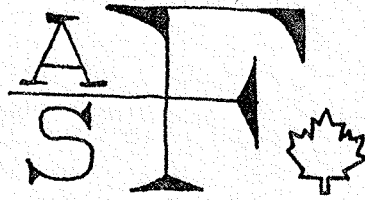


NORTHWESTERN ONTARIO CHAPTER

NEWSLETTER



VOL 3(2)

The Newsletter of the Northwestern Ontario Chapter
of the American Fisheries Society is printed periodically
three times annually and sent out 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 Organization.

Editor: Harald Schraeder

NEWSLETTER

OF THE NORTHWESTERN ONTARIO CHAPTER of the AMERICAN FISHERIES SOCIETY

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March 1983

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ANNOUNCEMENTS

1. *President's Message*

First, an update on our lake trout resolution. For the information of Chapter members I have included the responses from three out of the four Regional Directors petitioned. No response was received from Northern Region (Cochrane). We should know shortly, with release of the final versions of the District Land Use Plan, the type of protection afforded lake trout lakes in Northern Ontario. Unfortunately, it appears that the North Central Division of the A.F.S. did not endorse our resolution. Upon presentation of it to the general membership at the annual meeting in Des Moines a motion "to table" the resolution was passed. According to Webster, the parliamentary meaning of the term "to table" is "to remove from consideration indefinitely". A letter has been sent to the President of the North Central Division asking for clarification of their position.

During the next two months, we are planning to hold two more formal lectures and a social evening to close this year's winter program. Details of these events are included in this newsletter.

As you will see, submissions for the Chapter logo contest are displayed, along with a ballot form. I encourage all members to vote for their choice and either mail or hand deliver their ballots to:

Nick Baccante
Walleye Fisheries Research Unit
Ministry of Natural Resources
435 James Street, South
Thunder Bay, Ontario

The results will be published in the next newsletter.

Many Chapter members attended a S.T.O.C.S. workshop recently at Geneva Park sponsored by the Ministry of Natural Resources. The knowledge and insight gained on the rationale and methods best employed to manage fisheries at a stock level should benefit all fisheries workers who attended. While there, the finishing touches were laid in place for this year's conference and annual meeting. A brief outline appears in the newsletter, with tentative topics and general agenda items. Although much hard work remains I am encouraged by the initial response by Chapter members. For many of us it will be our initial exposure to the Experimental Lakes Area which is responsible for a considerable amount of current research into acidification, water chemistry analysis and primary production among other things. The fisheries data collected in conjunction with the preparation of the West Patricia Land Use Plan should be synthesized into management papers and the N.W. Ontario Chapter of the A.F.S. is pleased to offer the forum to achieve this.

The Northern Region (Cochrane) of the Ministry of Natural Resources has recently submitted a proposal to Fisheries Branch

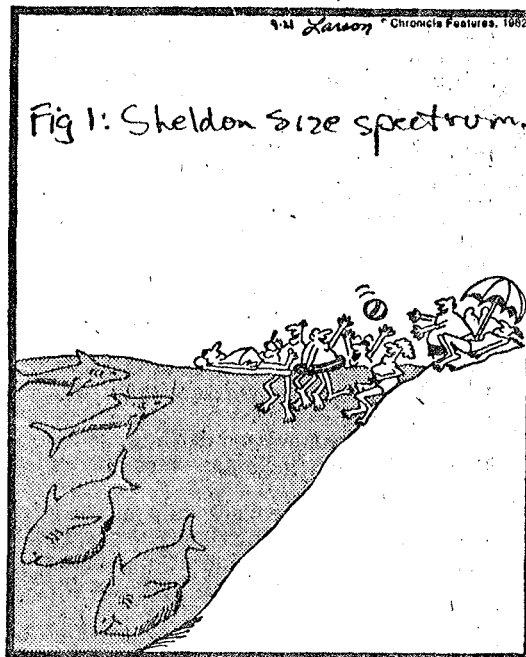
to solicit ideas and support for a workshop on inventory methods and productivity calculations for large warmwater rivers. It was suggested that the workshop may be co-sponsored by the M.N.R., the Northwestern Ontario Chapter of the A.F.S. and possibly the M.O.E. and Ontario Hydro. A copy of the letter which was received from Cochrane is contained in the newsletter for your information.

Special recognition was recently given in the A.F.S. diary to the Northwestern Ontario Chapter's submission to Fisheries magazine about our annual meeting and workshop (fish parasites and diseases). This weekly publication from the Director's office to all Chapter presidents and Executive Committees states:

"The Northwestern Ontario Chapter has sent us an excellent annual meeting account and photos which we will be pleased to publish in Fisheries. We're particularly gratified when material arrives well written and ready for publication". (A.F.S. Diary, Dec. 24, 1982)

Congratulations on a job well done is extended to Hal Schraeder who wrote the article. Hopefully it will appear in the next issue of Fisheries.

Bob Walroth
Chapter President



2. *Lake Trout Resolution*

Several responses to our resolution have now been received.

Don Johnston, Regional Director Northwestern Ontario, OMNR, relayed that his district land use plans have already considered our concern by inclusion of a general strategy statement to direct development of "management guidelines to protect significant lake trout populations through habitat protection measures and fish harvest controls". Mr. Johnston goes on to state that the forest industry cannot be held totally responsible for impacts on aquatic ecosystems and therefore his region will continue to protect and conserve fisheries from a more broad perspective without specific focus on any one influence.

Bill Cleaveley, Regional Director Northeastern Region, OMNR, feels that he cannot support our resolution on the grounds that he does not agree that no-cut zones are the only answer. Notwithstanding his position on our resolution, Mr. Cleaveley does agree that there is a need to protect lake trout lakes from environment damage. His region utilizes buffers around lake trout lakes and tributary streams to manage these sensitive areas.

Lionel Affleck, Acting Regional Director North Central Region, OMNR, shares our concern regarding the protection of the lake trout resource and has forwarded our resolution to Art Holder, Director Fisheries Branch, OMNR, for his consideration during the development of a Provincial Lake Trout Policy. Mr. Affleck reiterated that the objective of the Northwestern Ontario Strategic Land Use Plan (S.L.U.P.) includes a provision for the maintenance, protection and enhancement of lake trout populations. Two of the strategies used in his region to meet this objective are to identify and designate lake trout habitat, and to develop management guidelines to protect significant lake trout populations through habitat protection measures and fish harvest controls, as is done in Northwestern Ontario. The author of the interim policy, as identified in the S.L.U.P., for forest reserves (Affleck Report, 1979) went on to indicate that one of the key aspects of the interim policy was that it provides for the preservation of fishery features by establishment of forest reserves. As a result of the interim policy there is an interim 120 m. no-cut policy on prime lake trout lakes across Northern Ontario.

Finally, there was apparently considerable discussion and disagreement on the specific nature of our resolution at the annual business meeting of the North Central Division, A.F.S., in Des Moines, Iowa. It was eventually moved to table the motion to accept the resolution. The motion to table was passed and it should be noted that unfortunately our Chapter was not represented at the meeting.

3. Large River Inventory Workshop

The following memorandum to Art Holder, Director Fisheries Branch, OMNR from Jim Young, Regional Biologist Northern Region, OMNR addresses a topic of provincial significance. The opportunity for our Chapter to become involved in a session on large river productivity is alluded to and should interest our membership.

"It was discussed by the members of the large river inventory steering committee that there is a need for a synthesis of information on the inventory and productivity of large warm-water rivers.

Fisheries management practices on warmwater rivers have remained basically unchanged for several years. At the same time, however, increasing utilization of our rivers for water supplies, flood control, transportation, irrigation, food production, energy production, dilution, assimilation of waste products and numerous other uses have adversely affected the water quality and physical environment that support fish and other aquatic life. In addition to this, the 1980 Ontario angler survey (pg. 49) indicated that over 7.5 million man-days or approximately 25% of all the fishing done in the province is carried out on streams and rivers. Still, the rational overall management of this substantial recreational resource continues to elude us. Increasing demands for fishing opportunities are forcing fishery managers into managing warmwater rivers, but very little effort has been applied to solving warmwater river problems even though these systems offer great potential for meeting future fishery demands.

Due to the importance of the lotic resources in this part of Ontario, the Northern Region, via the capable hands of the Cochrane District, has taken the river initiative. An inventory manual will soon be completed and field tested and will be available for fisheries managers throughout the province.

In addition to this, some of the first population and biomass estimates for fish in large rivers in Ontario are being developed. These estimates, combined with variables measured in the inventory, may eventually lead to a river productivity estimator, not unlike that which has been developed for lakes in Ontario.

This type of information is needed for obvious reasons. One that is of immediate importance is the need to estimate productivity on large rivers for district fisheries management planning. Presently, no production guidelines exist and there are probably as many different methods being used to estimate productivity as there are districts in the province. This results in contradictory and high variable results from district to district and region to region. New fisheries initiatives based on supply and demand may not be realistic without more accurate productivity (supply) information.

The framework for the development of a productivity model is being developed here, but it will take several years before it will be refined enough for provincial use. We believe that considerable productivity data exists on a global basis that, if synthesized, could speed up the development of an empirical productivity estimator. Recent symposia and publications seem to illustrate this.

The purpose of this letter, therefore, is to solicit your ideas and support for a workshop on large rivers. A small gathering of experts from various jurisdictions (R. Welcome, P. Bayley, L. Hesse, etc.) for a brainstorming session on river productivity would be extremely worthwhile. The cost of such a session could be reduced if a small conference was held in conjunction with the workshop, with the registration fee partially covering the costs. The proceedings could even be published in the technical report series for everyone's benefit. Also, other potential sponsors such as Ontario Hydro, MOE, and the Northwestern Ontario Chapter of the A.F.S. could help defray the costs.

In general, we feel that a gathering of a small group of experts in the field of river productivity would be beneficial to the management of rivers in Ontario. This region would support such an endeavour and would contribute its findings if the opportunity was to present itself.

For further information contact Chris Brousseau at the Northern Regional Office."

PARENT SOCIETY NEWS

1. A.F.S. News Release (January 25, 1983)

During 1982, the American Fisheries Society conducted a funding need survey of the 63 state freshwater and marine fisheries agencies in the United States. The objective of the survey was to determine the extent and nature of funding problems faced by the state agencies which have responsibility for managing the nation's sport fishery resources. The survey asked:

1. What was the total budget of your organization in the last fiscal year?
2. How many additional dollars are urgently needed by your agency each year to manage a total fisheries program to the extent expected by the public and in the manner recommended by your professional staff?
3. For what purposes will the additional funds be used?

Responses were received from all 63 agencies contacted and were compiled by Dr. Raymond Johnson who coordinated the survey for A.F.S. The agencies reported that their 1982 fiscal year budgets totaled \$286 million and that they have urgent needs for an additional \$134 million per year to meet present management responsibilities.

Replies to the survey paint a grim picture of reduced staff, deteriorating hatcheries, curtailed fish stocking, interrupted research, decaying boating facilities, inadequate public access, obsolete equipment, habitat destruction, leaking impoundments, coarse fish domination, stream sedimentation, stunted fish populations, excessive harvest and other signs of a fisheries resource in trouble. The amount of funding shortfall, fueled by inflation, increased fishing pressure and declining state revenues, is growing at the rate of some \$20 million per year.

About two-thirds of the responding agencies provided enough detail to permit a line item analysis of the types of projects to be funded. Based upon these reports the 63 agencies need \$134 million more dollars per year for the following purposes:

Additional Annual Funding Requirements
Of State Fisheries Agencies
1982

Expense Category	Millions of Dollars	Percent of Total
Construction and Development boating access facilities, artificial reefs, hatcheries, fish ladders, stream improvements, new lakes, research stations, research vehicles, etc.	52	39
Land Acquisition lake and stream access, lake sites, springs, hatchery sites	16	12
Research catch statistics, management evaluations and assessment, surveys and inventories, habitat studies, aquaculture methods, endangered species, fish diseases, special studies on striped bass, grass carp, hybrids, salt water game fish, trout, etc.	23	17
Management habitat improvement, fish stocking, rough fish removal, public lake operations, equipment purchases, staffing and planning, new species introductions	27	20
Maintenance boat ramps, hatcheries, parking lots, laboratories, fish screens, fish ladders, landscaping	15	11
Coordination and Administration	<u>1</u>	<u>1</u>
Total	\$134 million	100%

The American Fisheries Society is playing an active role in an effort to find a solution to fisheries resource funding problems. For additional information write to the American Fisheries Society, 5410 Grosvenor Lane, Bethesda, MD 20814.

2. *Notes From the A.F.S. Diary* (Vol. 9 No. 3 and 4)

ACID RAIN/FISHERIES, the long-delayed proceedings of the June 1981 Cornell Acid Rain Symposium, has finally been completed and is available at A.F.S. The 357-page proceedings is hardbound and was edited by A.F.S. Past President, Dr. Ray Johnson. Easily the most comprehensive scientific acid rain document produced anywhere to date, the book covers the total proceedings of the A.F.S. Northeastern Division sponsored symposium. Conference sponsors, registrants, and the steering committee will receive copies. Other interested persons may acquire them from A.F.S. at \$25.00 per copy.

A COMING OUT CEREMONY for the new Publication FISH HATCHERY MANAGEMENT was held in the USFWS Director, Bob Jantzen's office on January 13. The room was packed with public and private fish culture leaders, and very special commendation was extended to Editor, Bob Piper, Technical Review Editor, Bob Kendall, and the co-authors. A.F.S. is proud of its role in stimulating and producing the publication and we assisted in arranging the special "coming out" ceremony. In case you haven't heard, FISH HATCHERY MANAGEMENT is the most detailed and comprehensive "how-to" hatchery manual ever produced. Its 500 pages cover every facet of hatchery activities. It is handsomely hardbound, and for sale at A.F.S. offices for \$20.00 to members and \$23.00 to non-members.

3. *A request from the Tennessee Valley Authority*

Lynn B. Starnes, a biologist for the Fisheries and Aquatic Ecology Branch in the Tennessee Valley Authority in Knoxville, introduces herself as chairperson of a newly formed committee within the Water Quality Section of the A.F.S. Lynn wants to contact all fish and wildlife biologists interested in mining reclamation with the purpose of developing enlightened management efforts to enhance these resources on mine sites. Anyone interested is urged to contact her about involvement in the *Fish and Wildlife Relationships to Mining Committee of the WQS* (A.F.S.).

A one-day session has already been planned to occur in conjunction with the 1983 A.F.S. annual meeting in Milwaukee to promote the consultatory and participatory role of the A.F.S. in drafting regulations concerning abandoned mine reclamation programs. You can contact Lynn at the TVA, 450 Evans Bldg., Knoxville, TN. 37902.

CHAPTER NEWS

1. *Northeastern Region, OMNR*

Wawa District is presently involved with the Sault Ste. Marie District, the Lake Superior Fisheries Assessment Unit and the commercial fishermen of Eastern Lake Superior in the development of an individual quota management system. This is part of the Commercial Fisheries Modernization Package which is to be implemented in 1984. At this point in time discussions have generated a new list of Fisheries Management Zones, which will replace the present Quota Zones. Negotiations on area quotas and individual allocations are expected to proceed over the next two months.

The 1983 field season holds two major programs in store for Wawa District. A creel census of the Michipicoten River and Bay in conjunction with a tagging program at the mouth of the river will commence with the start of the rainbow run this spring. The Lake Superior Research Unit will be conducting the tagging operation with some assistance from the Wawa staff. The creel census program will be conducted by Wawa District staff. Hopefully, enough marked returns will show up in the creel census to estimate the spawning population in the Michipicoten River.

Our second major program will be an intensive creel census of White Lake, northwest of the town of White River. White Lake is a large (5,888 ha) lake supporting a moderately intensive coolwater fishery and a subsistence food fishery for the Mobert Indian Reserve. Previous creel census data is available from the early 1960's and 1970's which will allow for some trend through time comparisons.

- Marcel Pelligrini

2. *Northwestern Region, OMNR*

Neville Ward, Regional Fisheries Biologist, has provided us with a *Fisheries Special Employment Program* update. The following list contains all the approved provincial FSEP projects exclusive of those sponsored by Conservation Authorities.

Projects include creel surveys in Dryden, Fort Frances, Ignace, Sioux Lookout and Red Lake Districts, check station operations in Ignace and Sioux Lookout, fish packing plant reconstruction in Red Lake and Windigo and rehabilitated spawning bed and water crossings in Kenora. The Northwestern Region has people doing fish aging, egg counting, data processing on a computer (creel survey, commercial fishing and growth curve programs developed on an Apple III), a history of Fish and Wildlife Management in Kenora collected from newspaper archives and a logging effects on aquatic habitat sound/slide show (an Expo display for Forest Management Agreement open houses will also be made).

FISHERIES SPECIAL EMPLOYMENT PROGRAM
 APPROVED PROJECTS
 SUMMARY BY DISTRICT

DISTRICT	NO. OF PROJECTS	NO. OF WORKERS	WORK WEEKS	CEIC FUNDING	BILD FUNDING	TOTAL COST
				\$	\$	\$
Algonquin Park	4	23	211	50,640	46,139	96,779
Bancroft	3	15	174	41,760	36,034	77,794
Blind River	4	21	334	80,160	73,073	153,233
Bracebridge	1		88	21,120	20,091	41,211
Cambridge	1	3	82	19,680	15,927	35,607
Carleton Place	3	17	175	42,000	43,968	85,968
Chapleau	2	11	146	35,040	35,339	70,379
Cochrane	1	4	44	10,560	12,897	23,457
Cornwall	2	13	94	22,561	21,089	43,650
Dryden	1	5	87	20,880	26,633	47,513
Espanola	1	3	30	7,200	6,051	13,251
Fort Frances	3	28	304	72,960	92,659	165,619
Gogama	8	36	399	95,760	72,208	167,968
Huronina	2	14	270	64,800	40,910	105,710
Ignace	1	10	154	36,960	39,067	76,027
Kapuskasing	4	16	205	49,201	58,977	108,178
Kenora	2	7	93	22,320	27,210	49,530
Kirkland Lake	4	30	600	144,000	168,249	312,249
Maple	6	36	523	125,520	116,696	242,216
Minden	1	11	110	26,400	22,726	49,126
Napanee	5	23	246	59,040	50,577	109,617
North Bay	3	51	932	223,680	186,704	410,384
Owen Sound	3	41	680	163,200	116,185	279,385
Parry Sound	2	19	213	51,120	45,487	96,607
Pembroke	2	18	144	34,560	32,155	66,715
Red Lake	2	8	41	9,840	10,211	20,051
Sault Ste. Marie	1	12	132	31,680	24,594	56,274
Sioux Lookout	3	14	207	49,680	54,120	103,800
Sudbury	4	67	667	160,080	129,383	289,463
Temagami	4	31	571	137,039	152,229	289,268
Thunder Bay	3	36	613	147,120	149,725	296,845
Timmins	1	6	60	14,400	12,703	27,103
<hr/>						
TOTALS	92	658	8,987	2,156,881	2,013,229	4,170,110

3. *Dorion Fish Culture Station - 1982 Review*

1982 was a very busy year at the Dorion F.C.S.

One of the year's highlights was the installation and official opening of a micro-hydro-electric generator at our sub-station, one of three sites participating in the Ontario Ministry of Energy's Micro-Hydro Demonstration Program. With repairs to its raceways completed, the sub-station is now ready for use as a truly independent facility.

A major revamping of the main station's incubation and early rearing area has nearly doubled the incubation capacity of this facility, and has almost tripled the early rearing capacity through the use of a nested trough concept.

The development of Lake Superior strain lake trout brood stocks from wild egg collections is ongoing. So far three consecutive year classes of Slate Island lake trout brood stock are in development and the first of three (projected) consecutive collections have been made for Michipicoten Island lake trout. Once mature, both of these strains of lake trout will be used to replace the inland strains now used for the Lake Superior lake trout rehabilitation program.

New future brood stocks of Lake Nipigon strain brook trout are started every year, through rotational line crossing of the domestic stocks. Future brood Lake Nipigon strain brook trout are developed at Dorion for both the Dorion and Hills Lake stations.

Hills Lake F.C.S. is also receiving future brood Killala Lake strain lake trout from the wild eggs collected by the Dorion F.C.S. So far two of the three required year classes are in development at Hills Lake.

At the present time the Dorion F.C.S. provides 100% of the provincial target for brook trout eggs. With the maturing of the Killala Lake strain domestic lake trout brood stock this past fall, Dorion is now the second largest producer of lake trout eggs in the province. These distinctions will pass once the Hills Lake F.C.S. brood stocks mature (brook trout in 1984/85; lake trout in 1987/88).

Even with Hills Lake in full production, Dorion will remain the main provincial facility conducting wild egg collections for brood stock management and production programs. The Dorion F.C.S. will continue to be active in the search for suitable new strains of brook and lake trout for the Ontario fish culture system in order to produce the best wild strain fish possible and to support the stock concept in fisheries management.

The following tables summarize the number of trout produced and stocked from Dorion, as well as the spawn collections and eyed egg transfers which occurred this past year.

- Scott Watson

MINISTRY OF NATURAL RESOURCES
DORION FISH CULTURE STATION

1982 PRODUCTION AND STOCKING SUMMARY

<u>SPECIES</u>	<u>AGE</u>	<u>TOTAL NUMBER</u>	<u>TOTAL WEIGHT</u>	<u>G./FISH</u>
LAKE SUPERIOR STOCKING:				
LAKE TROUT	YLG	934,350	14458.7 kg	15.2
LAKE TROUT	6Y	1,900	5069.6	2668.2
BROOK TROUT	ADULT	2,378	1218.2	512.3
INLAND STOCKING:				
BROOK TROUT	EE	860,000	-	-
BROOK TROUT	FRY	144,950	36.3	0.3
BROOK TROUT	YLG	63,900	719.4	19.5
BROOK TROUT	ADULT	2,488	1154.5	464.0
SPLAKE	3Y	1,440	1050.1	729.2
LAKE TROUT	3Y	277	50.3	181.8
TRANSFER TO TARENTORUS F.C.S.:				
BROOK TROUT	YLG	30,000	181.4	6.0
TOTALS		1,201,168	23,938.4 kg	
(EXCLUDING EE) (= 52,774.25 lb.)				

1982 SPAWN COLLECTIONS

<u>SPECIES</u>	<u>STOCK</u>	<u>GREEN EGGS COLLECTED</u>	<u>EYED EGGS PRODUCED</u>	<u>% EYE UP</u>
WILD BROOD STOCKS:				
LAKE TROUT	KILLALA L.	365,400	324,700	88.86
	SLATE IS.	192,700	165,100	85.88
	MICHIPICOTEN IS.	136,600	99,100	72.55
BROOK TROUT	SUTTON R.	NO COLLECTION-HEALTH ASSESS.: IPNV		
DOMESTIC BROOD STOCKS:				
LAKE TROUT	KILLALA L.	4,670,100	2,160,800	46.27
	(MAINLY FIRST-TIME SPAWNERS, 54% LOSS PREDICTED)			
BROOK TROUT	LAKE NIPIGON	3,002,800	2,484,000	82.72
TOTALS				
LAKE TROUT		5,364,800	2,749,700	
BROOK TROUT		3,002,800	2,484,000	

EYED EGG TRANSFERS - WINTER, 1982

<u>SPECIES</u>	<u>QUANTITY</u>
LAKE TROUT	1,297,680 ¹
BROOK TROUT	2,056,000 ²

¹ LAKE TROUT EGGS SHIPPED TO HILLS LAKE F.C.S. FOR FUTURE BROOD STOCK DEVELOPMENT AND PRODUCTION

² BROOK TROUT EGGS SHIPPED TO HILLS LAKE F.C.S. FOR FUTURE BROOD STOCK DEVELOPMENT AND PRODUCTION, AND FOR PRODUCTION TO TARENTORUS F.C.S., NORTH BAY F.C.S., PEMBROKE F.C.S., WISCONSIN D.N.R. AND CALIFORNIA D.F.G.

4. *Temagami District, OMNR*

Temagami District is heavily fishing oriented. Sport angling is the main concern. To this end, many programs are entrenched into the work planning schedule and include creel census, inventory, stocking and stocking assessment.

This district has also been involved with the Special Fisheries Employment Program. To date, a total of 517 work weeks of employment has been created with a total budget of \$289,265. through four different projects. The Town of Haileybury is sponsoring a Lake Timiskaming Shoreline Development Project which entails construction of a seaplane base, boathouse and an office/storage building. The Town of Temagami has sponsored two projects. One has created or upgraded fishing access with the construction of docks, launching ramps and day use areas. Another is conducting a winter creel census on Lake Temagami. In conjunction with the creel, lake charr will be examined to further an investigation for lake charr stock segregation by parasitic infestation.

The Timiskaming Environmental Action Committee has sponsored a winter acid stress testing project which hopefully will sample 250 district lakes for pH, T.I.P. alkalinity and dissolved oxygen. During the field operations, fishermen encountered will be interviewed in an effort to obtain fishing success rates in order to complement our aerial recreation surveys.

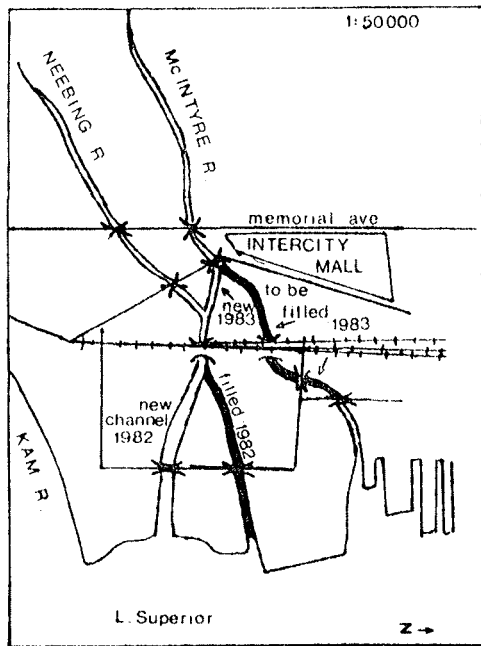
This upcoming year, a variety of projects is scheduled and are tentative at this time. For this spring, acid pulse monitoring on our prime lake trout lakes, larval lake trout fry emergence and documenting the walleye spawning is anticipated. Stocking of lake trout, speckled trout and rainbow trout is done in early May. We are planning a lake inventory program and a creel census of five area lakes during the summer. Several speckled trout stocking assessments are also scheduled. A lake trout spawning assessment is planned this fall followed by an aerial recreation survey of a portion of the district and a winter creel of Lake Temagami. There will probably be more S.F.E. projects as well, if the program continues.

Congratulations to those who are keeping the Chapter strong. Till next time.

- Gerry M. Leering

Who said metrification wasn't easy? After all, the internationally agreed to standard metre is actually only 1,650,763.73 times the wavelength in a vacuum of the unperturbed transition ($2p_{10} - 5d_5$) of krypton 86. Still, don't expect to see many graduated vacuum tubes on the market in the near future.

5. Lakehead Region Conservation Authority: Update on Neebing/McIntyre Diversion Project, March 1983



The so-called "plasticity" of the rainbow trout may again be put to the test as the new flood control measures project on the Neebing and McIntyre Rivers nears completion. Since the spring spawning run is fast approaching I thought an update of what's happening under those growing piles of earth around Intercity may be appropriate.

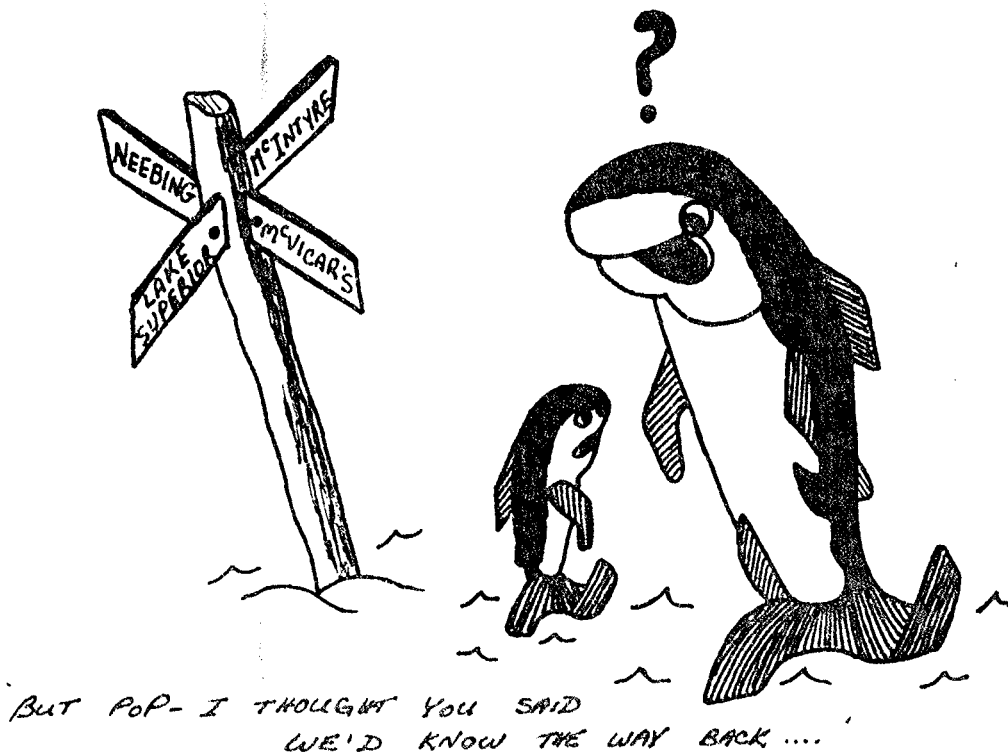
In 1982 the Neebing River mouth was filled in from the CPR tracks to the lake and the new flood control channel was opened. During this winter the channel which is to connect the McIntyre River to the floodway channel is being dug and the earth is being piled up beside the McIntyre River which is to be filled in from Fort William Road to Hammond Street by late summer, 1983.

Construction will cease during the spawning run of course, and throughout the project the water quality is being monitored for turbidity levels.

Migrating rainbow trout this year are faced with a new Neebing River mouth and possibly the connecting channel to the McIntyre River will be open as well as the original McIntyre River mouth. The McIntyre has been considerably widened right up to the college. The major change in spawning route will be in effect by spring 1984 when the new floodway channel will be the only access to both the Neebing and McIntyre Rivers. A 'fork in the road' will exist just below Fort William Road Bridge.

Although no adult tagging was attempted, a young-of-the-year study was set up and it is hoped that any dramatic change in river populations will be noticed in YOY populations.

- Jill Entwistle



6. Little Jackfish River Information

Current studies investigating the technical, environmental, social and economic implications of developing two hydro electric generating stations on the Little Jackfish River have been stopped and their completion deferred for at least four years.

The main reasons for the deferral are that the stations, scheduled for 1989 and 1990 in-service dates, won't be needed in the near future given the latest forecasts of electrical load growth, and that Hydro's restraint program dictate it stop spending money on new generation studies not required at this time.

The Little Jackfish sites are but two of ten sites identified in 1980 and 1981 as being potentially economic, when energy demand was forecast to grow at 3.4 percent per year to the end of the century. This February 1982 forecast has fallen sharply to 2.1 percent growth, the 1983 forecast. None of the sites - including those on the Little Jackfish are currently needed to satisfy energy requirements.

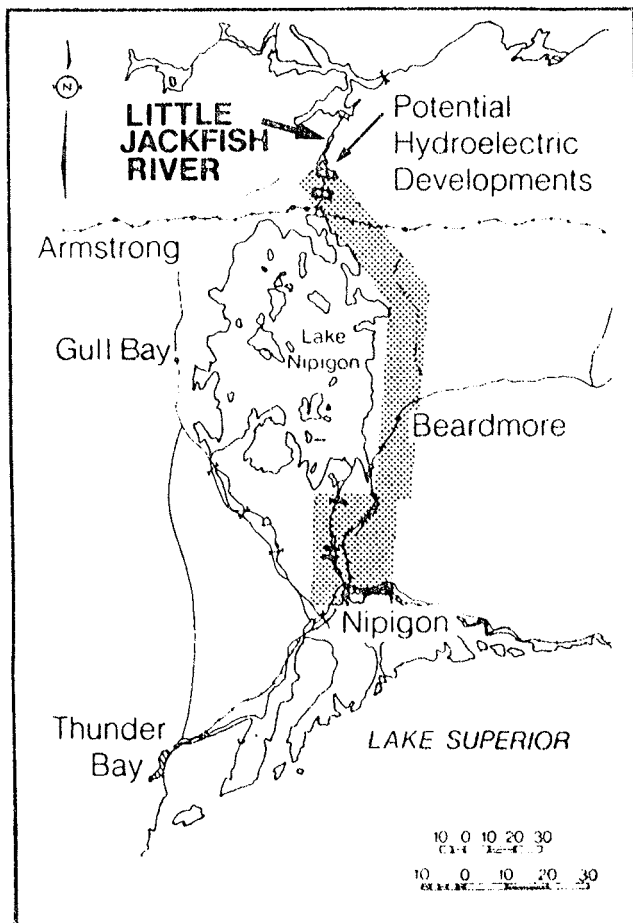
The decision to proceed with the current studies was based upon feasibility studies completed in the fall of 1979. Those studies concluded, at that time, that development of the river appeared technically feasible, economic and sufficiently acceptable environmentally to warrant more detailed study.

The latest studies, begun in 1981, represent the most comprehensive look at the technical, environmental, social and economic implications of development. Based upon the current load forecast, additional hydroelectric generation from this site, originally required for 1989 is not required at that time.

Participation of the area residents was an integral part of the study. A public involvement program was developed as one way of identifying and considering local issues and concerns in the project's planning. A citizens' committee was formed to discuss with representatives of the Armstrong area the possible social, cultural and economic changes that could occur to the area by the development.

In addition, Ontario Hydro carried out a number of community relations activities in the vicinity of Lake Nipigon to ensure that local residents were kept informed of the project's progress. These included personal contacts with individuals and groups, presentations to local elected and appointed officials, associations and native people's representatives, organizations, public information centres, mailings and news stories.

While the environmental assessment studies on the Little Jackfish River are deferred, Ontario Hydro's Northwestern Regional Office will continue to keep local communities informed of Hydro's activities in their area. The valuable assistance of the public gained during the course of the Little Jackfish River project will continue to assist possible future Hydro studies in Northwestern Ontario.



Location of the potential hydroelectric development of the Little Jackfish River. Shaded area illustrates the transmission facilities study area.

1. Chapter Logo Contest

Chris Brousseau, Regional Fisheries Biologist Northeastern Region OMNR, has forwarded all entries to be considered for adoption as our Chapter's standard symbol. The winner will receive a cash prize of \$20 and a Chapter hat (already considered untradeable by virtue of the honour it bestows upon the wearer). The submissions are presented one to a page and each is numbered. To vote for your choice simply cut out the ballot below and indicate by your mark which design you want to see as our symbol to be used on letterhead, newsletter covers, hats, mugs, etc.

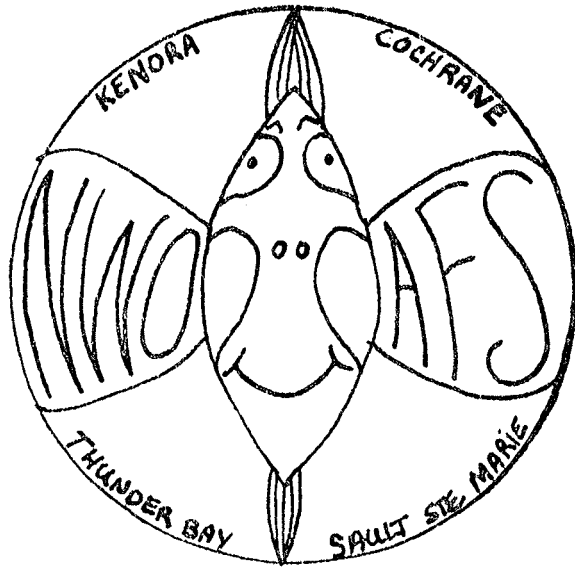
The judges will make their decision on May 2, 1983 so be sure to send your ballot in promptly. We anticipate a good response that will recognize the efforts of the organizer (Chris) and the members who submitted entries.

CHAPTER LOGO CONTEST	
OFFICIAL BALLOT	
My choice for our Chapter's Logo is entry number:	
1...	<input type="checkbox"/>
2...	<input type="checkbox"/>
3...	<input type="checkbox"/>
4...	<input type="checkbox"/>
Return to:	Nick Baccante Fish. Res. Sec. Walleye Unit 435 James Street South Thunder Bay, Ontario P7C 5G6
	OR
	Bob Walroth Box 970 Nipigon, Ontario POT 2JO

ENTRY NO. 1

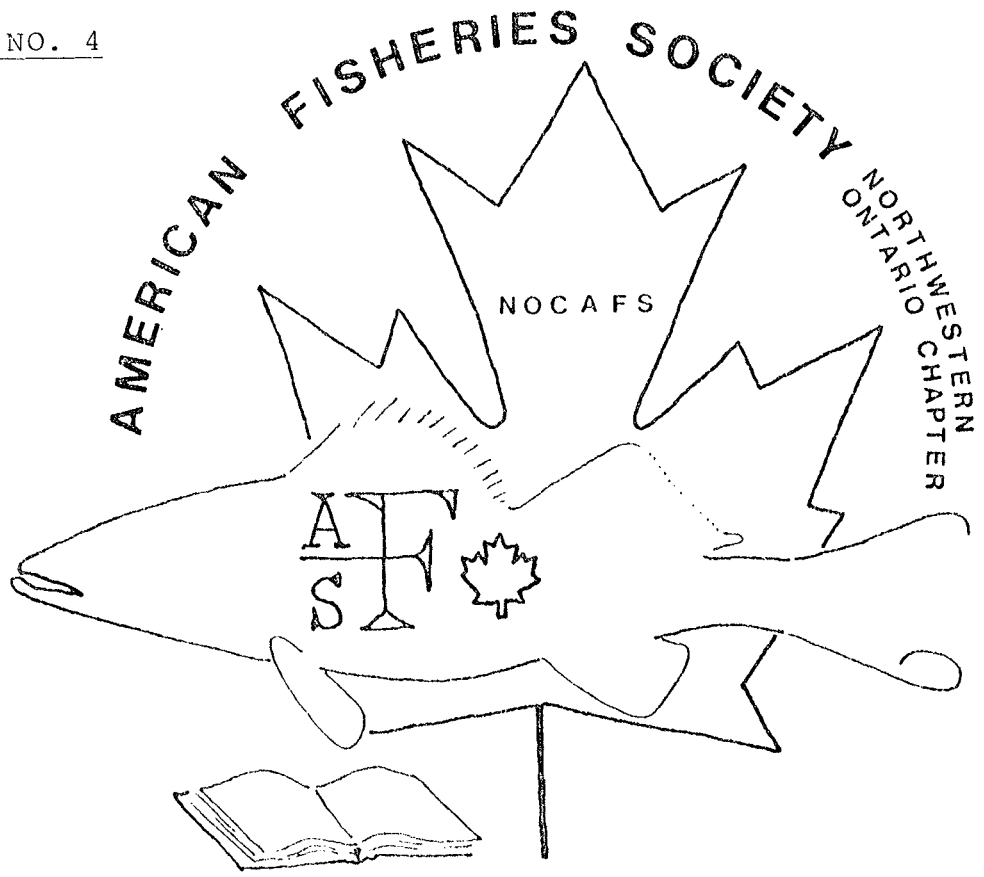


ENTRY NO. 2



ENTRY NO. 3





GENERAL INTEREST ARTICLES

1. *Interview:* Vladil Lyssenko

The following article was taken from the Cousteau Society's magazine *Calypso Log* (Vol. 10, No. 4, 1982). Rick Borecky (Lake Nipigon F.A.U.), a member of the society, provided us with this interesting revelation about high seas fisheries. (Translated for *Calypso Log* by Elizabeth M. Tobin).

Recently Captain Vladil Lyssenko defected from the Soviet Union to the West, claiming that his act was rooted not in political protest but in ecological protest. Capt. Lyssenko has spent most of his life as a sailor and fisherman in the Soviet Union. He currently makes his home in Sweden. During a recent visit to France, Captain Lyssenko agreed to meet with Yves Paccalet, editor of the French edition of Calypso Log, in our Paris office. He was accompanied by Leonide Pliouchtch, a mathematician and a Soviet dissident. (Calypso Log presented this interview because they believed the ecological issues raised were of enormous importance. However, they emphasized that the information offered by Captain Lyssenko in the following conversation had not been independently verified.)

CALYPSO LOG Captain Lyssenko, you claim that you left your country because the Soviet Union is systematically destroying the biological riches of the sea?

LYSSENKO I came to the West to make it known. I am here to denounce a criminal and absurd system. I am not an intellectual; my disagreements with the Russian authorities do not stem from moral, political, or philosophical ideas, as is the case with Pliouchtch, Solzenitsyn, or Shakarov. In exercising my profession, it became obvious that this kind of socialism destroys nature, but political dissent came at a later time for me. I have a passion for the sea. I cannot bear to see it harmed. Yet, this is what I contributed to for a number of years, first as a sailor and then as a commander of a vessel of the fleet of Murmansk.

C.L. Tell us about your early career.

LYSSENKO I will only speak of what I know best, the fleet of Murmansk. But, of course, the Soviet Union has numerous other fishing ports, where many other vessels are operating: Archangel, Leningrad, Odessa, Vladivostok. In 1953-1954, we were fishing only in the Barents Sea. We were catching cod. We had about 175 boats that were active in that area. I was young, and I was not well aware of the problems; I hardly questioned anything when I listened to old fishermen who were protesting. We were taking fish out of the water than measured 40 centimeters (16 inches) long and were barely three years old. The old men used to say, "Why catch them so young?" Nobody listened to them. Sometime later a law authorized us to catch cod measuring 35 centimeters (14 inches) long. Only then did I feel shocked. Fish of that size did not have enough time to reproduce. We were depleting the stock of the species.

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C.L. International regulations were in the conceptual stage at that time, but there were several agreements between governments that set forth regulations - some that applied to mesh sizes, for instance.

LYSSENKO I must tell you something. Soviet authorities do not care about international regulations. Our representatives sign whatever is wanted, and they make a number of solemn promises. Then they return from conferences and laugh at the naivete of the West. In areas where controls were frequent, we resorted to the double-net method: We fished with small-meshed trawls but we also carried other nets that met webbing regulation standards. We used to produce them whenever necessary. In areas where controls were not likely, it was worse. Every Soviet vessel is assigned a minimum catch quota that is set by the general plan (Gosplan), which is devised by Moscow bureaucrats. The means utilized to meet the quota do not matter. We used fine nets and we also managed to use special frames that pulled the fish toward our nets....More often than not, we would line the bottom of our trawls with canvas or animal skins. The West makes me laugh when they speak of moderation agreements and controls....

C.L. At that rate, the Soviet coastal waters must have thinned out quite rapidly.

LYSSENKO In 1955, it became impossible to meet the plan's quota in the traditional banks of the Barents Sea. We went fishing in the area of Novaya Zemlya, which is full of fish. The only problem was that the fish there is radioactive, because of atomic fallout from experiments the USSR conducted on these islands. We used to work with a Geiger counter in hand. When it acted up too much, we would dump the contents of our nets back into the sea. When it was behaving mildly, we would keep our catch. Party "scientists" would come and explain to us that it was not as dangerous as one would think and that, no matter what, "radioactivity is mainly concentrated in the liver of the fish, which is thrown away."

C.L. We should feel sorry for the children of those days who were duly fed cod liver oil from Novaya Zemlya by their mothers... But go on with your story.

LYSSENKO Once the Barents Sea was exploited, we went to Spitsbergen, where sea perch became our specialty. We did such a good job that three years later, there were none to be found. We went down toward Iceland, Newfoundland, and the North American continent. This took place throughout 1959, 1960, and 1961. The first time I hauled my net off the Georges Bank, I was amazed: I had never seen such an abundance of fish, let alone such a variety. We destroyed herrings there. At that time, I counted that the Soviets had over 1,000 vessels working in the North Atlantic. Ninety percent of the trawlers off the Georges Bank spoke Russian. There were so many of us that ocean liners used to alter their routes.

By 1964, the Georges Bank was depleted of most of its resources in fish. Yet, we were still catching a sort of small and

inedible hake that the Soviet authorities imposed upon the population under the name "hakeling." We caught hundreds of tons of them. They barely weighed 150 grams (5 ounces) each. The flesh was watery and disgusting. Then, one day, we lowered our nets to 400 meters (1,300 feet), as opposed to the usual 80 to 100 meters (260 to 330 feet), and we caught some beautiful hakes. Our biologists realized that those were the adult population of the inedible "hakelings": We had exterminated the young population of the species before even knowing who were the spawners.

C.L. Such anecdotes do not speak highly of professionalism among Soviet biologists.

LYSSENKO Soviet biologists are just like any other citizens in the country: They abide by the rules or they are in trouble....In the USSR you must be cautious of the way you speak out....I communicated with the Party and suggested that it might be preferable to eat large fish rather than small ones. I had allies who held important positions in the hierarchy of power. In the name of fisheries, I even received the Lenin Order, which was personally given to me by Nikita Krushchev (it was in gold and platinum - the highest reward). On that day, I had a meeting with him at the Kremlin. I argued the case of the fisheries. I thought I had won a battle. But I did not: The logic involved in the Soviet economic system is such that it dictates waste.

C.L. Could you expand on this last point, which seems important.

LYSSENKO After cleaning out the North American banks, we went down the Atlantic, sometimes along the coast of Brazil and Argentina, sometimes along the coast of West Africa and South Africa. We went as far as South Georgia - nearly to Antarctica. And it was the same story everywhere we went. As I said, each Soviet fishing boat must meet the quota. To do so, you catch anything and use every possible means. The only thing that matters is tonnage. In Spitsbergen, I remember that it used to take 15 minutes to catch 10 to 15 sea perches. Since we were ill-equipped, we would throw them into our holds without salting them. Half of them rotted. But that's not all. Once we got to Murmansk, we could not unload our catch; cold-storage units were too small and there was no one to package the fish. It wound up decaying in our holds. One year, I had access to a classified document addressed to the Minister of the Fisheries, whose name was Ichkov. The report said that 30,000 tons of fish were burned in Murmansk and likewise, 70,000 tons in Vladivostok. The same report estimated that less than 30 percent of the fish caught by Murmansk trawlers made it whole to the cold-storage units of the port. I should also add that in the Soviet Union there are not enough trucks to transport the fish throughout the country, so another portion of the fish catch decays in storage. We arrive at the following paradox: In a country that plunders the oceans of the globe, hardly anyone eats fish, except in large cities such as Leningrad and Moscow!

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C.L. Captain Lyssenko, you left the fisheries in 1969 and you went into freight operations. A few years later, you emigrated to the West. How did this come about?

LYSSENKO As I told you, I have always had a passion for the sea. Yet I received the Lenin Order medal because I was destroying it. It soon became unbearable for me. You know, toward the end of my career as a commander, we were using bottom trawl nets. Once we had located fish banks we would scrape the bottom once, then we would come back, and this way we would even catch the eggs! The places we went through are devastated and sterilized for a long time. Certain countries located in the area where we proceeded with such destructive methods were rather unfriendly toward us. In 1969, the Argentinians fired at us after they claimed their 200-mile territorial zone.

As far as I am concerned, my joining the merchant marine did not improve my feelings about the Soviet system. I was the commander of a tanker that used to go to Cuba loaded with oil products and return with molasses. There are no cleaning facilities in Havana; we would therefore rinse out our tanks at sea. I was no longer destroying the sea, I was polluting it. I came to the West six years ago.

C.L. There is a question I am very eager to ask you. It is said that every Russian trawler carries spies on board....

LYSSENKO There are two categories of Soviet trawlers: the ones that are involved with fishing and spying activities, and the ones that are conducting nothing but spying activities. Aboard the first category of trawlers, the KGB men are nonetheless in full control; every sailor must obey their orders, including the captain....I will tell you a story about these "trawlers" that carry no fishermen. In the beginning, when we used to approach American shores, the KGB men would disguise themselves as fishermen and would pretend to be fishing. Of course, the U.S. Coast Guard was not fooled for long. Today, the Soviet secret service specialists are still cruising the oceans in make-believe fishing boats, but when they meet Western coast guards, they do not bother to change their military uniforms anymore.

THERE SEEMS TO BE no rational timetable for scientific progress. Although it took less than a decade of space travel for man to get to the moon, nineteenth- and twentieth-century engineers needed 22 years to design the zipper.

2. *What is a Species Worth?*

The following article appeared in the February 1983 issue of *Science Digest*. It was written by Dr. Norman Myers who is a conservation specialist and consultant to the Smithsonian Institution.

Nobody wants to see any plant or animal species, no matter how lowly and obscure, die off. But by the end of the 1980's we could well be losing *one species per hour!* By the year 2000 we may have said goodbye to 1 million of Earth's 5 to 10 million species.

Sad to say, the question is not how to save *all* these species; we just do not have the resources to rescue more than a small fraction of those that are in trouble. The harsh question is, rather, which species are essential and which, owing to our insufficient resources, should quietly be allowed to go over the side of the lifeboat.

We must, in short, decide what each species is worth to us in terms of money, ecological value and importance to human survival. Then we must set up a scale of descending priorities for aiding selected threatened species.

Let's look at money values. Elephant ivory fetches \$38 a pound in Hong Kong. So an African elephant carrying 22 pounds of tusks is worth \$836 to a Far East trader. If we count in the elephant's value as edible meat and as hide for wallets, briefcases and such, one tusker is worth at least \$1,600.

The rhino is worth even more. Its horn, thought by many Asians to be an aphrodisiac, is worth up to \$775 a pound. An average horn brings over \$1,000!

But there is another kind of value, one that depends on keeping animals alive. My research shows that a good part of Kenya's safari tourist trade, worth \$160 million each year, is paid by people who come from abroad just to gaze at the cheetahs and lions. Thus, one of Kenya's male lions accounts for some substantial portion of a million dollars in tourist revenues each year. Few racehorses bring in that much!

To these amounts one must add the leisure time that people worldwide devote to watching, say, cheetahs in TV specials. If we price this TV time at two dollars an hour, the 33 million North Americans known to have viewed one recent half-hour film on cheetahs "evaluated" these graceful creatures at \$33 million.

Much more importantly, half the drugs we use derive ultimately from plants and animals. They are worth \$5 billion a year in the United States alone. One tropical plant, the periwinkle, produces two highly effective anticancer drugs - vincristine and vinblastine - whose worldwide sales total \$35 million a year. A Mexican forest plant, the Dioscorea yam, yields the drug from which the contraceptive pill, the basis of a billion-dollar-a-year industry, is made.

We think of insects as pests, but many of them kill off crop-destroying creatures and play an ever-greater role in modern agriculture. In Florida, for instance, citrus growers have saved \$25 million to \$35 million a year by paying \$35,000 for the importation of three species of parasitic wasps that live off pests.

The foregoing are only a few instances of the monetary, medical and other kinds of value many plants and animals offer humankind. Many of these survival benefits have become evident only recently, through advanced research.

But with our increasing awareness of these benefits comes a stern, even God-like responsibility. For, like it or not, we will eventually have to use the risk-benefit calculations to decide which species we shall help to survive and which we shall, in effect, condemn by withholding help.

This painful dilemma is remindful of that faced by battlefield surgeons, who, faced by rows of wounded troops, must resort to triage. That is, they must decide which patients are well enough to be ignored, which are too far gone to benefit from treatment and which may recover if given close attention.

Similarly, we must use risk-benefit calculations as our species triage guides. For nature lovers, this won't be easy. We'll constantly be tempted to make exceptions, to devote precious resources to saving "just one more" threatened species. But how many exceptions can we make without endangering *humanity's* future? Determinations like this will cause us many a sleepless night.

EGGSHELLS MAY BE A WAY TO DEAL WITH ACID RAIN and environmental budget cuts, at least in one area of Sweden.

When rising acidity was threatening to kill Lake Holmsjo, in central Sweden, local residents asked the county government to subsidize the spreading of massive doses of lime over the waters in an effort to neutralize the acid. They were told, however, that funds for such an undertaking were not available. Undaunted, the townsfolk began to pay for the liming themselves. But then someone thought of a possible way to save the lake at minimal cost, using a waste product from a local industry. A large bakery just a few miles away was discarding tons of eggshells every month, and it was suggested that perhaps the calcium in the shells might neutralize the acid.

A drive past Lake Holmsjo now reveals a waterway loaded with broken eggshells. While this unorthodox method may detract somewhat from the lake's scenic beauty, experts at the University of Agricultural Sciences in Uppsala say that the substitute may very well work.

3. *Exploring the Deep in One-man Suits*

This also appeared in the February *Science Digest*. We figured Phil Ryan would be interested in this one for sure.

What will Wasp, slurp guns and red-sensitive goggles do for marine biology? According to two scientists at the University of California, Santa Barbara, this unlikely-sounding trio is opening an exciting new era in the exploration of the Earth's largest habitat, the lightless zone of the sea below the surface.

Study of the midwater ecosystem is important because it contains many animals critical to the ocean's food chain, which provides valuable protein to countless millions of people. Until now, scientists who wanted to study the abundance, distribution and behaviour of deep-sea marine life were confined to using nets or taking a submersible to the bottom.

But Wasp is a 900-pound, one-person submersible that hovers in the water. It can dive nearly 2,000 feet, enabling biologists to study marine creatures too elusive or too fragile to capture in nets. Eight feet tall, three feet in diameter, and bright yellow, the Wasp has a bulbous clear acrylic dome and looks somewhat like an oversized space suit. It has two flexible arms ending in clawlike manipulators, which the researcher wears like gloves for grasping things outside the craft. Forward thrusters controlled by foot pedals move it through the water.

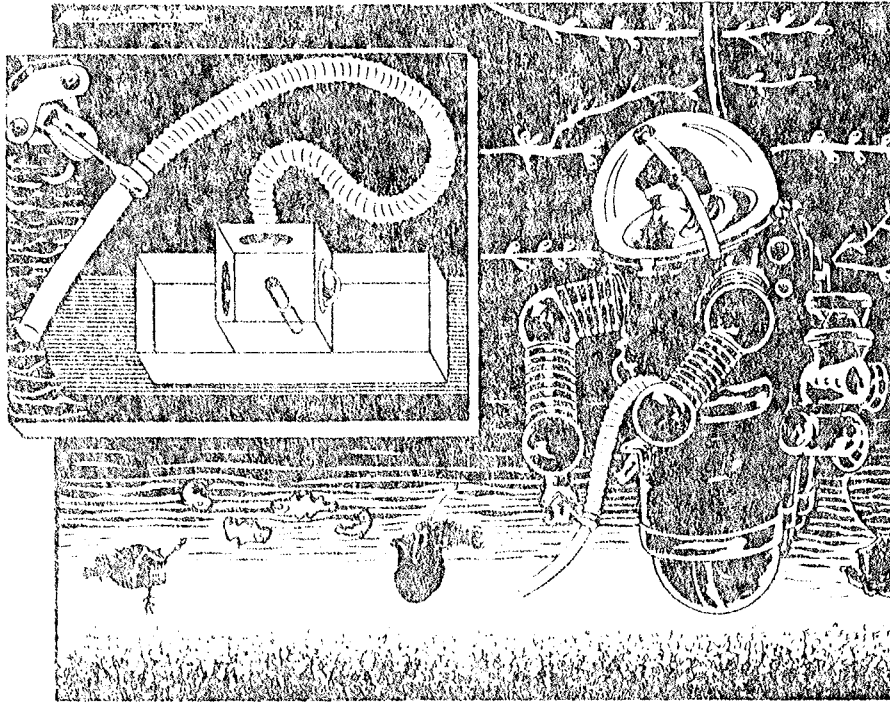
In a four-week-long expedition funded by the National Science Foundation, scientists used the Wasp last fall to explore marine life in the 1,800 foot-deep Santa Barbara Basin, 10 miles off the coast. Because sea creatures see light only at the blue-green end of the spectrum, the biologists illuminated the water with red lights and wore red-sensitive goggles - the kind that give you night vision. To capture gelatinous zooplankton and fish, they used a "slurp-gun," a two-foot long tube that gently sucks marine organisms into a separate collection chamber. In the past, underwater nets have torn these fragile creatures apart.

What did the researchers see from inside the Wasp? "Almost everything down there seems to be luminescent," says Alice Alldredge, an associate professor of biology at the university. "There are a lot of speculations on the function of luminescence. Many fish use it as camouflage - they can adjust their light level to match that coming from the surface. At other times luminescence is used to attract prey."

Associate research oceanographer Bruce Robison was struck by the abundance of fish. "We found as many as ten times what we expected," he says, "based on catches from nets."

During their daily migrations to the surface in pursuit of

prey, says Robison, many fish congregate around long, thin gelatinous creatures called siphonophores. "Perhaps they are taking advantage of the siphonophore's web of stinging cells to protect themselves from predators. Or maybe they are picking food particles off the creature's tentacles."

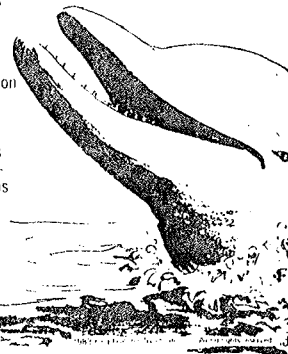


A Japanese firm produces a computer that requires a kiss before it works. The computer identifies operators by their lip prints and won't work until an authorized person has kissed a recognition plate. (Talk about being USER FRIENDLY, eh ?!)

Riley's **Believe It or Not!**

A NEW COMPUTER SYSTEM

developed by Dr. John Lilly of the Human/Dolphin Foundation in Redwood City, Calif. translates dolphins' speech on a computer screen -- and changes human words into high-frequency sound patterns
DOLPHINS SEEM TO UNDERSTAND



CYBERPHOBIA

is the medical term for an intense fear of computers and a study at St. Joseph's University in Philadelphia, Pa., reveals that some 30% of America's office workers suffer such discomforts as



4. *Salmon Spectacular*

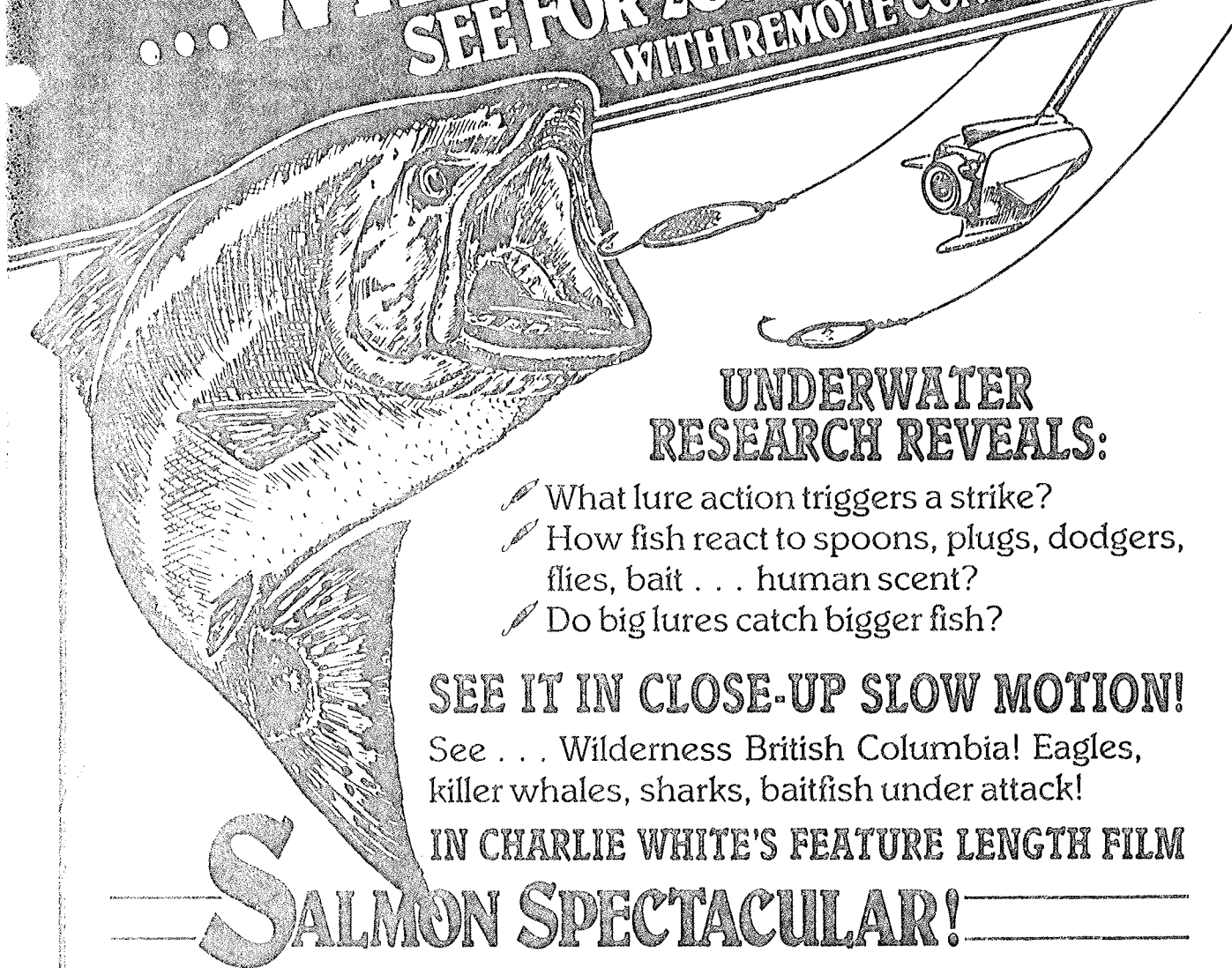
Charlie White Productions Ltd. have released a novel film which actually shows what occurs at the bait end of a fisherman's line. The film will be shown throughout the province in various locations, some of which are listed below.

<u>LOCATION</u>	<u>DATE</u>	<u>FACILITY</u>	<u>TIMES</u>
Toronto	April 5th & 7th (Tuesday & Thursday)	Queen Elizabeth Theatre CNE	6:30/9:30 P.M.
Sault Ste. Marie	April 12th (Tuesday)	Auditorium, Korah Collegiate & Vocational School	6:30/9:30 P.M.
Belleville	April 17th (Sunday)	Auditorium Centennial Secondary School	8:00 P.M.
Sudbury	April 19th (Tuesday)	Fraser Auditorium Science Building Laurentian University	6:30/9:00 P.M.
Kingston	April 21st (Thursday)	Auditorium, Kingston Collegiate and Vocational School	8:00 P.M.
North Bay	April 26th (Tuesday)	Weaver Auditorium Nipissing University College	6:30/9:00 P.M.
Thunder Bay	April 7th	Lakehead University	6:30/9:00 P.M.

Tickets will be available at local sporting goods stores or Collegiate Sports.

"Well worth the admission."
Chicago Sun-Times

WHY FISH STRIKE! ... WHY THEY DON'T! SEE FOR YOURSELF! WITH REMOTE CONTROL VIDEO!



UNDERWATER RESEARCH REVEALS:

- What lure action triggers a strike?
- How fish react to spoons, plugs, dodgers, flies, bait . . . human scent?
- Do big lures catch bigger fish?

SEE IT IN CLOSE-UP SLOW MOTION!

See . . . Wilderness British Columbia! Eagles, killer whales, sharks, baitfish under attack!

IN CHARLIE WHITE'S FEATURE LENGTH FILM

SALMON SPECTACULAR!

"Remarkable film. Don't miss it." CBS

"The views are unbelievable." Vancouver Sun

"Well worth the price." Oregonian

FIND 34 LAKE TROUT LAKES OF NORTHERN ONTARIO

B E P H U I L F T B N T L N T A S L L Q M L E A A J Y W S P L F M L C S D
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| BENDING | PAGWACHUAN |
| CARIBOU | PANACHE |
| COMMANDO | PICKEREL |
| CONFEDERATION | QUETICO |
| CRYSTAL | SASAGINAGA |
| DISRAELI | SAYNO |
| ELLIOT | SNOOK |
| EMERALD | SUPERIOR |
| FAYEL | SUTTON |
| GOOSENECK | TENAGAMI |
| KILLALA | TROLLOPE |
| MATINENDA | TROUT |
| MEGGISI | WANAPITEI |
| MIJINEMUNGSHING | WATABERG |
| NIPIGON | WAWIASHKASHI |

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START	DIR	WORDS
O-15	D	ABIGOGAMI
F-14	D-R	ATHELSTONE
V-13	L	BENDING
M-16	U-R	CARIBOU
J-11	D-L	COMMANDO
O- 7	R	CONFEDERATION
G-26	L	CRYSTAL
E-23	D	DISRAELI
P-22	D-L	ELLIOT
U-25	L	EMERALD
V-16	U-L	FAVEL
D-20	D-R	GOOSENECK
M- 6	U	KILLALA
K-17	D-R	MATINENDA
V-15	U-R	MEGGISI
S- 5	U-R	MIJINEMUNGSHING
V-11	U-R	NIPIGON

START	DIR	WORDS
I-25	U-R	NYM
M- 7	D-L	PAGUCHI
J-16	L	PAGWACHUAN
I- 5	R	PANACHE
M-14	R	PICKEREL
L-21	U-R	QUETICO
N-14	D-R	SASAGINAGA
V-21	U	SAYMO
K-19	U	SNOOK
I-15	U-L	SUPERIOR
A-25	D-L	SUTTON
M-12	U-R	TEMAGAMI
P-29	L	TROLLOPE
G-15	U-R	TROUT
Q-11	U-L	WANAPITEI
M-20	R	MATABEAG
P-14	U-R	WAWIASHKASHI

UPCOMING MEETINGS

1. The Northwestern Ontario Chapter of the A.F.S. is pleased to host a series of lectures presented by the Thunder Bay Special Fisheries Employment Centre at the following time and place:

Wednesday, March 23, 1983
Room 3012
Main Building (Centennial)
Lakehead University
7:30 P.M.

Speakers will include:

David Orr - Niobe Lake Benthos
Bruce Ward - Lac des Mille Lacs creel census
Ed Iwachewski - Acoustic survey, Lake Superior
Mary-Ellen MacCallum - Whitefish Lake Data analysis

2. The Chapter is also please to announce that a lecture entitled *Mark-Recapture Models for Larger Systems of Considerable Heterogeneity* will be presented by Robert Kushneriuk on April 13, 1983 at Lakehead University in a room to be announced.
3. All Chapter members are cordially invited to participate in a Social Evening sponsored by Doran's Brewery on Thursday, April 28, 1983 at Northern Breweries Ltd., 154 Algoma St. N.

Highlighting the evening's affairs will be a slide presentation featuring "Louisiana Crawdads" by Dr. Walter Momot, and a travelogue by Nick Baccante who will recount his recent exploits in Australia (do you come from a land down under?.....)

Due to limited room capacity those planning to attend should contact Ken Cullis at 475-1635 some time before the date above.

4. *The Northwestern Ontario Chapter of the American Fisheries Society* is pleased to announce that the 3rd annual business meeting and conference will take place in Dryden, Ontario from September 6 to 9 inclusive.

The Executive Committee has drafted the following outline describing how the conference is expected to be conducted. Please review it and be sure to forward the information requested of you at the end.

SESSION #1

This part of the conference will consist of a field trip and workshop to the Federal Department of Fisheries and Oceans Experimental Lakes Site near Dryden. For those members not familiar with the E.L.A., the following is an excerpt from Schindler (1980). Evolution of the Experimental Lakes Project. Can. J. Fish. Aquat. Sci. 37: 313-319.

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"In 1968, the Government of Canada and the Province of Ontario agreed to the establishment of an Experimental Lake Area (ELA) in Northwestern Ontario (Johnson and Vallentyne 1971). The purpose of designating this area was to permit experimentation on a whole-lake scale to resolve questions related to the eutrophication issue. Data resulting from these experiments have proved useful in forming nutrient control strategies for larger lakes. However, the project has not confined itself to this single management issue but has become involved in a number of important ecological problems. Using whole-lakes, whole watersheds, or large enclosures within lakes, the effects of acidification, pollution and heavy metals or radionuclides, clearcut logging, nitrilotriacetic acid (NTA), ameliorating the effects of nutrient addition, and a natural windstorm and forest fire have been explored."

Accommodation and meals will be provided at the site and transportation from Dryden will be arranged. Although the final itinerary must still be worked out a tentative schedule of events is presented below for your information.

Tuesday afternoon, Sept. 6 - register at E.L.A.

Tuesday evening - introduction to E.L.A. by Dave Schindler, Project Leader.

Wednesday - information workshop. Various resource people from the Freshwater Institute will outline their ongoing research projects. This portion of the agenda has yet to be finalized with the E.L.A. centre but we hope to include the following topics:

- i) Eutrophication Research: the phosphorous-nitrogen-carbon controversy and its resolution. Evidence from this research was used to formulate a nutrient loading abatement policy for the Great Lakes. The effects of forest fires on lake nutrient budgets and other environmental characteristics will be discussed.
- ii) Acidification Research: a review of the experimental acidification project on lake 223.
- iii) Fish communities in the E.L.A. A corollary to this will include a discussion of fish communities in acidic lakes.
- iv) South Indian Lake project: the aquatic community and environmental conditions in a large Manitoba lake have been monitored through time. Findings from this work will be presented.

- v) Demonstration of the collection of fish sampling gear E.L.A. personnel utilize in conducting their research.

Alternatively, attendees may wish to assign themselves to a field survey crew (acidification project, water chemistry, primary production project, microbiology project) and accompany them to their respective sampling sites. It has been suggested that those members who intend to get involved in these field activities and subsequent laboratory analysis arrange to arrive Tuesday morning. In this way it will still be possible for these people to participate in the workshop the following day.

Wednesday evening - Steak Roast.

SESSION #2

The second part of the conference will be held in Dryden or a lodge nearby and get underway sometime Thursday morning. The theme will be the Presentation of Papers connected with the preparation of the Fisheries Section of the West Patricia Land Use Plan and contributed papers on lake trout studies. The rest of Thursday and Friday morning is tentatively scheduled for this session, with the annual business meeting of the Chapter taking place Thursday evening. We hope to conclude the conference at noon Friday. The following is a proposed agenda.

<u>TITLE OF PAPER</u>	<u>GENERAL SUBJECT</u>
(1) Historical perspective of fisheries/limnological work in the Patricias	-general area description: climate, topography, geology, flora and fauna -major changes at biome level: deforestation, water diversions, LTRAP -ecosystem level: fishing, logging, mining..... -Patricia Inventory
(2) The West Patricia fisheries program (1977-80)	-why we were there: Reed Tract proposal, need for environmental assessment, Inventory of WPLUP resources for broad scale land use planning and resource allocation. Creation of multi-disciplinary inventory team. The fisheries program.
(3) General limnological survey of West Patricia area	-methods, trends, generalizations -bathymetry of small lakes

<u>TITLE OF PAPER</u>	<u>GENERAL SUBJECT</u>
(4) Relative productivity of WPLUP lakes and models	-relationships between, P, N, colour, chlor a, transparency. Nutrient level: fish yield relationships. Nutrient level: watershed and lake characteristics.
(5) Fish communities of WPLUP: patterns and trends	-zoogeography. Results from discriminant function analysis of relationships between environmental characteristics and the presence/absence of single fish species or particular assemblages.
(6) Survey of fish communities of small lakes	-results from investigations of population sizes, community composition, biomass estimates, stomach content analysis, population characteristics. Considerations in experimental design.
(7) Limnological characteristics of small lakes in relation to fish community type and potential yield	-MEI and watershed characteristics relation to standing crop, community type, winter oxygen conditions.
(8) Lake districts in WPLUP and estimation of fish yields	-Identification of groups of similar lakes, using landscape unit mapping and lake characteristics (conductivity, bathymetry) -estimates and error statistics for unknown lakes: estimation of potential yield.
(9) Commercial and sport fisheries in West Patricia	-results from road check creel census, new models for lake capacity calculations; history and present status of West Patricia commercial fisheries.
(10) Discussion of potential analyses of the West Patricia data set.	
(11) Contributed papers on lake trout studies in Northwestern Ontario.	

We expect to send out formal invitations and the final agenda sometime in the near future. We do however, want to get some idea of the number of Chapter members interested in attending the conference now in order to plan accommodation etc. We would therefore greatly appreciate it if those members interested

in attending would complete the following form and either mail or hand deliver it to:

Nick Baccante
Walleye Research Unit
Ministry of Natural Resources
435 James Street, South
Thunder Bay, Ontario
P7C 5G6
Telephone: (807) 475-1635

I am interested in attending both the E.L.A. Session and the West Patricia Session.	<input type="checkbox"/>
I am interested only in attending the E.L.A. Session.	<input type="checkbox"/>
I am interested only in attending the West Patricia Session	<input type="checkbox"/>

NEW MEMBERS

The Chapter extends a sincere welcome to its two most recent members:

Robert Kushneriuk
135 McKellar St. N.
Thunder Bay, Ontario

and,

Evan Thomas
MNR Wawa District
P.O. Box 1160
Wawa, Ontario

All Chapter members are reminded that they should feel obligated to solicit new members for our organization. Annual dues consist of a paltry \$5 - made out to *The Northwestern Ontario Chapter of the American Fisheries Society* and forwarded to:

Ken Cullis
Secretary Treasurer
Northwestern Ontario Chapter A.F.S.
c/o MNR
Box 5000
Thunder Bay, Ontario
P7C 5G6

CONTRIBUTORS

The Editor gratefully acknowledges the contributions made by the following to this issue of the newsletter:

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Ken Cullis, Ministry of Natural Resources, Thunder Bay
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Gerry Leering, Ministry of Natural Resources, Temagami
Terry Marshall, Ministry of Natural Resources, Thunder Bay
Marcel Pelligrini, Ministry of Natural Resources, Wawa
Bob Walroth, Ministry of Natural Resources, Nipigon
Neville Ward, Ministry of Natural Resources, Kenora
Scott Watson, Dorion Fish Culture Station

and appreciates the efforts of Leona Webb who typed this
and the previous issue.