have not been demonstrated may be ignored. Research biologists lose just as much sleep and become just as frustrated in this kind of situation as in one where their prized findings are ignored.

Research is most likely to be bypassed when a certain management program becomes a fad. Yes, I said "fad". There are fads in fisheries management, as in most other human endeavors. A few years ago it was the fad to liberalize regulations and, as is the way with fads, in some cases this was carried to far. Now the reaction has set in, this leniency is being reversed and more restrictive regulations are the fad, especially length limits. Length limits are supposed to improve fishing "quality" by giving people bigger fish to catch. This sounds better than saying that they will be permitted to keep only the larger fish that they catch. It seems probable, of course, that in heavily fished waters more fish will grow to a relatively large size if

they are protected from capture by a relatively high length limit, so there may be more larger fish to be caught. This aspect of the length limit is what appeals to the imagination of fishermen and managers and this is the aspect which has been emphasized.

Other probable effects of a length limit are less appealing. It is almost certain that the total number (and very probably the total weight) of fish taken home will be less after a length limit is imposed than before. The individual fisherman will have to be satisfied with fewer though larger fish. Of course, he had the sport of catching the undersized fish he had to throw back. Whether this perhaps frustrating sport and the larger size of the fish he can take home will be as satisfying as a longer stringer of smaller fish, only the fisherman can tell.

In heavily used waters where a length limit has been in force for some time, most of the fish may be cropped off as soon as they grow to exceed the length limit by a small fraction of an inch. This would suggest that the improvement in the "quality" of fishing would not be great. In water where this happens a large population of fish may develop which are just under the limit on lengths. Since they are relatively large and unusually numerous, the total standing crop of fish (pounds per acre) may be considerably higher than without a length limit. There is always the possibility that such a large number of relatively large predators may put undue demands on the capacity of water to produce forage and that the fish therefore will be underfed and slow growing. Under these conditions reproduction and recruitment may be curtailed by competition and cannibalism. Thus, the quality fishing the length limit was supposed to provide may not be attained.

One of the functions of fisheries research is to try out new management practices, such as length limits, under local conditions. It is our

job to make an objective evaluation of the method and its effects on all aspects of the fishery: the return to the fishermen, the effects on recruitment, growth and population dynamics of the species regulated, and the effects on other sport and forage species. To do this requires a carefully developed and comprehensive research program and results can not be expected overnight. It is essential that our observations should continue until at least one year class has been hatched, grown to maturity, and passed through the fishery under the regulations being evaluated. For smallmouth bass in an Ozark stream, this would require at least five years,

probably longer. This may seem like a long time to wait for our turn to get on the band wagon when other states are setting length limits and sports writers, resort operators, and fishermen's organizations are convinced that a length limit will improve the fishing quality immediately.

It is unlikely that the length limit will prove a cure-all for all the ills of our fisheries. It is likely that in certain places and situations it will be a valuable tool of management. The Missouri Conservation Commission has a well deserve reputation for scientific resource management.



14-19 April 1991 Athens, Greece

**Major Themes:**

- Condition of Major Aquatic Habitats
- Fisheries Resource Utilization & Policy
- Protection of Biotic Diversity
- International Development Projects
- Assessment Methodologies & Fisheries Management
- Role of Aquaculture in World Fisheries
- Other Fisheries Science Topics

**Registration Information available from:**

World Fisheries Congress  
5410 Grosvenor Lane, Suite 110  
Bethesda, Maryland 20814, U.S.A.

Tel: (301) 897-8616

Fax: 301 897 8096

Co-sponsored by 47 natural resource organizations worldwide.

Editor's note: Steve Boe sent along the following excerpt from the Michigan Manual for Fish Culture by Harry Westers as some food for thought.

People are the most important resource. The Hippocratic Oath for executives by Clarence Francis, expresses very adequately how a supervisor should consider his people:

"I believe that a business's greatest assets are its human assets, and that the improvement of their value is both a matter of material advantage and moral obligation; I believe that employees must be treated as honorable individuals, justly rewarded, encouraged in their progress, fully informed, and properly assigned, and that their lives and work must be given dignity, on and off the job.....if I have supervision of so much as one other person, I will strive to honor these principles in practice."

ATTENTION ALL MN/AFS MEMBERS:

**BALLOT**  
**1991 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 1991. Mail ballots must be received by January 16, 1991. You may also turn in your ballot at the annual meeting in Hudson, Wisconsin, prior to the business meeting.

Cindy Tomcko  
Nominating Committee Chair

---

**President Elect: (Vote for one)**

**Ginny Snarski** (US EPA - Duluth)  
 **Larry Kallemeyn** (Voyageurs National Park -  
International Falls)

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**Secretary Treasurer:**

**Don Schreiner** (MN DNR - Duluth)  
 **Charles Anderson** (MN DNR - St. Paul)

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 **Chantel Waltner** (U.S. Forest Service - Bemidji)

**MN DNR:**  **Henry Drewes** (Bemidji)  
 **Molly Negus** (Duluth)

**Academic:**  **Carl Richards** (Natural Resources Research Institute -  
Duluth)  
 **Peter Sorenson** (University of Minnesota - St. Paul)

**Open:**  **Dave Conner** (Red Lake Band - Red Lake)  
 **Ken Mueller** (Northern States Power)

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