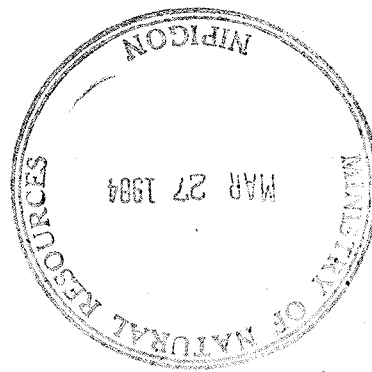


NEWSLETTER

NORTHWESTERN ONTARIO CHAPTER
of the
American Fisheries Society



R. BORECKY OMNR
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Promotes the Conservation, Development
and Wise Utilization of the Fisheries

Vol. 4 No. 2

American Fisheries Society
Northwestern Ontario Chapter



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VOLUME 4(2)

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The Newsletter of the Northwestern Ontario Chapter of the American Fisheries Society is printed periodically three times annually and sent to its members free of charge.

Membership in the Chapter may be obtained by remitting \$5.00 to the Secretary-Treasurer. Chapter members are urged to consider joining the parent organisation.

Editor: Rick Borecky, P.O. Box 970, Nipigon, Ontario P0T 2J0

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ANNOUNCEMENTS

PRESIDENT'S REPORT

Welcome to the second newsletter of the 1983-84 season of our Chapter. This issue will be out a little later than I would like it to be, but we have all been busy in one way or another.

Our Chapter's highlight this year will be the Annual Conference and Meeting, to be held at Quetico Centre, from September 18 to 21, 1984. Neville Ward, the Program Chairman for this year, will brief you on the conference further on in this newsletter.

I hope to see our next newsletter sometime in late May. At that time we should have an agenda for the Conference and Annual Meeting, along with registration forms.

As always, I urge those Chapter Members who are not Parent Society Members to join up soon. Although the Parent Society has been flexible up to now, as far as allowing Non-Parent Members to join Chapters, we cannot be sure that it is going to stay that way forever. Furthermore, I know that quite a few people are missing out on news and feature articles in the "Fisheries" bulletin, as well as not being aware of all the latest publications.

I also want to remind all Chapter Members that everybody's input, no matter how small, is significant in the preservation and promotion of our Chapter, and what it stands for. By this I mean to remind people to use the Chapter for what it was intended: make people aware of relevant fisheries-related issues in Northern Ontario, and provide a forum for discussing those issues.

To do this effectively, we must keep our objectives and goals in constant focus, at the same time, keeping ourselves plugged-in with what is going on around us, and use it to our advantage, to ultimately benefit our Resources.

In concluding, I hope that our Chapter serves as an inspiration to other fisheries people in Ontario, and provides them with an incentive to form new Chapters.

A.S.P.Y. - WHAT IS IT?

Over the next couple of years, chances are that you'll hear a new "buzz word" in the fishing world. This new term is A.S.P.Y., an acronym for "Assessment of Stock and Prediction of Yield". This is the title given to an International Symposium, sponsored by the Great Lakes Fisheries Commission, to be held at Geneva Park Lodge, near Orillia, Ontario, from June 2 to June 12, 1985.

The main focus for ASPY is to advance our understanding of large-scale ecosystems, and conceptualize fish production models for the Great Lakes. The impetus behind ASPY arose from the need for holism in our study of the Great Lakes Basin. This need was previously identified in the 1978 U.S.-Canada Agreement on Water Quality, and subsequently re-iterated in both S.P.O.F. (Strategic Plan for Ontario Fisheries) and "Strategic Great Lakes Fishery Management Plans".

ASPY will look at fish as an integrator of stresses on the ecosystem, and try and come up with models which will predict how each stress affects the system. The bottom line of these models, is that they should be testable in the real world.

The Steering Committee for ASPY is made up of the following people:

W. J. Christie: Co-chairman - Fisheries Research
Ontario Min. Nat. Res.
Glenora, Ontario

G. Spangler: Co-chairman - University of Minnesota
Minneapolis, Minnesota

P. J. Colby: Fisheries Research
Ontario Min. Nat. Res.
Thunder Bay, Ontario

M. A. Ross: Biologist, GLFC
Ann Arbor, Michigan

W. L. Hartman: Resources Assessment Section
U.S. Fish and Wildlife, GLFC
Ann Arbor, Michigan

K. H. Loftus: GLFC
Toronto, Ontario

D. Talhelm: Socio-Economist
Michigan State University
East Lansing, Michigan

About 50 participants, including some of the top ecological theorists in the world, will participate in the conference. The proceedings of ASPY are scheduled to be published in the Canadian Journal of Fisheries and Aquatic Sciences.

On behalf of our Chapter, I wish the organizers and participants good luck in their ambitious undertaking, and hopefully the science generated will be transferred to the field via future training sessions.

- Dominic Baccante

P.S. I will report any significant developments of ASPY in future newsletters.

PROPOSED AFS NAME CHANGE

March 6, 1984

Mr. Carl Sullivan
Executive Director
AFS, 5410 Grosvenor Lane
Bethesda, MD 20014

Dear Mr. Sullivan:

It was almost 100 years ago when the American Fish Culturist's Association decided to change its name to the American Fisheries Society. I am sure that back in 1884 the members would never have dreamed that the AFS would grow to 8,000 strong and into the most respected and well known fisheries organization in the world. At that time an almost entirely American membership must have seemed appropriate for a young and aspiring society.

But times have changed. In the September-October (1981) issue of Fisheries, your article "The History, Structure, and Function of the American Fisheries Society" pointed to a truly international fisheries organization. The membership statistics showed that approximately 10% of the AFS individual memberships and 40% of the library subscribers reside outside the United States. In fact, about 75 foreign countries are represented on the membership roster. Canada alone has 475 members and 156 library subscribers.

These percentages, although significant, do not entirely reflect the valuable contribution made to the AFS by this so called "foreign" membership. For example, there have been 3 Canadian AFS presidents in the last 6 years; Canadians have been presidents of every division except the southern division, and Canadians have served on just about every committee for several years.

Not only are AFS members international, many of the problems facing our fisheries resource also ignore political and geographical boundaries. For example, atmospheric borne emissions often travel thousands of miles before falling to the earth as acid rain. Marine fisheries face problems world-wide and we are all familiar with over-exploitation, pollution, and the introduction of undesirable species.

In 1979-80, a new Chapter of the AFS was formed comprised of, for the first time, an all Canadian membership. The Northwestern Ontario Chapter, now with over 100 members, has grown rapidly into a viable and active Chapter of the North Central Division. It has demonstrated that there is a need amongst its members to share our common interests regardless of affiliation, and its local theme has contributed greatly to the Chapter's success. Due to the Parent Society's name, however, it is often difficult to act upon environmental issues from a Chapter point of view. Our political impact is often reduced when we state we are a Chapter

of an American fisheries society. On every issue we have to go into a lengthy discussion as to our identity, whom we represent, and what we are trying to accomplish. We always have to stress that we are a Canadian Chapter representing a worldwide fisheries organization. On one occasion when we booked a room for a meeting, they thought we were a group of "yankee anglers".

In summary, I feel that the time may be right to change the name of the Parent society to reflect the international nature of our organization, our members, and our problems. I am sure that it would also encourage foreign membership. The Northwestern Ontario Chapter strongly supports any move by the Parent Society to change its name to echo our global character.

Chris Brousseau, Past-President
Northwestern Ontario Chapter
American Fisheries Society

CB/lnc

c.c.: N. Baccante, Walleye Research Unit, Thunder Bay

c.c.: N. Ward, Kenora

c.c.: H. Lawler, Freshwater Institute, Winnipeg

c.c.: J. Dillard, President, NCD/AFS, Columbia, MO

ANNUAL CONFERENCE UPDATE (1984)

Walleye and Tourism - Future Management Strategies

This heading represents the theme for the 1984 Annual Conference of the Northwestern Ontario Chapter of the American Fisheries Society. The conference is scheduled from 18-21 September at the Quetico Centre just outside Atikokan. There are five sessions scheduled, with the introductory session, chaired by Nic Baccant beginning at noon on the 18th. The next day will see Doug Dodge's session on habitat protection and rehabilitation and Walter Momot's session on regulation of harvest as a goal of fish management. Speakers will cover both traditional and experimental approaches to harvest regulations. The 20th of September will be devoted to walleye culture and stocking, with Scott Watson as Chairman. Scott has arranged speakers from Manitoba, Wisconsin, Minnesota as well as southern and northern Ontario, to outline their experiences with walleye rearing and stocking programs. The final half day will be a summary session chaired by Tom Adamchick. This session will begin with summary statements by each session chairman (or a designated reporter) outlining the pros and cons of various strategies to maintain, and where necessary, increase walleye harvests. A general discussion will follow that, and hopefully bring out the most appropriate walleye management strategies for the tourism industry in Northern Ontario.

Attendance will not only include Northwestern Ontario AFS Chapter members, but selected representatives of NOTO to present the tourism industry viewpoint.

Come and be prepared for a good exchange of ideas between researchers, managers, assessment unit staff and tourist operators. Our next newsletter will firm up the agenda for the conference as well as provide a registration form. Thus if you want to attend, make sure your chapter dues are paid up, and if there's a lot of interest, parent society members will be given first priority.

Support for your fisheries society helps make conferences like this a reality.

- Neville Ward
1984 Program Chairman

PARENT SOCIETY NEWS

NOTES FROM THE AFS DIARY

The Northwestern Ontario Chapter reports a 45% growth in 1983 plus a highly successful 3rd annual meeting and conference in September. It's our only all Canadian chapter, though new chapter organizational efforts are under way in Nova Scotia.

NOTES FROM THE NORTH CENTRAL DIVISION MINI-NEWSLETTER

Now comes the time to consider a name change for AFS. The 1984 mail ballot will include the issue; and you will be asked:

- 1) to decide yes or no on a name change, and if yes, then
- 2) to choose between THE FISHERIES SOCIETY and NORTH AMERICAN FISHERIES SOCIETY. (lest there is any doubt, I favor a change to THE FISHERIES SOCIETY). Carl Sullivan, Executive Director, AFS, 5410 Grosvenor Lane, Bethesda, MD 20014 is soliciting letters-to-the-editor in the May/June issue of FISHERIES. Please send him your letter by March 1 so he can share the contrasting positions with all members via FISHERIES prior to the vote.

FROM LETTERS TO EDITOR, FISHERIES BULLETIN

Doesn't like name change

This letter is in response to your editorial in *Fisheries* (March-April 1983) regarding the proposed name change to The Fisheries Society. Having read your comments I get the idea

that to some small degree you feel that Canadians are going to sign up in droves were American dropped from the Society name. Also, and more importantly, I feel you are ashamed of the word American. Considering 90% of all members are, and likely will remain to be from the U.S., it does not seem unreasonable that we chose the word American.

I am quite sure that Canadians are proud to be such, just as I am proud to be a "United Statian". The Maple Leaf flies beneath the Stars and Stripes here in Hemlock Eddy upon the Allegheny. We are quite proud to display this beautiful symbol of our neighbor to the north. We are, however, slightly prouder of the flag which flies above the Maple Leaf.

My comment is this. When you drop the word American from the Society name, I drop my membership for life.

Frederick R. Griffiths
Warren, Pennsylvania

CHAPTER NEWS

NORTHERN REGION OMNR

Aurora Trout Management Plan Receives Approval

A plan that outlines a new approach to the management of aurora trout has recently been approved by the Ontario Ministry of Natural Resources. The plan describes the management objectives, targets and strategies that are needed to maintain and rehabilitate this unique stock of fish. Aurora trout were first discovered in 1923 in three lakes near Temagami, Ontario. At that time they were considered a new species, Salvelinus timagamiensis. Subsequent morphometric and electrophoretic studies have indicated that the aurora trout are simply a unique colour variant of the brook trout. Aurora trout and brook trout are anatomically quite similar. They differ, in that the aurora trout lack the vermiculations across the back which, in the brook trout, extend into the dorsal and caudal fins. The colouration of the fish also differs. The red spots with the blue halos, which characterize the brook trout, are replaced by a gleaming silver or purplish sheen, more or less uniformly distributed over the body.

The aurora trout disappeared from the wild more than twenty years ago, probably due to the acidification of the four lakes that they originally inhabited. They have been maintained artificially in the hatchery system since that time and now exist in only a few lakes where they are held to allow egg collection. Angling for aurora trout was closed across the province in 1970.

The management plan recognizes the need to protect and rehabilitate the stock and at the same time provide fishing opportunities and associated benefits. The targets are separated and priority ranked as follows:

1. maintenance of target
2. rehabilitation target
3. angling target
4. public awareness and scientific knowledge target

It is important that the aurora trout be maintained. They represent a stock of fish of unique genetic makeup and characteristics that have scientific value and recreational interest. For more information please contact Chris Brousseau at Cochrane Regional Office.

NORTH CENTRAL REGION OMNR

Yellow Pickerel Harvest Control By Access Management

- W. J. Cook

The Geraldton District has a multitude of lakes that have yet to be accessed by road. Historically, as road access has reached a lake, extreme angling pressure has been exerted until the CUE dropped to the average level of accessed lakes.

In a newly opened area north of Geraldton, attempts were made to keep road construction one kilometre away from Marshall Lake, a fly-in yellow pickerel fishery with a high CUE. Inability to deter construction of an access road to the lake by private individuals led to posting the access to restrict motorized vehicles under the Public Lands Act. Boats started appearing on the shore of Marshall Lake, a lake of 1935 hectares. After the second year of access, there were thirty-five boats cached on the access point to the lake. It was impossible to enforce the access closure. After the boats were cached, the travel restriction was obeyed.

Two outpost camps on the lake have a potential guest capacity of 26 anglers. Creel censuses were conducted on Marshall Lake during 1982 and 1983.

It was obvious from the high number of anglers in 1982 using cached boats, that access restriction was not the answer to harvest control.

In an attempt to make quality angling harder to access and thereby reduce the "meat" angler and maintain the CUE, a boat cache restriction was established.

This restriction banned the leaving of boats/canoes unattended within 1000 metres of the shore of Marshall Lake. The exception to this was for those having land tenure such as the outpost

camps where boats could be left on the licensed camp area. The removal of boats from the shore was honoured by the owners, however, their opposition to the restriction was presented to local politicians and angler associations to lobby on their behalf. When the purpose of maintaining quality angling was explained, the opposition dwindled. The move was supported politically and by angler groups such as the Ontario Federation of Anglers and Hunters.

Creel censuses from 1982 to 1983 indicated a reduction in CUE from 1.6 pickerel/person-hour to 0.8/person-hour. The number of fish remained the same however.

After the boat cache restriction was established, the harvest was substantially reduced from 6000 fish in 1982 to 1500 fish in 1983. This may not be totally due to the boat cache restriction, however, by reducing the number of anglers, it naturally had an effect on harvest.

It is planned to leave the restriction in effect indefinitely in the attempt to regain and maintain the high CUE prior to the establishment of road access.

This restriction has been placed on four quality pickerel lakes in the District. We feel this control, in concert with access control, will maintain the opportunity for high quality angling for pickerel in the future in this District.

GENERAL INTEREST

PROJECT RESEARCHS DANGER TO FISHING

- Reprinted from Lakehead Living February 28, 1984.

Molson Breweries and the Ontario Federation of Anglers and Hunter are sponsoring a research project to investigate a potential threat to Great Lakes Fishing.

Douglas Noltie of the University of Western Ontario is the recipient of the 1984 Molson's Research Grant. Though the competition was stiff, Noltie's proposed study of pink salmon was awarded the \$1,500 grant at the Annual Meeting and Wildlife Conference of the Ontario Federation of Anglers and Hunters.

The Pacific pink salmon population in the Great Lakes may be increasingly posing a threat to other fish such as rainbow trout and other salmon. If there is further range expansion, it could possibly endanger species on the Atlantic coast.

Mr. Noltie's Ph.D. research involves the study of reproductive behaviour and ecology of pink salmon, concentrating on male

breeding patterns. Field work being conducted in a Lake Superior tributary will include tagging and measurement of external characteristics. When the salmon are released, their sexual behaviour will be observed.

WHAT EXACTLY IS A METER?

- Reprinted from Science Digest - December 1983

When the French invented the metric system in the 1790's they probably thought that the meter, its basic unit, was precise enough for any reasonable measurement need. But the meter has just been redefined with a precision unimaginable to the average person.

Originally, this standard of length, equal to about 39 inches, was set at 1/10,000,000 of the distance between the North Pole and the equator. Each unit in the system - centimeters, millimeters, kilometers - was to be 10 times as big as the unit preceding it. By working in multiples of 10, the French hoped to replace the cumbersome British system of inches, feet and miles.

Over the years, though, it became clear that the subtly changing shape of the Earth made pole-equator measurements inconsistent; each attempt to set a standard meter resulted in a different length. So the meter was pegged in this century to the wavelength of a krypton atom - measurable and almost unvarying.

Unfortunately, *almost* isn't good enough for astronomers testing theories of the universe, atomic physicists or Earth scientists measuring continental drift. Even the krypton standard allowed measurements to vary as much as five feet between here and the moon.

The new standard, 10 times as accurate as its predecessor, is defined as the distance light travels through a vacuum in 1/299,792,458 of a second. "Basically, we've redefined distance according to time," says Don Jennings of the National Bureau of Standards. "That's because we can measure time more accurately, using an atomic clock." Jennings helped develop the multilaser system that will take measurements based on the new standard. "Scientists will use it," he says, "but the average American is still addicted to feet and inches".

ONLY THREE countries in the entire world have stayed behind the times by not requiring the use of the metric system: Burma, Brunei--and the United States.

AMERICA ENTERS STURGEON WAR

- Reprinted from Science Digest - January 1984.

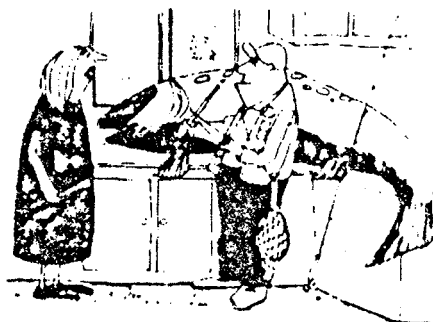
The Russians think they have a lock on the world caviar market, but researchers at the University of California, Davis, are taking the first steps to ensure that cocktail-party goers will never lose their hors d'oeuvres to cold-war bickering between the superpowers.

Improving on established techniques, they are putting together a sophisticated hatchery that will bolster American populations of sturgeon, the ancient, endangered fish whose lustrous eggs can command hundreds of dollars a pound.

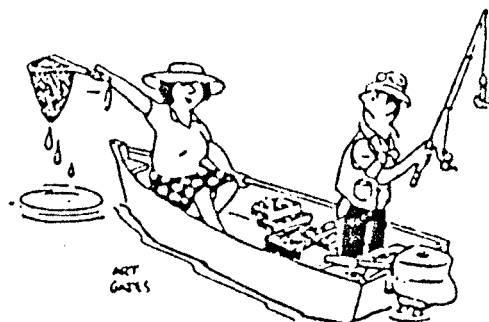
In the USSR, the native population of sturgeon is augmented by hatcheries on the Caspian Sea. To propagate sturgeon artificially, the Russians inject female fish with hormones known as gonadotrophins, which stimulate egg production. The hormones, as well as the roe, are obtained from sturgeon killed in commercial fisheries, says George Monaco, who directs the California project.

Monaco's staff cannot rely on killed fish, however. "We have a limited supply of sturgeon, and we're interested in keeping them all alive," he says. They get the gonadotrophins they need from carp. They have also tried using a synthetic hormone. "Initial tests have been very promising," he adds.

To obtain roe without killing fish, an incision is made in the abdomen of a pregnant female. "We spoon out the roe and sew it up," says Monaco. The fry, fed a special diet, grow twice as fast as the Russian fish. Once released, the hatchery fish have a survival rate of 7 to 12 percent, compared with 0.1 percent for those born in the wild.



"But I've already defrosted a chicken."
MOOMPNIK IN FIELD & STREAM



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CONTRIBUTORS

The editor gratefully acknowledges the following individuals for their assistance in compiling this newsletter.

Nic Baccante
Chris Brousseau
Bill Cook
Neville Ward
Leona Webb

American Fisheries Society

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The Northwestern Ontario Chapter of the A.F.S. has been active for over four years promoting the transfer of fisheries science among fisheries workers throughout Northwestern Ontario. It is the first entirely Canadian chapter of this international organization whose main objective is the promotion of scientific research and enlightened management of aquatic resources.

The Chapter publishes three Newsletters annually. It also hosts several lectures on various fisheries-related topics and conducts an annual business meeting and conference.

Inquiries about the chapter and its activities should be directed to Dominic Baccante, President, c/o the Ontario Ministry of Natural Resources, 435 James Street South, Thunder Bay, Ontario, P7C 5G6, or telephone (807)435-1635.

MEMBERSHIP IN THE NORTHWESTERN ONTARIO CHAPTER OF THE AMERICAN FISHERIES SOCIETY IS AVAILABLE FOR AN ANNUAL FEE OF \$5.00.

ALL PROSPECTIVE MEMBERS SHOULD COMPLETE THE FOLLOWING AND MAIL IT ALONG WITH THEIR DUES TO:

Harald Schraeder
Secretary-Treasurer
Northwestern Ontario Chapter
American Fisheries Society
c/o Ministry of Natural Resources
Box 970
Nipigon, Ontario
POT 2J0

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