

**American Fisheries
Society**



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Minnesota Chapter

OCTOBER 1993

AFS

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PRESIDENT'S NOTES

by Don Pereira

I will use this opportunity to inform you of recent events at the parent society meeting in Portland. I thought the Portland meeting was exceptionally productive, from the diverse technical sessions to the EXCOM and annual business meetings. You may not be surprised to hear that **ADVOCACY** was the hot topic in Portland. The proposed amendment to the society constitution by Jerry Bouck was voted down after emotional debate at the business meeting. The amendment called for society-wide review in *Fisheries* and approval of advocacy activities by all AFS subunits. This may not have hampered too much activity at the federal level where new policy grinds through legislative procedure for three to four years. At local levels however, newly proposed legislation may arise overnight and our ability to respond would have been severely hampered. Interestingly, proxy mail-in ballots supported the amendment by a margin of 655 for and 568 opposed. In contrast, votes tallied at the business meeting were 61 supporting and 245 opposed. At a level of 47% support the amendment did not carry the 2/3 majority required to pass. Further spirited debate centered on language and approval of the AFS policy statement on reauthorization of the Endangered Species Act. This statement was published for Society review in *Fisheries* (July 1993). No substantive comments were received and the statement was voted in the same form as that published. At the meeting, some members objected to the language identifying "introduction of non-natives" under Jeopardy Determination (item 2). Not only did this language survive review, but Susan Shipman was supported by Bill Fox in adding "over-harvest" as another force jeopardizing endangered species. Incidentally, Dale Burkett thought the business meeting was the most substantive he has ever attended!

Maybe some fisheries professionals are still uncomfortable with advocacy. However, the Portland business meeting suggests two things to me. First, could it be that our profession is undergoing a maturing process that may be motivated by the desire of part (albeit, a minority) of our

society to become ecologically literate? Perhaps this is an optimistic thought, but it is supported at least in part by our Chapter's recent, successful ventures in environmental advocacy. These ventures would not have been successful if society was not willing to listen. Second, it certainly appears that this maturing process is also motivated by our own professional colleagues — scientists and managers who are beginning to sense a true urgency in our roles as environmental stewards. Perhaps the time is near when we may want to consider "New Roles for Fisheries and Wildlife Professionals"? I will elaborate more on this thought following our fall EXCOM meeting.

Finally, I will leave you with a note of truly mixed emotions. Again from Portland, I have BAD news, then GOOD news, then BAD news again, but finally finishing with GOOD news. I'll give you the BAD news first, then the GOOD, then the BAD news, and finally the GOOD news:

BAD NEWS: Alaska beat us in the quest for the much coveted "Outstanding Chapter Award."

GOOD NEWS: We came in second!

BAD NEWS: There was only two contestants (VPI did not get their application in).

GOOD NEWS: It was an extremely close race. In fact, at one point it looked as if a tie-breaker of some sort may be needed.

Apparently, society officials were so impressed with the packet of materials sent in by both chapters, they are going to be summarized and published in *Fisheries* so that other Chapters can learn how to run an effective and outstanding operation. My only discomfort through all of this (slight though it was) is that the past and current officers and members who have worked so hard starting new initiatives were not there to get the recognition they truly deserve. I am sure it is obvious to all of you that during the past several years our Chapter has had motivated leaders leading highly motivated chapter members. Each one of you should be proud of your accomplishments. Til next time, DP.

PARENT SOCIETY SEEKS EDUCATION AWARD NOMINATIONS

The American Fisheries Society Excellence in Fisheries Education Award was established in 1988. The award is administered by AFS' Education Section and is presented annually to an individual to recognize excellence in organized teaching and advising in some aspect of fisheries education. Nominees may be involved in extension or continuing education, as well as traditional college and university instruction.

Nomination deadline is June 1, 1994. Additional information can be obtained from:

Matt Sabo
Chairman, Excellence in Fisheries Award Committee
Louisiana State University
Baton Rouge, LA 70803
(504) 388-4560

NOMINATIONS FOR 1994 MN\AFS CHAPTER OFFICERS

To All MN/AFS Members:

Use this form to nominate candidates for the following 1994 chapter offices: *President-elect* (this year preference will be given to Academic affiliation), *Secretary/Treasurer* (any affiliation), *Executive Committee Members-at-large* (candidates can be nominated from each of the four affiliation groups – Academic, Federal, DNR, and Open).

Please contact your nominees to assure that the information you provide is correct, then sign your name at the bottom of the form. Attach additional pages if needed. **ACT QUICKLY!** Nominations must be received at the address on the back of this form by **November 24, 1993!**

Chapter office:
Candidates name:
Affiliation:
Telephone number:
Number years in AFS parent society:
Reasons for nomination:

Chapter office:
Candidates name:
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Chapter office:
Candidates name:
Affiliation:
Telephone number:
Number years in AFS parent society:
Reasons for nomination:

Your signature: _____

**Rod Pierce, Fisheries Research
Minnesota Department of Natural Resources
1201 East Highway #2
Grand Rapids, MN 55744**

ANNUAL MEETING: CALL FOR PAPERS

The 27th Annual Meeting of the Minnesota Chapter of the American Fisheries Society will be held on February 1 - 3, 1994, at the Holiday Inn in St. Cloud. Those persons wishing to present papers or posters should submit abstracts to Bill Thorn (DNR Fisheries, 1801 S. Oak St., Lake City, MN 55041) as soon as possible. Final details and lodging arrangements will appear in a special late December issue of this newsletter.

NEWS ITEMS

TU Lawsuit Gains Environmental Review of California Fish Hatcheries (From TU press release)

Responding to a Trout Unlimited (TU) lawsuit, California's Department of Fish and Game (DFG) has agreed to conduct an unprecedented wholesale environmental review of its fish hatchery program. In a letter dated August 30, 1993, the DFG notified TU President Charles Gauvin that DFG plans to prepare an environmental document of the program that will address the concerns TU cited in its suit.

TU, America's leading coldwater fisheries conservation group, filed the suit in April 1992, alleging that the California trout hatchery program and fish planting programs have never complied with the California Environmental Quality Act (CEQA), because no environmental impact statements have ever been prepared for these programs.

"The DFG has addressed every point in our suit," explained Mr. Gauvin. "The environmental assessment that the DFG plans to conduct will be the first objective scientific assessment of the ecological and economic costs of a hatchery program. We are extremely pleased that (DFG Chief Deputy Director) John Sullivan and his colleagues at DFG have decided to do the right thing and take a long, hard look at California's hatcheries."

"This analysis will benefit everyone in California," said Mr. Sullivan. "We are confident that once it is completed, this document will serve as a blueprint for wild trout management nationwide."

On March 16, 1993, TU President Gauvin assembled a panel of America's most distinguished fisheries experts to represent TU's position to the DFG. At the meeting, TU's experts pointed out the following: Native species have been endangered to the point of extinction in their native watersheds by genetic drift. Wild trout are negatively affected by hatchery trout in competition for critical habitat and food. Hatchery trout, with their conditioned behavioral mannerisms, cause disruptions to native trout populations. Hatcheries can cause significant downstream water pollution. Operational costs of hatcheries consume a disproportionate share of the DFG budget compared to preservation and restoration of critical coldwater fishery habitat. Hatcheries are fertile ground for catastrophic disease outbreaks.

Stocking hatchery trout facilitates the spread of pathogens. As much as 50% of the annual production at some trout hatcheries is consumed by predatory birds. The average return of hatchery trout from roadside waters is 35% or less. The cost of catchable trout actually caught by licensed fishermen is close to \$400 per pond.

In its letter, the DFG also said that it is preparing to hold a series of scoping sessions throughout the state of California. The letter expresses the DFG's hope "that Trout Unlimited and its California members will provide detailed input at these scoping sessions."

"ON THE DYNAMICS OF EXPLOITED FISH POPULATIONS" (From AFS press release)

First published in 1957 but long out of print, Beverton and Holt's great work remains the most frequently cited fisheries book ever produced. It established the basis for modern age-structured approaches to fisheries management, and it remains a deep source of inspiration and insight for scientists today.

The book's value to fisheries students and professionals has been limited by its scarceness. Now, "On the Dynamics of Exploited Fish Populations" is back in print, issued by Chapman and Hall (London) as Number 11 in its "Fish and Fisheries" series. The American Fisheries Society is the designated distributor of this book in North America.

Beverton and Holt's text is reproduced exactly. Preceding it are new forwards written by Tony Pitcher and Daniel Pauly. A useful addition is a list of corrections to the original text, compiled by John Hoenig for the AFS Marine Fisheries Section and approved by Professor Beverton. This classic belongs on the bookshelves of all serious fisheries professionals throughout the world.

Books may be purchased from the American Fisheries Society. Prices: \$84 Nonmember; \$67 AFS Member; \$59 AFS Student Member; and \$59 Marine Fisheries Section Member. Prices include shipping within the United States (for orders outside the US please add \$3.00 per book). You can place your order by writing or calling AFS, 5410 Grosvenor Lane, Suite 110, Bethesda, Maryland 20814, (301)897-8616, FAX 897-8096.

MINNESOTA CHAPTER OF THE AMERICAN FISHERIES SOCIETY DRAFT POSITION STATEMENT

The following draft position statement is intended for chapter-wide review. We would appreciate your comments which should be sent to: Don Pereira, DNR Fisheries, 1200 Warner Road, St. Paul, MN 55106.

Please send your comments by 1 December 1993.

All comments will be reviewed by authors of the position statement along with at least one EXCOM member. Substantive comments will be incorporated in to a final revision, which will be available for final review prior to the 1994 annual business meeting. The EXCOM would like to conduct final membership approval of this position statement (by vote) during the business meeting. Thank you for your cooperation.

Issue Definition

The U.S. Fish and Wildlife Service has estimated that 53% of the original wetlands in the lower 48 states have been lost, primarily to agricultural conversion (Dahl, 1990). Destruction continues at a rate of approximately 290,000 acres per year (Dahl and Johnson, 1991). It is the fringe wetlands, those wetlands found along lakes and streams, that have the greatest direct fishery value. These wetlands affect water quality, stabilize shoreline, and provide important habitat for fish. Impacts to the fishery include direct destruction of habitat, loss of invertebrate populations, loss of spawning habitat, sedimentation of streams and rivers, flooding perturbations, and loss of genetic and biological diversity. The loss or degradation of these wetlands results in the decline of the fishery.

Certain types of activities within wetlands are regulated under federal and state laws. Permitting programs provide for replacement of lost wetland area and, to some degree, lost wetland function and value. Because of a limited understanding of wetland ecology and a chronic underfunding of regulatory agencies, the efficacy of replacement practices (wetland restoration and creation) remains in question. Little information has been gathered regarding the amount of wetland replaced or the value of the replacement wetlands. In spite of these limitations, the programs continue to encourage wetland replacement.

Technical Background

The basic assumption of wetland replacement is that the artificial or restored wetlands can duplicate the functions of natural wetlands. However, little is known about the art and science of creating and restoring wetlands. The science base is limited, project goals are often not adequately stated, and monitoring is seldom carried out.

A recent preliminary mitigation study (DeMars, 1992) reveals several shortcomings in the permitting programs:

1) Regulators do not develop an adequate understanding of the form and function of the "target" wetland prior to its destruction. Therefore, they are not able to clearly state which wetland functions should be replaced.

- 2) Project proposers and their contractors understand even less about wetland ecology and, therefore, require more direct supervision.
- 3) Permits do not require mid-course corrections in the event the project fails at any stage.
- 4) Permits do not require long-term or short-term monitoring.
- 5) Minimum area replacement requirements are not met.
- 6) Wetland restoration/creation, as part of permitting programs, often results in a net loss of wetlands, contrary to state and federal policies.

In addition, wetland water quality is subject to decline as a result of adjacent upland development. State and Federal agencies do not regulate development beyond the defined wetland boundary. Therefore, protecting water quality in the wetland requires that local governments establish the appropriate safeguards.

Legal Background

In Minnesota, the regulation of activities in wetlands occurs at the federal, state, and local levels. Regulation by the federal government is carried out under Section 404 of the Clean Water Act or under the "Swampbuster" regulations of the U.S. Department of Agriculture. Section 404 permits are issued by the Army Corps of Engineers to place fill or dredged material into any water or wetland area. The Corps regulates all wetland types.

The state regulates activities in wetland types 3, 4, and 5. The DNR administers Minnesota's public waters permit program, pursuant to M.S. c. 103G. Any person proposing to change the course, current, or cross section of a public water (which includes the act of draining or partially draining a lake or wetland) must obtain a permit from the DNR. The state's jurisdiction for public waters is the ordinary high water mark, which is typically the point where the natural vegetation changes from predominately aquatic to predominately terrestrial. The definition of "public waters" is found in Minnesota Statutes 103G.005.

With some exceptions, the Wetland Conservation Act of 1991 provides regulation of draining and filling of wetlands

that are not already regulated by the Commissioner of Natural Resources. Wetland protection under the Act is administered by local government. The Wetland Conservation Act clearly states that it is in the public interest to achieve no net loss in the quantity, quality, and biological diversity of Minnesota's wetlands [M.S. 103A.201 subd. 2(b)(1)], to increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands [subd. 2(b)(2)]; and to avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and biological diversity of wetlands [subd. 2(b)(3)].

Comprehensive, long-term monitoring of wetlands has not been a component of the federal, state, and local permitting programs. Due to a lack of money and personnel, agencies seldom monitor replacement wetlands or actively enforce the permit requirements. As a result, little information has been gathered about the quality of replacement wetlands and the effectiveness of permit programs.

Recognizing that the state's wetland resources directly contribute to the maintenance of a healthy fishery and that comprehensive, properly implemented regulations are necessary to protect our wetlands, the Chapter recommends the following courses of action.

Courses of Action

- 1) The Chapter supports "no net loss" in principle as well as in law, and advocates for maintaining strong and aggressive wetland policies and regulations at the federal, state and local levels.
- 2) The Chapter encourages the regulatory authorities (Army Corps of Engineers, Minnesota Department of Natural Resources, and Local Governmental Units) to develop

baseline wetland data, monitor replacement wetlands and enforce the permit provisions concerning amount of replacement, wetland configuration, and function.

3) The Chapter supports efforts to review past wetland replacement projects to determine the level of success/failure of those projects.

4) The Chapter encourages changes in the laws and rules such that development plans for upland areas adjacent to legally defined wetlands must contain provisions to mitigate the effects of the development on the water flowing from the upland to the wetland. These mitigative procedures should be considered a cost of development and clearly stated as such. The quality of water flowing from the developed upland to the wetland must be equal to or greater than that of the pre-project flow.

5) The Chapter encourages the regulatory agencies to develop and enforce performance standards for wetland replacement.

References

Dahl, T.E. 1990. Wetland losses in the United States 1780s to 1980s. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

Dahl, T.E. and C.E. Johnson. 1991. Status and trends of wetlands in the conterminous United States, mid-1970s to mid-1980s. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

DeMars, A. 1992. A study on the effectiveness of wetland mitigation. Minnesota Department of Natural Resources, Division of Waters. Unpublished report.

CHAPTER SUPPORTS RAINY/NAMAKAN WATER LEVEL MANAGEMENT CHANGE PROPOSAL

After reviewing the Rainy/Namakan Water Level International Steering Committee's proposed rule curve and relevant literature, the Chapter agreed that the moderate changes in the existing water level management system recommended by the Steering Committee would result in more "natural" fluctuations in water levels and be beneficial to the native species of fish, wildlife, and plants of the Rainy/Namakan ecosystem. A letter was sent to the committee expressing Chapter support for the proposed changes.

The Steering Committee is now submitting its recommendations to the IJC, which has authority over discharge rules. Further opportunity for Chapter input exists once the IJC begins considering this proposal. Since this is an international issue, the EXCOM is considering bringing this issue to the Division level.

Chapter members, we would like your feedback/comments on how the Chapter should proceed on this issue. For further information (copy of the Chapter's support letter, the Committee's June 1993 Final Report and Recommendations and stacks of supporting literature) or to offer comments, contact Ginny Snarski, Issues Committee Chair (218) 720-5515 or -5614)

Will We Change, or Do we lack an Ecological Conscience? A Challenge to all Professionals

by Paul J. Radomski

Outsiders to the fisheries profession might deduce healthy debate on fish management priorities is occurring. Phil Pister, in recent voyages to this region, has spoken eloquently of the need to change fisheries management priorities. He talked of moral obligations and ethics in the sense of having an ecological conscience. But, I believe some in our community are not listening, and some are unconvinced ethical change is necessary. Thus, I remain skeptical that observable, meaningful change will occur any time soon.

External and internal forces are maintaining the status quo. My concerns lie with the internal. To some, I may appear impatient for change, but I see little evidence of productive debate occurring in or reaching important nodes in our hierarchical organizations. I see some program staff and administrators with vision and idealistic young biologists in the field; upper management pushing for appropriate management and specialists and technicians questioning authority. It is an unique time within the Minnesota Department of Natural Resources. I see professional organizations, such as the Minnesota Chapter of the American Fisheries Society, discussing the immediate need to shift from an era of sustained yield to an era of sustainable ecosystem management. I see essays and articles in *Fisheries* discussing: ethics for fisheries managers (Callicott, March-April 1991), over-reliance of hatcheries in the face of habitat degradation and loss (Hilborn, January-February 1992), biodiversity management (Williams and Rinne, May-June 1992), and the source of all management problems (Becker, September-October 1992). Some professionals have expressed concern about internal debates. It is time for such debate in such respected forums. It appears that many recognize the need to focus efforts on the preservation and restoration of the integrity of native aquatic ecosystems.

I assert that an important segment of our profession is resistant to change or ambivalent to it. Many are participating in the evolution of the science of fisheries management to a discipline that addresses global and local habitat alteration and destruction. But, many are irrelevant to the process or impede it. Many fisheries professionals in state or provincial agencies are not members of professional societies. In Minnesota, which is probably not unique, 63% of the state's fisheries staff are not members of the Minnesota Chapter of the American Fisheries Society, and a greater percentage are not members of the parent society. Thus, they are isolated. Others cling to old ideologies, others have made no effort to keep current with the science, and a few have forgotten the basic principles of science and ecology.

However, it is the degree of our ecological conscience that is the major obstacle, not our ability. Like businesses which expend more energy fighting change in the global market than adapting to it, our organizations, through

the collective acts of individuals, are slow to effectively implement solutions to looming problems. I am not referring to the assimilation of new science and technology, which Loftus (1984, 1987) addressed well. Loftus has written and spoke on the importance of effective science transfer within resource management agencies. I agree that this is a critical issue, but what one does with information is as important. In times of accelerated human impact to the environment, if one's goal is only to improve walleye catch/angler-hour, the use of new information is dubious.

The major problem in our organizations are not so much technological as sociological in nature. DeMarco and Lister (1987) stated that we focus on technical issues rather than the human issues not because they are more important, but because it is easier to do. Humans and human interactions are difficult subjects. Science is moving quickly, but most of what we could do more of does not require us at the leading edge of science. Resource management agencies are the appliers of ecological research; it is natural for us to lag behind the science. It also may be appropriate to let a new theories age and mature before they are applied extensively. Most theory in ecology has been around for along time, and the basic ecological principles and concepts can be found in most ecological and fisheries books. Raymond Lindeman related the second law of thermodynamics to energy flow in lakes in 1942. The Malthusian principle, the theory of natural selection, population dynamic concepts, and predator/prey theory provide the theoretical framework of ecology, and they were not born yesterday. The 'modern' experimental approach (i.e. hypothesis, experimental design, analysis) which R.A. Fisher defined has been around for some time. We should all spend more time investigating new methods, recalling old lessons, and reading the scientific literature, but we should also spend time asking the question "why are we doing this?" We could do more good work with our knowledge if we applied an ecological conscience when we develop our fisheries management priorities.

It is imperative that all levels of an organization practice or allow good ecosystem management, but especially at the area level. Decisions on individual lake and stream management generally occurs at the lowest level of administrative authority. Thus, middle managers dictate most of the site-specific management activities. In bureaucracies middle managers are most resistant to change. Without their support substantial change is difficult; they slow or dilute change from the top, and they block change from the bottom. Minnesota's middle managers are Area Fisheries Supervisors, and half are not being reached by the American Fisheries Society. Therefore, it is up to all of us and the public to develop incentives to change the behavior of some in the profession.

There are 3 effective ways to change our existing priorities

to those dominated by habitat issues which incorporate good ecosystem management. They are: tools, training, and peer review. Tools and training go hand in hand. First, people tend to use the tools readily available. We stock fish because we know how and we have the trucks. We do surveys in summer because we have a lot of gill and trap nets. We stock rainbow trout in lakes because we have both. In Minnesota, we now survey bass populations because we have electrofishing boats (and I suspect will see more management for bass because of it). Would we participate in watershed initiatives if we had the tools? Courses in conflict resolution, public relations, and agency coordination are generally not part of the curriculum of fisheries majors. If we had the tools we would use them. Second, people tend to do things they are comfortable with. Some of us raise walleyes, others of us spend our days on the computer. Some rely more on their staff than others. Would we be more involved in environmental impact assessment and permit review if it were satisfying? Would we direct more effort in habitat restoration if there were positive incentives? We need the tools and training to feel comfortable and confident in new roles and missions. Agency administrators need to supply fisheries professions with opportunities for this kind of personal development. Minnesota does a good job, but we all could do better. The American Fisheries Society and its subunits have a role in this. We could do better by targeting our training to levels in an organization that are bottlenecks to change, by sharing information (how many copies of *Fisheries* are read by only one?), and by obtaining new tools to do a new job.

Third, we need more peer review mechanisms. We have peer review for our publications, but it is ironic that we do not for our management activities (sure they are approved, but it is a rare supervisor that has the time to critically review proposals). Would we do less stocking if stocking proposals were reviewed more critically? Would we do less habitat 'improvement' if 3 objective experts were standing on the bank of every stream. Agencies need quality teams. In Minnesota, a regulations review committee was established. The committee stopped special regulations from becoming more of an abused tool in the state. It did not take more staff or money, just a changing of priorities. Certainly the peer review concept could incorporate an ecological conscience. Fisheries professionals should be encouraged by their peers and the public to adhere to good ecosystem management principles. I have expanded the Grey Towers Protocol (Sample 1991) as an example of simple criteria to test and challenge our actions. They are:

1. Management activities must be within the physical and biological capabilities, and based upon sound resource information and sound ecological theory.
 - a. Active fish population manipulation should take the path of least biological resistance. Ideally, the primary species of management should be limited to the naturally self-sustaining species. In those lakes where that is not socially acceptable at this time, management should be directed at sustainable use (i.e. the needs of the present are met without sacrificing the ability of future use).
 - b. One should be managing for native diversity by managing

the full complement of native species in normal patterns of abundance.

- c. Evaluation of active fisheries management should be possible, should be planned, and should be occurring. Evaluation should include principles of experimental design (e.g. temporal or spatial replication, variable treatments, etc.).
- d. We should recognize ecological entities besides the population. We should understand other fundamental concepts, such as communities and ecosystems and their associated theories and processes, and incorporate them in our management plans.
- e. We should keep abreast of current research, attend workshops, and communicate more with other disciplines.

2. The objective of management should be focused on obtaining desirable resource conditions, not in achieving specific near-term harvest or creel targets.

- a. Ecological classification systems should be used as aids in the formulation of long-term goals for individual waterbodies. We should be making progress towards the use of tools, such as GIS, to understand the resource from a landscape perspective.
- b. We should avoid the development of artificial fisheries, and where unavoidable, sustainable land, riparian and aquatic use practices in the area should be aggressively pursued.
- c. We should be developing partnerships with groups and other agencies interested in watershed management.
- d. Exploitation issues should be given greater scrutiny, and solutions to overfishing, where not experimental (in the scientific sense), should be based on sound applicable research.

3. In addition to practicing good "scientific management", we should recognize the moral obligations of the job. Good ecosystem management attempts to pass the resource (intact functioning ecosystems) to the next generation in better condition.

- a. We should be sensitive to potential impacts to all flora and fauna in planning our management activities.
- b. Results from cost/benefit analyses should not be the sole justification for activities. Those analyses should be used to spend limited funds wisely.
- c. We should take Aldo Leopold's thoughts to heart, and read works that advance a land ethic.

Fisheries management lags behind fisheries science. Larkin (1993) stated that "management tends to go with the state-of-yesterday's art, where yesterday is from 10 to 15 years". But he also said that fisheries management is technically ready for the year 2000. The limiting factor in addressing the major problems of habitat loss and alteration is attitude.

Observable, meaningful change will occur, because it must. The question is when will we see it reflected in our fisheries management actions. If we all help it along, it will come sooner.

Literature Cited

- DeMarco, T. and T. Lister. 1987. *Peopleware: productive projects and teams*. Dorset House Publishing Co. New York, NY.
- Larkin, P.A. 1993. *The year 2000: will we be ready*

technically? We're ready, already. Fisheries 18(3):6-11.

Loftus, K.H. 1984. Fisheries: past, present and future in the Great Lakes. Journal of Great Lakes Research 10:164-167.

Loftus, K.H. 1987. Inadequate science transfer: an issue basic to effective fisheries management. Transactions of the American Fisheries Society 116:314-319.

Sample, V. A. 1991. Land Stewardship in the next era of conservation. Grey Towers Press, Milford, PA.

SPECIAL SYMPOSIUM-FIRST CALL FOR PAPERS USES AND EFFECTS OF CULTURED FISHES IN AQUATIC ECOSYSTEMS

This symposium is intended to examine the roles of hatcheries and genetics in fisheries management and is supported by AFS Sections: Fish Culture, Fisheries Management, Genetics, Fisheries Administrators, Introduced Fish, Bioengineering, Physiology, and Early Life History. Others will participate and voiced support.

It will be an interactive symposium with contributing sections adapting and modifying individual section views on the uses and effects of hatchery products. Warm-up sessions were held at the annual meeting in Portland. This symposium in Albuquerque will flesh out the debate. Papers will be published, and a follow-up facilitated workshop will be in Halifax at the 1994 annual meeting.

Both solicited and contributed papers will be published in a special AFS publication. Papers will be solicited to fall in the following topic areas (Panels) and contributed paper authors should identify for which panel their contribution is intended. Manuscripts should accompany authors to the symposium. Alternate papers will be solicited or contributed to fill potential program gaps as: No Manuscript, No Presentation!! Poster presentations are encouraged. Alternate papers will be published even if not orally presented.

We encourage experience papers (good, bad, and ugly) on uses and effects of cultured fishes and will solicit papers representing successes and failures. Cut the BULL and bring your NUMBERS and DATA. The goal of the symposium is to define existing appropriate uses and to suggest future improvement in cultured animals, especially the genetic aspects, to make them better tools for specific management uses. Bring Solutions, not Problems, anyone can CARP.

Panel 1. Fisheries Management Needs: Sport Fish Restoration & Enhancement. Moderator: Administrators Section.

Panel 2. Fisheries Management Needs: Threatened & Endangered Species. Moderator: Fish Culture Section.

Panel 3. Fisheries Restoration and Enhancement: Stocking Criteria & Goals. Moderator: Physiology Section.

Panel 4. Fisheries Restoration and Enhancement: Genetic Criteria & Goals. Moderator: Genetics Section.

Panel 5. Fish Production to Meet Needs: Capabilities and Limitations. Moderator: Bioengineering Section.

Panel 6. Evaluation of Stocked Fish: In Hatcheries and In the Wild. Moderator: Fish Culture Section.

Panel 7. Role of Exotic Species: Past and Future Uses in Fisheries Management. Moderator: Introduced Fish Section.

Panel 8. Hatcheries, Habitat, and Regulations. Past & Future Uses in Management. Moderator: Fisheries Management Section.

Posters: Moderator: Early Life History Section???

A. Stocking Successes: warm, cool, cold, anadromous, marine.

B. Stocking Failures: warm, cool, cold, anadromous, marine.

C. Federal, State, and Private Aquaculture.

D. Physical & Biological Considerations in Stocking.

E. Urban Fishing Needs.

F. Put & Take Fishing Needs.

G. Integrated Fisheries Management.

H. Society Life Style Changes Affecting Perceptions of Angling.

I. Genetic Gizmos: Marking, Ploidy Doubling, Gene Banking, etc.

J. Warmwater Aquaculture.

K. Coolwater Aquaculture.

L. Coldwater Aquaculture.

Abstracts should be submitted to:

Program Chairmen: Gary Charmichael & Vince Mudrak
213 Bryn Mawr Drive SE
Albuquerque, New Mexico 87106

Abstract Deadline: December 15 1993

Manuscript Deadline March 12, 1994

Symposium Chairman: Delano Graff, Commonwealth of Pennsylvania, Pennsylvania Fish Commission, Bureau of Fisheries, 450 Robinson Lane, Bellefonte, Pennsylvania 16823-9616. Phone: (814) 359-5154 Fax: 359-5153

The 13th International Symposium of the North American Lake Management Society (NALMS) will be held at the Seattle Westin Hotel, Seattle, Washington, from November 29 to December 4, 1993.

NALMS is unique among scientific organizations in its emphasis on the vital communication link between the scientific community and concerned citizen volunteers, advocates, and lake residents. It is an excellent opportunity for scientist and citizen to interact closely, exchanging ideas and learning new techniques. Scientific and technical sessions, weekend workshops on aquatic macrophytes and algae identification as well as several sessions targeting the volunteer audience provide a comprehensive and varied agenda. These sessions along with the opportunity for professional and personal communication between scientists and citizens make this conference valuable. Contact Bob Schroeder, NALMS, PO Box 101294, Denver, CO 80250 Phone: (303) 781-8287 Fax 781-6538.

FIELD REPORTS

ACADEMIA

Dr. Charles S. Holt, Professor of Biology and Coordinator of the Aquatic Biology Program at Bemidji State University, will retire from teaching at the end of the fall quarter 1993. During his 29 years of service to BSU, Dr. Holt developed the aquatic biology major program of studies, and served as a resource person on statewide aquatic issues.

Dr. Holt taught a variety of courses in limnology and fisheries biology. In this capacity, he trained many students who are now employed by the EPA, DNR, MPCA, and private environmental consulting firms. Research projects explored during his tenure included the eutrophication of Lake Bemidji, biotelemetry studies of walleye, reclamation of Hayes Lake (winterkill), the ecology of the chestnut lamprey *Ichthyomyzon castaneus*, the Seven Lakes Water Quality study, and the Lake Bemidji Watershed Study Phases I and II. One of his favorite teaching methods was to coach students to prepare oral presentations for presentation at professional meetings.

Dr. Holt was Secretary-Treasurer of the MN Chapter AFS from 1970-74. He served as Chapter President in 1975 and was the editor of the Chapter newsletter from 1985-86. He was President of the BSU Faculty Association in 1987-88.

In retirement, which his wife Lynne calls a "major career change", Dr. Holt will expand his scientific lake management consulting business, Lake Consultants, Ltd. This firm offers a variety of professional services including aquatic educational seminars, sampling design and monitoring services to lake associations, and scientific lake and river property evaluation. Finally, Dr. Holt also plans to engage in activities associated with restoration of Model A Ford automobiles. Best of luck in retirement, Dr. Holt!!

FEDERAL AFFILIATION by Larry Kallemeyn

On September 29, 1993, Secretary of the Interior Bruce Babbitt signed order No. 3173 officially establishing the National Biological Survey (NBS). The mission of the NBS is to gather, analyze, and disseminate the biological information necessary for the sound stewardship of our Nation's natural resources and to foster understanding of the biological systems and the benefits they provide to society. To accomplish this mission, the NBS will 1) perform research in support of biological resource management; 2) inventory, monitor, and report on the status and trends in the Nation's biotic resources; and 3) develop the ability and resources to transfer information gained in research and monitoring to resource managers and others concerned with the care, use, and conservation of the Nation's resources.

Functions necessary to perform the mission of the NBS are being transferred from the US Fish and Wildlife Service, National Park Service, Bureau of Land Management, Minerals Management Service, Office of Surface Mining Reclamation and Enforcement, US Geological Survey, and the Bureau of Reclamation. Personnel being transferred to NBS include researchers at

US Fish and Wildlife Service Cooperative Units and Research Centers and field stations and National Park Service research personnel. Units that MN-AFS Chapter members are most likely to interact with are the Coop Unit at the University of Minnesota and the USFWS research centers at LaCrosse and Ashland, Wisconsin. Chapter members will be able to continue to use the same phone numbers and addresses to reach their contacts at these stations since people being transferred to NBS are to remain in the same geographic location.

OPEN AFFILIATION by John Ringle

"A Letter to All Open Members": As the EXCOM member representing the "open" category of Chapter membership, one of my first questions was who were these people who make up this category and what do they do? In an attempt to properly represent my constituency, I called Jeff Reed for a membership printout of this "open" category. What I found was this category has only 24 individuals who have actually declared this as their membership affiliation. These members primarily represent private enterprise, tribal fisheries programs, and state agencies other than DNR, such as MPCA and MNDOT. Several members are employees of power companies, several are affiliated with Minnesota's aquaculture industry, and several are in environmental consulting. Six members are retired fisheries professionals.

In addition to the 24 "open" members, 51 members have not listed their affiliation and are recorded as "unknown." By default I guess I represent the "unknown" as well! Through the course of the year I hope to be able to determine the affiliation of these members and stimulate and increase their participation in Chapter activities.

Open membership in our chapter means you are not an employee of the DNR, a member of the academic community, or a federal fisheries worker. I guess it is a "lump all" category and that you are difficult to categorize. As a person who is often referred to as a person difficult to categorize, I can sympathize! Do not think for a minute that your views are not important, however. It is through this diversity of interests and affiliations that we can truly call ourselves representative of all fisheries issues and concerns. We open members often bring different perspectives on issues to light that help solve real-world problems. Don't be ashamed of your affiliation or your viewpoint. As fisheries professionals we often take differing viewpoints that can lead to eventual consensus building, hopefully with the ultimate result of improving the fisheries resources of Minnesota for our future generations.

If you feel your views are not being adequately addressed by our AFS Chapter or if you feel you would like to get more involved as an "open" or unaffiliated member, please contact me at (218)335-8244. I am willing to stimulate your Chapter involvement by representing your diverse views.

News from the Tribal Fisheries Programs: Brian Burkholder was recently hired as the Ceded Territory Fisheries Biologist by the Fond Du Lac Reservation Tribal

Council. In this capacity, he will be working in the 1854 Ceded Territory on a variety of fisheries projects. Brian received his training at Virginia Tech. Welcome aboard.

Larry Schwartzkopf, Reservation Fisheries Biologist at Fond Du Lac, reports he has recently completed their 3-year radio telemetry assessment of St. Louis River channel cats. This was a cooperative study with the US Fish and Wildlife Service. In conjunction with this project, they have placed spawning structures at selected locations to enhance natural reproduction of the catfish. Larry also reports they are working on a cooperative sturgeon restoration project on the upper St. Louis River. They are working cooperatively with the MNDNR and USFWS. Larry also says he has been working on fisheries concerns related to the FERC relicensing of the St. Louis River hydroelectric system.

Leech Lake Reservation Fisheries Department is nearing completion of their fish rearing facility below the Lake Winnibigoshish Dam. Ten one-acre ponds have been

constructed and will be used to rear a variety of species for reservation needs. Coop fish culture projects are being developed to use some of the ponds for baitfish production.

The Bureau of Indian Affairs again highlighted tribal fish and wildlife projects at their booth at the Minnesota State Fair. This booth was developed cooperatively with the USFWS and this year highlighted tribal fish hatcheries and fish production by the 30 Indian reservations assisted by the Minneapolis area. A nice brochure was developed by **Bob Jackson**, Area Fish and Wildlife Biologist, to feature programs on the reservations.

The annual **Great Lakes Conference of the Native American Fish and Wildlife Society** was held in Green Bay, WI, September 27-30. Agenda topics included a panel discussion on Canadian/US Resource Management Issues, Conservation Officer Environmental Training, a Fish Health Issues Panel, a Wetland Restoration panel, and a panel discussion on sturgeon. Traditional feasts were hosted by the **Oneida and Menominee Reservations**.

COMMITTEE REPORTS

MEMBERSHIP by Jeff Reed

If you have read Paul Radomski's comments in this newsletter you probably noticed that he made mention that 69 percent of the state's fishery staff is a member of the chapter. I think it is time to increase that percentage, and I'm not just talking about the DNR's figure, we need more members from every facet of the fishery professional community in Minnesota. To do this the chapter has come up with its version of the AFS PROClub (Professionals Recruiting Others). For every new member you recruit for the chapter, you will receive a certificate good for one free shot at a great raffle prize (no dud here, we're talking a nice prize! - more specifics in the next newsletter). The special drawing will be held at the annual meeting in St. Cloud (so you had better get going!!) Only those of you who recruit a new member will be eligible for the drawing.

Perhaps the easiest place to start is to get those former members of the chapter back in the swing of things. You say you have no idea who used to be a member of the chapter! Well to help you out a little bit here's a list of people who did not renew their memberships for 1993 (some even go back to 1991 - imagine that!) Look closely, the person sitting next to you may be on the list. Sign them up! To get credit for the raffle, just put your name on the membership application. If you need more applications let me know.

Those past members include: Dennis Anderson, Eric Anderson, Patricia Bailey, Jeff Berrington, Andrew Bindman, Stephen Boe, Mark Briggs, Daniel Bumgarner, Ian Chisholm, Dave Coahran, Scott Collyard, Scott Craig, Jeff Denny, Philip DeVore, Harold Donnell, Pete Eikeland, Jack Enblom, Richard Fesenmaier, David Friedl, Jean Fujikawa, Bob Glazer, Jerry Grant, James Groebner, Scott Gustafson, Mark Hanson, Dan Helwig, Rebecca Hunt, Tim James, Dennis Johnson, Jamie Juenemann, Ron Kellner, Doug Keran, Michelle Klein, Steve Klotz, LeeAnn Krogseng, Steve Kubeny, Frank Kutka, Mike Larson, Ron Lawrenz, Bruce Little, Vince Mattson, Micheal McLean, Kurt Mead,

Bob Moody, Stephen Morse, Steven Mortenson, Scott Muhm, Phil Nasby, Derek Ogle, Daniel Orr, Dirk Peterson, Don Reedstrom, Gary Rogers, Anne Runstrom, Brain Schultz, Melvin Smith, Steven Spigarelli, Mark Spoden, Jeffrey Stone, Mark Stopyro, Micheal Swan, Henry Swanson, Craig Tukkanen, Ron VanBergen, Jerome Wendlandt, Dan White, Dwight Wilcox, Amy Wilfahrt, Duane Williams, Donald Woods, David Wright, Shirin Yousuff, Gary Zarling, and Kevin Zytovicz.

Obviously some of these members may have left the state or perhaps changed professions, while others have retired. This is not a complete list of potential members, a large portion of fisheries professionals in Minnesota are not associated with AFS. Get them involved. There is an even greater number of resource professionals that deal with fisheries related issues, let's get them involved too!

Finally, as you will notice, for the first time we have a membership application. This will enable me to update the membership database faster and hopefully make registration at the annual meeting go even smoother. Note: dues for 1994 are now seven (that's 7) dollars. A reminder for those of you who are members of AFS, you can pay your chapter dues at the same time you pay your annual AFS dues.

PUBLIC AWARENESS by Steve Quinn

The committee has been working on a script for the Public Service Announcement about the Chapter, emphasizing support for habitat preservation and conservation of resources. The video footage should be edited this fall.

The committee mailed copies of the Parent Society's news release about the CNN documentary to 60 media outlets around the state.

Chairman Quinn arranged for a video company to tape several sessions at the Portland meeting for use in the video about the American Fisheries Society.

**1994 Membership Application
Minnesota Chapter
American Fisheries Society**

Name _____

Affiliation _____

Work Address _____

Work Phone# _____

FAX # _____

Home Address _____ (optional)

Please place a check in the space before the address to which you would like your newsletter sent.

AFS Membership Number _____ (on mailing label of *Fisheries*)

I have been a member of the MN Chapter since _____

(If new member, list member recruiting member here _____)

Students Check this line.

=====

MN AFS T-SHIRT ORDER FORM

Name: _____

Shipping Address: _____

Home Phone: _____

| <u>Species</u> | <u>Size</u> | <u>Number</u> | <u>Cost Each</u> | <u>Total Cost</u> |
|---|-------------|---------------|------------------|-------------------|
| _____ | _____ | _____ | 15.00 | _____ |
| _____ | _____ | _____ | 15.00 | _____ |
| _____ | _____ | _____ | 15.00 | _____ |
| Sub-total | | | _____ | _____ |
| Shipping (\$2 first shirt, \$1 each additional shirt) | | | _____ | _____ |
| Total | | | _____ | _____ |

Please make checks payable to MN AFS

Send this order form to: Henry Van Offelen
Detroit Lakes Area DNR
PO Box 823
Detroit Lakes, MN 56502

Species available: brook trout, rainbow trout, walleye, black crappie, largemouth bass, orangespotted sunfish, and channel catfish. **New Species Available: smallmouth bass, brown trout**

MINUTES OF MINNESOTA AFS CHAPTER EXCOM
October 5, 1993 Hinckley, MN

Members in attendance: Don Pereira, Chris Kavanaugh, Bill Thorn, Ginny Snarski, Brad Parsons, Rod Pierce, Greg Busacker, Steve Quinn, Carl Richards, Henry Drewes, Lynn Mizner, John Ringle, Larry Kallemyn.

Call to Order - D. Pereira - Meeting was called to order and everyone was welcomed.

Approval of Minutes - C. Kavanaugh - Minutes from the May EXCOM meeting were reviewed, motion to approve, seconded, passed.

Treasurer's Report - C. Kavanaugh - Treasurer's Report was distributed and reviewed. Explanation by Kavanaugh that this report covers the period from May 2, 1993 through October 4, 1993. Some registration for continuing education workshops had been received prior to May 2, 1993. Balance sheets for the two workshops were distributed. The larval workshop netted a profit of \$978.19, the non parametrics statistics workshop expects to profit \$402.97, for the chapter. Pereira explained that we had expected approximately \$500 profit from both workshops. Pereira also has expenses from the Parent Society meeting. Motion to approve treasurer's report, seconded, passed.

Pereira asked to jump to agenda item 26, President's travel budget and special initiatives. At the annual chapter business meeting the budget was modified so that expenditures were more in line with projected revenue. Presidents travel was cut from \$800 to \$500 and the special initiatives fund of \$200 was dropped. Considering the Continuing Ed. and T-shirt sales is bringing in more than expected, and the fact that the Portland Parent Society meeting was very expensive and the need to be able to participate in special initiatives (Pereira discussed a print donated to the Parent Society raffle and a Genetics workshop he attended), there is a need to reinstate those budget items.

A question was asked of how the genetics workshop fit into the chapter. Pereira explained that because of the chapter position statement, his testimony (on behalf of the chapter) to the legislature last year, and our new activity in an advocacy role, that the chapter can and should be a "watchdog". Is the chapter now supporting member travel to symposia? It was suggested that those conferences are more of an agency responsibility. Pereira discussed that it depends on the issue, sometimes the agency will not fund travel, as in this case, since there was already DNR representation at the conference and working on the issue, his participation may not have been funded. Further, participation by the chapter, at chapter expense, provides a non-aligned view.

The chapter is "putting its money where its mouth is" and advocacy costs money. However, there is a need to bring the issue to the chapter membership. There is a need to first draft some criteria, suggestions included chapter funding if the agency is non-supportive, proposal for chapter funding to EXCOM for review. Pereira, Parsons, Kavanaugh and Busacker to draft criteria based on D. Bathel's financial survey and present it to the membership at the annual business meeting.

A motion was made to restore the original budget for presidents travel to \$800 and the special initiatives fund to \$200. Seconded, discussion about prioritization of presidents travel to NCD, mid-year EXCOM and Annual meeting. Motion passed.

Discussion about the need (wisdom) of maintaining a large balance in the treasury, currently at about \$10,000. H. Van Offelen and Kavanaugh to look at how to spend money and report at annual meeting.

Busacker said there have been some changes in the legislature regarding lobbying activity (advocacy?) that we need to be aware of.

Annual Chapter Meeting Plans - B. Thorn - Been working with Tim Brastrup on arrangements. New Ulm, Hutchinson and St. Cloud are being considered. Leaning towards St. Cloud, at the Holiday Inn, at this time. The meeting will most likely be between Feb. 21 and March 11, 1994 and will probably consist of a Weds. evening social, Thursday papers all day, Friday papers till noon.

Also working with Brian Stenquist on developing a Chapter Input Session. There is concern that this may be too soon since the last input session, however, we will be trying for joint meetings in the next couple years so this may be the only opportunity.

COMMITTEE REPORTS

Awards - P. Sorensen - A memo was sent by Sorensen and distributed at the meeting by Pereira. To date there have been no nominations for either the Chapter's 'Award of Excellence' or the 'Special Recognition Award'.

Sorensen made a motion change the wording in the purpose for the Award of Excellence because of redundancy and lack of distinction between it and the Special Recognition Award. His motion read "Amend the procedures manual to strike the clause 'or outstanding performance in an activity that furthers the goals of the chapter' from the description of the Award of Excellence." Seconded. A friendly amendment was made to modify the language to read "Amend the procedures manual to modify the clause (above) to read 'or outstanding performance in an activity the furthers the goals of conservation and wise use of aquatic resources' ..." The amendment was seconded and passed.

Sorensen also made a motion to change the best paper award judging criteria to address 'informational papers'. There was no second to the motion so it is tabled. There was discussion about the need for further study and language modification. Snarski will work with Tracy Close.

Sorensen regretfully submitted his resignation as chair of the awards committee because of time constraints. He is willing to work with his successor and has offered to stay on until that person is found.

Continuing Education - M. Cook - Cook was not present but Kavanaugh reported that the workshops went well, balance sheets are attached to the treasurer's report. He's working with Drewes of the Rivers and Streams

Committee on the fluvial geomorphology workshops for summer, 1994.

Issues - G. Snarski - Review of International Joint Commission (IJC) border lakes water level management. Information was handed out in the packet. Suggested we put the issue out to the membership in the newsletter for input on direction and feedback. The Northwest Ontario Chapter has been contacted but has not offered a response. There was discussion about elevating the issue to the North Central Division. Richards, Snarski, and Paul Radomski will draft a resolution supporting the IJC Technical Committee's recommendations for submission at the NCD business meeting in St. Louis in December. Pereira to contact Dave Phillip for direction on process.

There has been no progress with the DNR Division of Waters on the clearing and snagging issue, response has been predictably inadequate. Drewes to draft a letter from MN AFS and The Wildlife Society requesting a meeting with the DNR Commissioner's Office to discuss and recommend AFS Guidelines. Drewes, Snarski and Pereira have the lead.

Long Range Planning - Nothing to report.

Membership - J. Reed - Report given by B. Parsons. Currently 264 members registered. There are still approximately 100 people that are still in the state (parent society members) but not members of the chapter. Reed has two initiatives to increase membership.

Develop a modification of the Parent Society 'Pro-Club' program. Offer a special raffle prize for those members that recruit new members. For each new member recruited, a raffle ticket is earned. For the member recruiting the most new members offer an additional prize, perhaps a free registration. Coupled with this initiative is an effort to identify and bring back the current ex-members. One suggestion is to publish a "most wanted list". There was discussion about details and impact of this initiative. Busacker, Parsons and Reed to work out details and report at next meeting.

The second initiative is to expose high school students interested in natural resource careers to our chapter. Reed attended a wetland symposium where the sponsor invited Jr./Sr. year honor students interested in science careers to the symposium. There was broad support from EXCOM for this idea. Once the meeting location is established, contacts will be made with local schools.

Newsletter - B. Parsons - The Newsletter Editor manual will be coming out soon. The fall newsletter should be available to people by the end of October. This issue will include a first call for papers, nomination form for officers, and a new member registration form. EXCOM decided to have a December newsletter as well as a meeting update newsletter in late Jan. or early Feb. There was concern from EXCOM that the time it takes to print the newsletter may cause some items to be outdated by the time members get it. Brad explained the DNR - Fisheries is printing the newsletter for us at no cost. The delay experienced with the last newsletter is not expected to happen again. EXCOM is prepared to pay for printing cost if DNR is unable to do the printing. L. Mizner requested several additional copies of the newsletter for sending to universities.

Parsons is respectfully submitting his resignation effective at the annual meeting due to time constraints.

Nominations - R. Pierce - Nominations form will be in the next newsletter. Still need additional past presidents to help with review of nominations.

Procedural Manual - G. Busacker - Will make changes in the manual for the 'Award of Excellence'. Need additional input on other changes. Will have the manual available in WordPerfect format by December 1, 1993.

Public Awareness - S. Quinn - A draft script for the public service announcement (PSA) is available. In-Fishermen staff working on assembling images. The PSA introduces the chapter and focuses on habitat. There is still time for comments.

Resolutions - C. Richards - No resolutions have been submitted.

Rivers and Streams - H. Drewes - The fluvial geomorphology workshop is being planned. Steve Gough, of Gough and Associates, has agreed to teach. Course will be specific to Minnesota. Two three-day workshops are being planned, probably the second and third weeks of August. To be held at St. Mary's College in Winona. There will be room for 50 to 60 people. Expect tuition to be \$200 to \$300 per student. Drewes to pursue cost-sharing with the NCD, looking at a stratified fee schedule, giving chapter members a break in price. St. Mary's College does require a \$1,000,000 liability insurance binder. This will cost about \$200. EXCOM discussed options of moving the workshop somewhere else but then decided to move forward with the plans and acquire the binder.

NCD Rivers and Streams Committee will be holding a special meeting at the St. Louis meeting where they will address the flood of '93.

Students - L. Mizner - There has been no response for the student paper travel grant to the NCD. There is at least one student presenting a paper at the meeting, however, funding is already available to that student.

Finance - H. Van Offelen - Report given by Kavanaugh. T-shirt sales keep rolling in. Reeds Sporting Goods was receptive to the idea of selling shirts where we would receive a 10% commission, however, they have not ordered any from the vendor.

There is an opportunity to sell T-shirts at the Eelpout Festival on Leech Lake. Discussion that we should stay away from association with the event. T-shirts would probably not be a hot item in February.

Quinn offered to give us a contact with a merchandiser used by In-Fisherman.

Additional Old Business

Funding (\$7 dues increase) - Pereira - Chapter dues for 1994 are officially set at \$7.00. The parent society has included the increase on the recently mailed statements.

Mizner commented that her survey of students indicated that \$7.00 was reasonable and acceptable.

NSP Grant - Kavanaugh - Checked with NSP on information on their grant program. Dollars are limited, currently focusing on providing start-up capital with the sponsor taking over long term funding, most grants are from \$1000 to \$3000. Focus is on youth education targeting the

disadvantaged youth. There may be some opportunity for the PSA or the membership initiative bringing in HS students. Kavanaugh to do more follow-up.

Public Service Announcement - Covered above in the Public Awareness Committee report.

New Business

1993 Action Agenda Progress - Pereira - **Wetland Position Paper** - Draft was distributed, will be printed in the newsletter. Comments to go to Pereira by Dec 1. Pereira, Kallemyn, and Brastrup to review comments with authors. Revised draft to be printed in pre-meeting newsletter for action by membership at the annual chapter business meeting.

Sustainable Management Initiative - Video of panel discussion at last annual meeting is now available. Pereira is working with Paul Pajak to boil it down to salient comments. Pajak and Pereira are also working on additional products. A perspectives paper or a presentation will be given at the annual meeting. There may be an opportunity for Stenquist to incorporate the discussion into the chapter input session.

Exotics - Ringle has made some contacts and is working on it.

Public Education - Richards is making progress. Busacker's project was discussed as to how it could be incorporated. Busacker provided a handout on his meeting with 'non-aligned' anglers. Input is needed on where to go with it.

NCD Student Travel - Covered in the Students Committee report.

NCD Technical Comm. Chapter Reps - Drewes is co-chair and chapter rep for the Rivers and Streams Committee. Jeff Reed is co-chair of the Esocids committee. Pierce is stepping down from his role as chapter rep, Reed will be asked to 'wear two hats'. Tim Goemen is stepping down from his role as chapter rep on the walleye committee. Pereira is considering appointing himself but welcomes other suggestions.

Point/Counterpoint Debate Series - Pereira - This is a new initiative consisting of live debates at the division meeting. This year's topic will be genetic considerations. The parent society has approved the initiative which will allow inter-divisional collaboration. One product will be a compilation in Fisheries. A draft position statement titled "Protecting Genetic Resources of Aquatic Organisms:

Elimination of Stock Transfers" was handed out in the packet.

Report on Annual Meeting - Pereira - These comments will be presented in the President's Message of the next newsletter.

Advocacy - There was a resolution at the meeting on advocacy. An amendment was offered which would require that any Society advocacy activity be first published in Fisheries for approval by the membership before action was taken. There was much heated discussion. The amendment was voted down while the resolution passed.

Outstanding Chapter Award - The award for outstanding chapter was given at the meeting to Alaska, Minnesota came in a very close second. The application materials will be condensed and presented in an upcoming issue in Fisheries.

Endangered Species Act Policy Statement - This passed at the meeting.

Clean Water Act and Interjurisdictional Rivers Act endorsement - Information was made available in the packet.

Chapter Membership Directory - Snarski - An example of the Michigan Chapter Directory was distributed. Snarski discussed the advantages to such a listing (a good way to find out where people are, especially if they are not in your agency or members of the parent society.) EXCOM felt it was a good idea. Snarski to pursue cost estimate and work out other details.

Other

1) **Legislative Breakfast** - Pereira suggested we do this again but this time early in the session. Pereira, Drewes, and Kavanaugh to work on logistical details and organize the event.

2) **State list of Endangered, Threatened and Special Concern Species** - Drewes explained that the state list is beginning an 18 month revision process. Drewes, Jay Hatch, Jim Underhill, Bob Bellig are on the fish team. There is also an invertebrate team. Drewes encouraged all members to lend their expertise to this project. More information will be available in the December newsletter.

Motion to adjourn, seconded, passed.

Respectfully submitted by Chris Kavanaugh, October 7, 1993

CNN AIRS MAJOR FISHERIES DOCUMENTARY

Imagine a restaurant without any seafood on the menu; imagine a stream existing without any fish. It's probably very difficult to do so, but for fisheries scientists, it's more than an image.

Since Colonial times the watersheds of North America have been greatly altered as a result of rapid increase in human population and development. Fertile estuaries have been filled or polluted, and marine fish stocks have been badly exploited.

There is a critical need to communicate science-based fisheries conservation information to the public. The American Fisheries Society is pleased to announce that a Cable News Network (CNN) report on fisheries in North America is underway.

Ted Turner, founder of CNN, has committed the network to air a six-part series on the plight of North America's fisheries beginning Monday, October 25. Parts of the series will cover overfishing, commercial catch of non-target species, habitat alteration, fish population trends, and the role of science in fisheries, focusing on salmon in the Northwest. With an audience of more than 30 million households worldwide, the documentary series will give the American public a new understanding of fisheries problems as well as remedies which will hopefully insure healthier fisheries in generations to come.