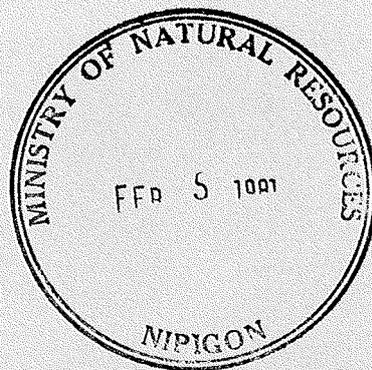


American Fisheries Society



F/W

Northwestern Ontario Chapter

AMERICAN FISHERIES SOCIETY

*** NORTHWESTERN ONTARIO CHAPTER ***

President: Terry Marshall, Box 2089, MNR, Thunder Bay.
President-Elect: Chris Brousseau, Box 5000, MNR, Thunder Bay.
Past-President: Dr. Walter Momot, Lakehead University, Thunder Bay.
Secretary/Treasurer: Dominic Baccante, Box 5000, MNR, Thunder Bay.

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ANNOUNCEMENTS

1. *President's Report*

Our first newsletter was well received by the membership and even evoked a congratulatory letter from Executive Director, Carl Sullivan. This encouragement has aided in getting the current issue out on schedule despite the fact that the work is being carried out by too few of the members.

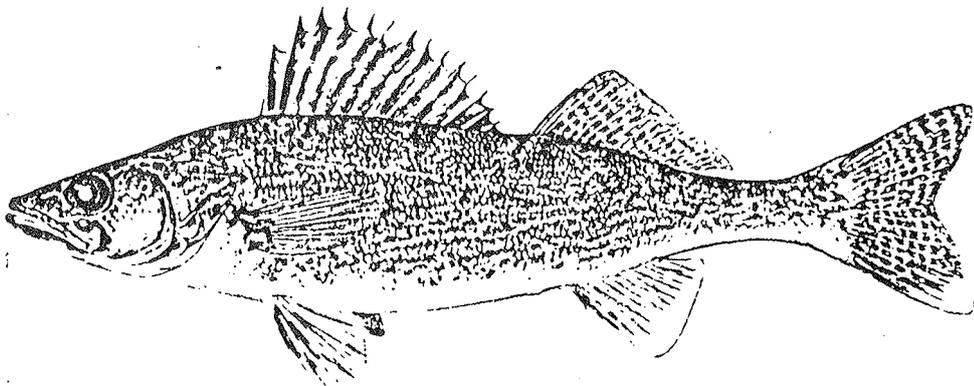
We are once more distributing the newsletter to prospective members, however this will definitely be the last "free" issue. It should now be obvious to those contacted outside the Thunder Bay area that, although they are unable to attend the monthly meetings, they are being kept informed of all activities and stand to gain from affiliation with this organization. Membership is only \$5.00 and can be obtained through any of our officers. Please give it your consideration.

Response to our proposed conference and annual meeting has been positive and we will proceed. Time constraints, however, have precluded our scheduling it this winter, instead tentatively setting the date for October 7 - 9, 1981. The location has also been changed from Thunder Bay to Quetico Center, near Atikokan. This conference center offers complete facilities for such an event, including residences, cafeteria, conference rooms, and a pool. The move will greatly reduce the work involved in arrangements while maintaining reasonable costs of under \$100.00 per person. We are currently requesting approval to cover the attendance and expenses of MNR and MOE employees, and attempting to arrange for additional funding to aid other members.

The conference will consist of four main sessions, one dealing with acid rain, another with fisheries habitat and rehabilitation, a third concerned with fisheries management, and the last consisting of contributed papers. We have already committed a number of guest speakers, however there is still room for additional contributed papers if anyone is interested.

This conference offers an unique learning opportunity for fisheries personnel and limnologists in Northwestern Ontario, so please support it. Due to limited space, attendance may be restricted to Chapter members and contributors. More details will be presented in the next newsletter.

Terry Marshall



2. Chapter Meetings

February 4, 1981

"The Teratology of Water Pollution" by Dr. Eugene Perrin, Wayne State University, Detroit, Michigan.

Lower Lecture Theatre - Room CB 0050

Lakehead University - 7:30 PM

March 12, 1981

"Commercial Fisheries Management on Lake Erie with emphasis on Yellow Perch" by Mr. Doug Howell, Ministry of Natural Resources, Thunder Bay.

Time and Place to be Announced

PROGRAM UPDATES

1. Quetico-Lac des Mille Lacs Fisheries Assessment Unit (MNR).

The first program conducted by the QMLFAU has been the winter creel census of four unit lakes. Atikokan District staff are conducting a census on Niobe Lake, while QMLFAU staff are surveying Lac des Mille Lacs, Whitefish and Greenwater Lakes.

The intensive sport fisheries on some of these lakes and the lack of lake trout yield data underlined the need for a census program. Whitefish Lake is rumoured to be northern Ontario's answer to Escanaba. A partial summer creel census in 1976 (June-August) estimated the sport fish yield for that period as 9 kg/ha. Thunder Bay District staff suspect that the annual yield of sport fish is close to double that harvest. Yields of walleye and northern pike to sport fishermen from Lac des Mille Lacs reported during the PERCIS Symposium comprised 92% of a total harvest of 5.24 kg/ha. Since that time the winter sport fishery has developed considerably. In the past two weeks, resort operators have been ploughing roads across the ice and charging anglers for access to their road systems. Since this development and the arrival of milder weather, fishing pressure has jumped dramatically.

Survey activities have been conducted by skidoo and aircraft. The anticipated problems with aircraft availability, skidoo breakdowns and severe weather have all materialized on schedule, however the problems have been overcome to date by the excellent cooperation of fishermen, our MNR Service staff and by the energy of our field personnel.

FEATURE ARTICLES

Up to Date of Chapter Activities

The Chapter's series of public lectures was launched on September 17, 1980 by Chris Brousseau, Fisheries Biologist for the Thunder Bay MNR District, with an informative slide show on SPOF (Strategic Planning for Ontario Fisheries). Basically, what SPOF aims to accomplish is to identify people's needs and aspirations in the Province's fisheries resources. Committees have attempted to find out what the problems are which prevent these goals from being reached, and work out strategies to solve them.

These basic strategies are as follows:

1. Actively manage using available knowledge to the full.
2. Acquire essential new knowledge base.
3. Adopt user pays principle.

The next lecture sponsored by the Chapter took place on November 27, 1980 and featured Wayne MacCallum, Biologist with the Lake Superior Fisheries Assessment Unit, Thunder Bay MNR, who outlined some of the major biological concepts and models which are used to manage fisheries in Lake Superior.

Initially, he showed trends in the fisheries catch in the lake. Basically the catch was fairly steady, and at its highest levels during 1880-1905. Then large oscillations took place between 1910-1925, and it remained steady up to the early 1950's. The total catch dropped dramatically around 1960, and the major contributor to this decline appears to be the invasion of the sea lamprey in the lake. Since that time, the catch has been steadily increasing and is now at levels comparable to those of the 1940's.

Wayne also discussed some of the vital population parameters such as age to maturity, growth rates, mortality, mean age, and year-class strength, and how exploitation affects them. By understanding how these respond, better decisions can be made to manage what we have and hopefully bring back some of what we used to have.

The latest in the series of lectures consisted of Dr. G. W. Ozburn, Biology Professor, Lakehead University who provided some interesting comparisons between fluids chosen to replace PCB in manufacturing and how these affect fishes' environment and biology. Some of the chemicals he tested consisted of Aroclor 1016 (capacitor fluid); TCB, transformer fluid; WEMCOL, capacitor fluid; and a variety of Dow Corning products. Most of these chemicals proved to be extremely less toxic to fish than PCB components. George found that these fluids were cleared from the fishes' systems in a very short time as compared to PCB. On a positive note, these studies discouraged Dow Chemicals from manufacturing C₄, which is used as a capacitor fluid. This particular chemical proved to be the most toxic of all the ones tested aside from PCB. Acute and chronic toxicity studies were carried out, using flagfish and rainbow trout.

Dominic Baccante

NWO Chapter Supports M.O.E. Control Order

On October 1, 1980 a public hearing was held at the Thunder Bay City Council Chambers to discuss the Control Order placed on Great Lakes Forest Products Limited by the Ontario Ministry of the Environment. The Order involved improving the water quality in the Kaministiquia River.

At the meeting, Chris Brousseau presented a statement on behalf of the Northwestern Ontario Chapter. After a brief introduction about the American Fisheries Society the statement read as follows:

"It is the policy of the Northwestern Ontario Chapter of the American Fisheries Society to promote the scientific management of aquatic resources for the optimum use and enjoyment for the people of this area. Included also is the promotion of the best possible quality of the aquatic environment consistent with its use for fish production.

With these objectives in mind, our Chapter would strongly support any proposal by Great Lakes Forest Products to improve the water quality in the Kaministiquia River. Present conditions in the river occasionally lead to fish kills which are extremely detrimental to the production and long-term viability of fish populations. A few kilometers of fish habitat have been virtually eliminated and the area is aesthetically unpleasing.

The reduction of effluents containing Biological Oxygen Demanding Substances, suspended solids, and other toxic materials will lead to an improvement in the overall water quality in the lower reaches of the Kaministiquia River. This would probably result in the expansion of the sport fishery that now exists at the mouth of the river as well as above Highway 61. There would also be an increase in water associated outdoor recreation. These are two very important benefits for the people and visitors of Thunder Bay that would result from water quality improvements in the river.

Our Chapter is impartial as to the method needed to improve water quality as well as the site of the treatment centre. Our concern is the improvement of the water quality in the Kaministiquia River for the people and visitors of Thunder Bay. We feel that present water quality conditions in the Kaministiquia River are unacceptable and we strongly urge that any action taken by Great Lakes Forest Products to clean up the river take place as soon as possible in view of the economic, social, and technical constraints."

As of the time of this printing, no final decision on the issue has been made.

Chris Brousseau

Canadian Conference for Fisheries Research - Canadian Chapter
of the International Society for Theoretical and Applied
Technology - Montreal, Quebec, January 5-7, 1981.

The CCFR met on January 5 and 6 with a Monday morning session on phosphorus in Lake Dynamics. Afternoon papers included a paper on anadromous brook trout parasites by Geoff Black of Lakehead University who is beginning his Ph.D. work at Guelph University.

On January 6 there was an all-day session on Canada's contributions to Third World Fisheries. One of the more interesting papers was on Canadian contributions to the study of the Peruvian anchovy. Overall, I found this to be the best prepared paper in this session.

Contributed papers included at least one of interest to Northwestern Ontario by W. Lysack, Manitoba MNR, on the effects of commercial fisheries on Lake Winnipeg walleye. He found that use of the age specific mortality rate curve was a better measure of changes in mean age at maturity than calculation of mean age - a point worth considering.

At the SIL meeting held the next day it was decided to organize a formal group called the *Canadian Society of Limnologists*. Anyone wishing to join should contact Jack Vallentyne. Officers will be elected by mail ballot. Dues are \$5.00 for SIL members and students and \$10.00 for non-SIL members. The plan is to meet with the CCFR in Ottawa next year.

The highlight of the meeting was a session on Limnology in the 80's. I found the session a disappointment despite the illustrious names on the program. It seemed poorly organized and most of the speakers did not stick to the topic. One of the most interesting contributed papers was by M.J. Dadswell, "Distribution routes and barriers for freshwater fauna in Eastern Canada during Wisconsin deglaciation".

Overall the meetings of CCFR-SIL seem to be very disorganized and poorly planned and I found a distinct lack of enthusiasm, particularly at the SIL session. Perhaps it may be due to the fact that the conference is heavily subsidized by the Federal Government.

I think a Canadian Section of AFS would be a much better idea. The AFS meetings I have attended are much better organized and some of this must be due to having a permanent international organization providing hints on planning, organization and structure.

The Constellation Hotel burned down after the conference. Perhaps it was symbolic of the meeting.

Walter Momot

NORTH CENTRAL DIVISION NEWS

The North Central Division annual meeting was held in conjunction with the 42nd Midwest Fish and Wildlife Conference in St. Paul, Minnesota from Dec. 7-10, 1980. One third of our membership (16 persons) attended these meetings. This fact was recognized by Carl Sullivan who termed it a "remarkable turnout".

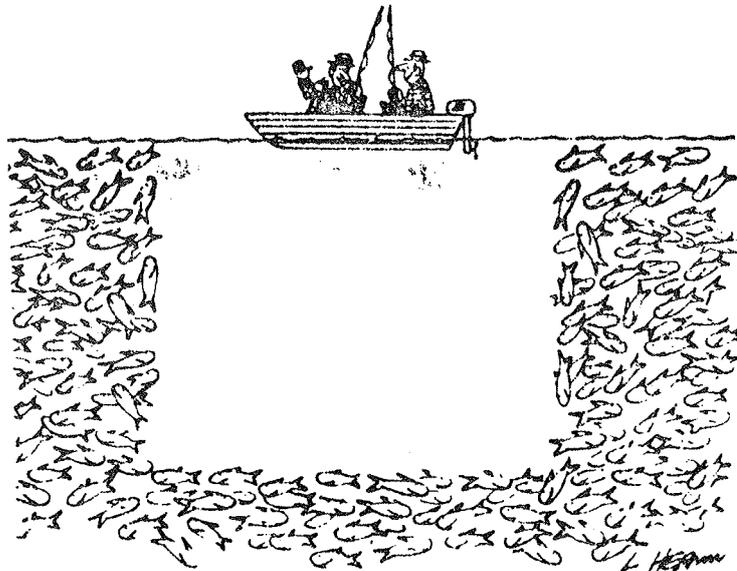
Dr. Momot's views on this event are as follows:

This was a well attended conference (800+ registrants) and since many members of the Chapter attended, I will limit discussion to two items of greatest interest to NOC members. The session on Ecology and Management of Percids and Esocids in Boreal Lake Communities went very well. Nick Baccante, Tom Mosindy and Val Macins all made fine contributions to the program. We received several good comments.

There was an evening workshop on Walleye and Pike Research in Boreal Lakes. I had hoped to have notes from all the participants so that the highlights could be included in this newsletter but we can wait for the spring newsletter for this presentation. The workshop was very well received and all those who attended were very enthusiastic in their presentations. There was a great deal of interest in keeping the workshop going and I hope we can arrange future meetings. I wrote to each group coordinator asking their response.

There was also a session on winterkill lakes that I did not attend.

I am sure that NWO Chapter members will discuss their impressions of the conference with fellow Chapter members at our monthly meetings. Most of the members I have spoken to seemed very pleased with the conference.



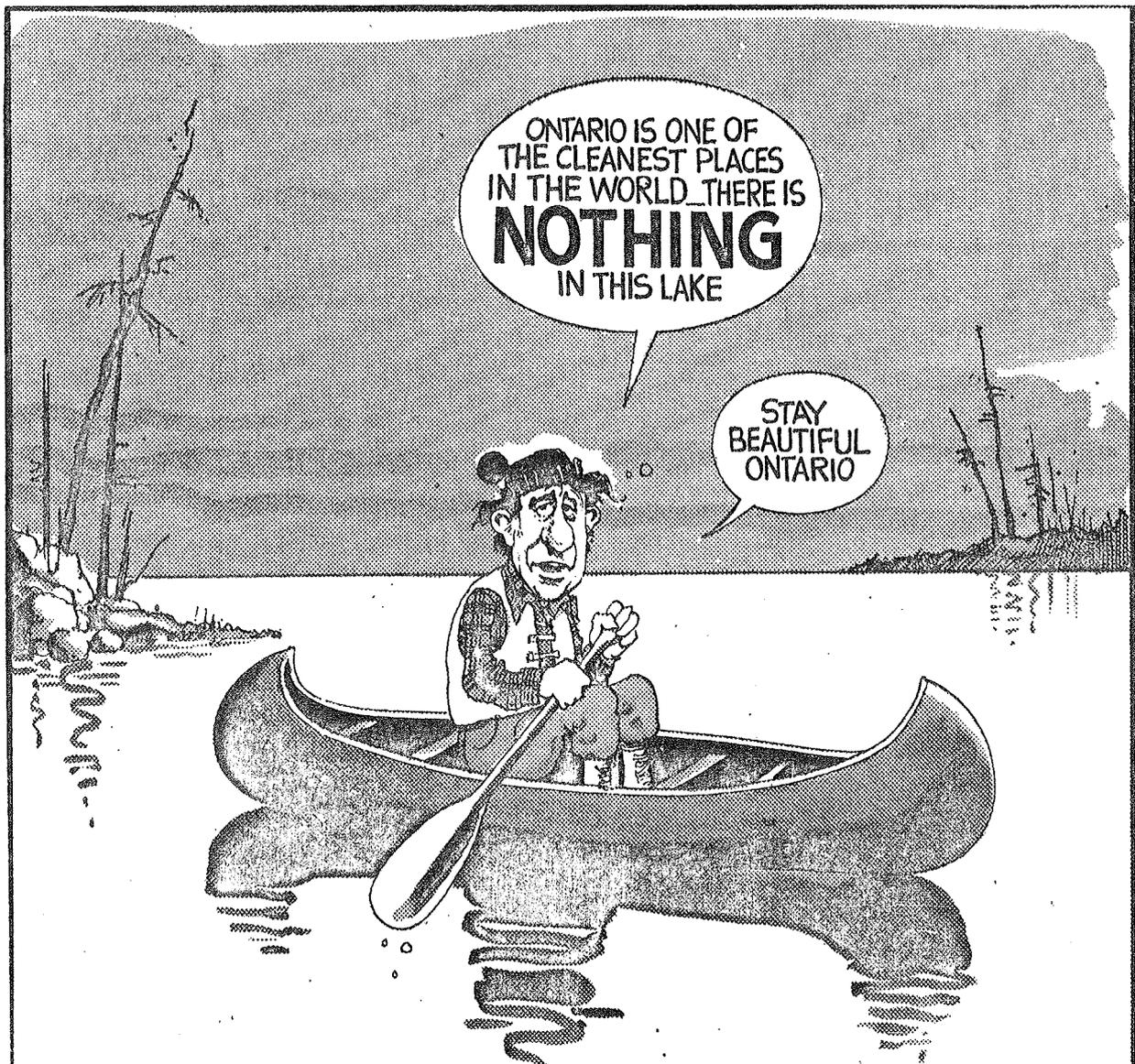
"Stop the motor! My years of experience tell me this is a good spot!"

PARENT SOCIETY NEWS

Mercer Patriarche has been chosen as editor of the new North American Journal of Fisheries Management. Manuscripts are already being received and publication is anticipated in late winter or early spring. Every member may be sent the first issue along with a promotion piece and subscription form (subscription price - \$10.00). Carl Sullivan reports the first official subscriber to the new journal is Don Barnes of our Chapter.

An all time record was set for AFS membership in 1980, with new recruits numbering 1188. This is remarkable as the record came in the same year as a 35% increase in dues. While on this topic, I would like to point out that a large number of our members do not belong to the Parent Society. This is a thorn in our side as non-members cannot hold office and, in general, weaken the Chapter. In this light, an AFS membership brochure has been included with your newsletter where applicable. Fees are only \$27.00/year, and the Society has something to offer for everyone. J O I N U P.

Terry Marshall



NEW APPOINTMENTS/PERSONNEL CHANGES

Doug Howell has recently accepted the position of Fish and Wildlife Supervisor for the Thunder Bay District of the Ministry of Natural Resources.

John George and Marcel Pellegrini have been appointed as Senior Technicians to the Quetico-Lac des Milles Lacs Assessment Unit of the Ministry of Natural Resources.

Scott Watson has recently assumed the position of Manager of the Ministry of Natural Resources Fish Hatchery at Dorion.

Lorne Punschon, previously attached to the Lake Huron Assessment Unit, has accepted the position of Conservation Officer Coordinator for the Thunder Bay District of the Ministry of Natural Resources.

Nadine Hunzinger has accepted the position of Regional Ageing Technologist for the Thunder Bay Region of the Ministry of Natural Resources and will commence her duties early in February.

ANNOUNCEMENT OF UPCOMING MEETINGS

1. Fisheries Assessment Unit Workshop (MNR)
March 8 - 11, 1981 - Toronto
2. First Conference of the Northwestern Ontario
Chapter of the American Fisheries Society
October 7 - 9, 1981 - Quetico Center

CONTRIBUTORS

Nick Baccante - Ministry of Natural Resources
Chris Brousseau - Ministry of Natural Resources
Ken Cullis - Ministry of Natural Resources
Terry Marshall - Ministry of Natural Resources
Walter Momot - Lakehead University
Barb Pike - Ministry of Natural Resources