FORUM

FOR STEWARDSHIP AND SUSTAINED BENEFITS

Great Lakes Fishery Commission

The Challenge of the St. Marys River

by Leslie TeWinkel

Until sea lamprey larvae populations in the St. Marys River can be controlled, they will continue to represent a threat to the fishery…

Fishery agencies and the public have become increasingly concerned about the devastating impact sea lampreys have had on the fish community in Lake Huron. The cause of this concern is sea lampreys coming from the St. Marys River, which connects Lake Superior and Lake Huron. Assessments have shown that the St. Marys River harbors large numbers of sea lamprey larvae and is the largest uncontrolled source in the entire Great Lakes basin. Conventional treatment of this large river with TFM has not been possible because of unresolved questions of cost and effectiveness. These questions and concerns for the ecosystem of the river itself have prompted research and development of a control strategy that integrates alternative control methods using new information on the ecology of larval lampreys in the river.

Population levels of spawning-phase sea lampreys in northern Lake Huron are estimated to be greater (250,000 to 500,000) than that of all the other Great Lakes combined. The last time lamprey populations were this large in Lake Huron, populations of lake trout and whitefish were decimated. Researchers now estimate that the annual total damage to the fishery caused by sea lampreys in northern Lake Huron alone is between $3 and $6 million; the damage to the primary species affected, including lake trout,

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The Great Lakes Fishery Commission was established by Convention between Canada and the United States in 1955 to improve and perpetuate fishery resources. FORUM is published by The Great Lakes Fishery Commission. For a free subscription to FORUM, or to provide change of address information, please contact the Commission at 313-662-3209.

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From the Chairman...

Gail Beggs

Sound science is the cornerstone by which Great Lakes management decisions are made. Indeed, successful management efforts in the Great Lakes have been dependent on maintaining a firm scientific understanding of the natural and human-induced conditions that affect the Great Lakes system. Moreover, there is certainly no doubt that the success of future management initiatives in the Great Lakes will depend on the quality of science upon which these initiatives are based.

The thing that is most enviable about the Great Lakes is the way Federal, State, Tribal, and Provincial agencies all contribute to the common body of knowledge. It is cooperative to the highest degree. The Commission has been pleased to be an integral component of this cooperation. By working together, agencies on both sides of the border and at all levels, leverage each other's resources to produce the science we all rely on for management decisions.

Nevertheless, the reality is that all levels of government face the need to reduce current levels of expenditure. Realistically, the generation of science may not be immune from these reductions. I am, however, very concerned that the generation of science on the Great Lakes may be receiving a disproportionate share of the reductions in funding. Take a moment to put the resources in perspective. The Great Lakes contain about 20 percent of the world's fresh surface water; its shoreline is longer than the entire east coast of the United States. And yet, several Great Lakes research laboratories—in both countries—are facing significant reductions. There is a real danger that this remarkable resource will be left with little or no capability to conduct the research we need.

To address the concern about the loss of science, the Commission sponsored a special session on Great Lakes research during its 40th anniversary annual meeting in Toronto. Commissioners heard from a number of prominent scientists, from both countries, who reminded the Great Lakes community about the pivotal role of research in responsible ecosystem management. The meeting participants left with a greater understanding of the dilemma governments face: on the one hand, we need sound science to make decisions; on the other hand, shrinking resources mandate budget cuts.

In formulating spending reduction scenarios, governments must consider the importance of the Great Lakes as an ecosystem and consider the importance of science to its future management. They must insure that decisions made today do not compromise the ability of future generations to meet their resource management needs. I agree with Department of Fisheries and Oceans Minister Brian Tobin in the July, 1995 issue of *Fisheries* when he states: "Unless science comes before political, economic, business, social, or other considerations, fisheries are going to be in trouble." ≈

CONTINUED FROM PAGE 1

chubs, whitefish and chinook salmon, represents 70% of their value to the fishery. This damage is so severe that State, Provincial, and Tribal fishery agencies jointly have decided to forego efforts to restore lake trout until significant control is attained on the St. Marys River.

The cornerstone of the St. Marys River control strategy is an extensive study to understand the distribution and density of larval lampreys in the river. Researchers use newly developed deep-water electrofishing gear, geographic positioning systems, and satellite information systems to map the larval densities. These state-of-the-art tools have revealed that while the larval population is very large, most larvae are concentrated in distinct patches.

Researchers are developing new approaches to target these lamprey hot-spots with lampricides. A bottom-release lampricide—granular Bayer 73—is being refined and tested for spot treatments. Furthermore, computer models of lampricide movement permit effective targeting of TFM application to larval populations. By coupling the results of the TFM transport model with the maps of larval distribution, control agents have confirmed that a full-scale treatment of the river would likely be ineffective. Instead, applications targeted to specific areas of the river—for example the north channel—may be cost-effective and should eliminate significant concentrations of sea lamprey larvae.

A sustainable program of lamprey control on the St. Marys River depends on using a mix of techniques. Nearly 20 years of research has led the Commission to a large-scale evaluation of the sterile-male-release technique. Placed in nursery streams, sterilized male sea lampreys compete with resident males to reduce the reproductive success of the population. Studies in the St. Marys River have indicated that this program may greatly reduce the number of viable nests.

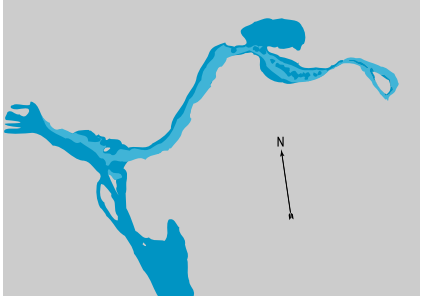
Additionally, traps that catch sea lampreys as they migrate upriver to spawn have the potential to reduce lamprey populations by limiting reproduction, by providing males for sterilization, and by providing critical assessment information. The Commission is constructing a new trap at the Canadian Great Lakes Power Company generating station to attract and capture sea lampreys more efficiently. The Commission is also working in partnership with the U.S. Army Corps of Engineers to build another new high-efficiency trap on the face of its smaller generating plant on the river.

Until sea lamprey populations in the St. Marys River can be reduced, they will continue to present a threat to the Lake Huron and northern Lake Michigan fisheries. ≈

The editor thanks Gavin Christie, Roger Bergstedt, and Larry Schleen for their contributions to this article.

Simulated TFM Application

12-hour TFM treatment at 1.5 times minimum effectiveness. Light blue denotes locations where minimum effectiveness was maintained for 9 hours.



Courtesy: Shen, Yapa, and Bergstedt

Ballast Water Management Key to Preventing Exotic Hitchhikers

By Marc Gaden

A timeline of entry mechanisms for aquatic species introduced to the Great Lakes

(Mills *et al.* Exotic Species in the Great Lakes: A History of Biotic Crises and Anthropogenic Introductions, International Association for Great Lakes Research, Vol. 19, No. 1, 1993)

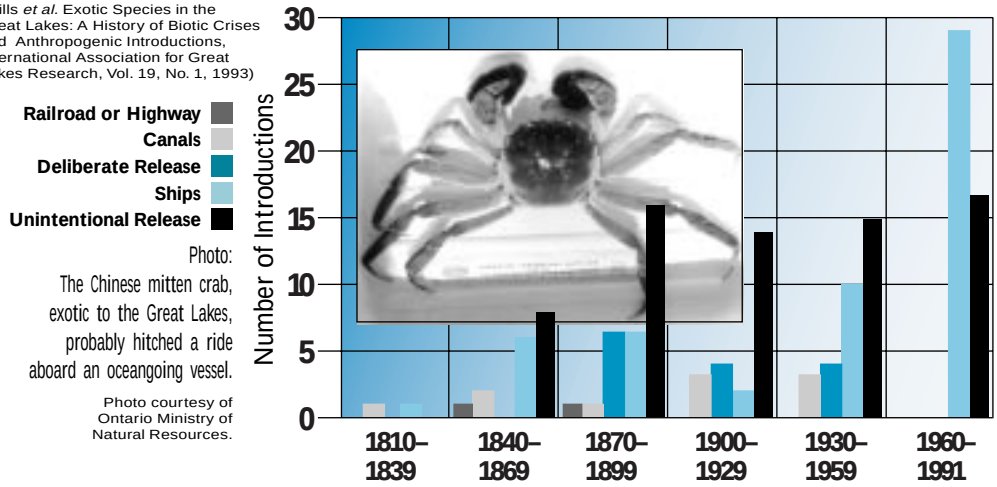


Photo: The Chinese mitten crab, exotic to the Great Lakes, probably hitched a ride aboard an oceangoing vessel.

Photo courtesy of Ontario Ministry of Natural Resources.

Human activities in the Great Lakes region have facilitated a continuous invasion of exotic terrestrial and aquatic species. Indeed, nearly 140 new exotic species have become so entrenched that control, let alone eradication, remains difficult. With the sharp increase in commercial shipping in the 20th century came sharp increases in exotic species introductions. The recovery in 1994 of juveniles from species that are not known to reproduce in fresh water—European flounder and Chinese mitten crab—reemphasizes the fact that preventing exotic species introductions is an ongoing task that requires continuous efforts.

Exotic species can and have been introduced into Great Lakes waters through several means including entry through deliberate and unintentional releases, through man-made canals, and via ship-ballast water discharge. It is this last method—ship-ballast water discharge—that has caused some of the more recent, devastating, and unfolding exotic species introductions such as zebra mussels and European ruffe. In fact, between 1960 and 1991—roughly coincidental with the operation of the St. Lawrence Seaway—ships and shipping activities alone have been responsible for 21 percent of the total new releases of exotic species into the Great Lakes.

Introductory year of exotic species considered to have substantial impacts on the Great Lakes resource

- 1988 Zebra Mussel
- 1986 Ruffe
- 1952 Eurasian Watermilfoil
- 1950s White Perch
- 1933 Coho Salmon
- 1883 Brown Trout
- 1879 Common Carp
- 1873 Alewife
- 1873 Chinook Salmon
- 1830s Sea Lamprey

In many cases, the impacts of new species have been significant. Ruffe, for instance, have now become the most abundant fish species in certain Lake Superior streams, and were recently reported in Lake Huron. Round gobies have spread from Lake St. Clair and Lake Erie to southern Lake Michigan and are often found in densities of 20 per square meter. Also, scientists are only beginning to understand the ecological impacts of zebra and quagga mussels. Shifts in food webs caused by exotic species will ultimately be felt by both sport and commercial fishermen.

In an attempt to curtail and hopefully stop exotic species introductions via ballast water, both the United States and Canadian Coast Guards require oceangoing vessels to exchange or treat ballast water before entering the St. Lawrence River/Great Lakes system. The Canadian program, which remains voluntary, was initiated in 1989; the U.S. effort began as a voluntary program in 1991 and became mandatory in 1993. Despite these programs, however, and since the ballast water enforcement efforts began, some foreign organisms have survived ocean voyages to be discharged and subsequently recovered from Great Lakes waters.

As reported above, juvenile European flounder were apparently discharged with ballast water into Lake Superior in 1993 or 1994. Also, five-year old Chinese mitten crabs were discovered in Lake Erie in 1994, and may have been discharged with ballast in 1989. These species do not reproduce in fresh water, so the discovery of yearclasses produced after initiation of ballast management strategies by Canada and the U.S. suggests that ballast management, as implemented, is still permitting the release of viable organisms.

In response to the ongoing threat of exotic species introductions via ballast water, the Great Lakes Fishery Commission—with the support of the States, Tribes, and the Province of Ontario—recently wrote the two Coast Guards urging them to intensify their ballast water management efforts. While the Commission's letter commended the Coast Guards for their diligent efforts to date, it also encouraged the two countries to enforce existing ballast management measures to the strongest extent possible. The letter also expressed support for the reauthorization of the U.S. Nonindigenous Aquatic Nuisance Prevention and Control Act, which authorizes the U.S. ballast management program. Canada was urged to convert its Great Lakes/St. Lawrence River Ballast Control Guidelines into regulation. The Commission's letter urged both Canada and the United States to take the lead in research and development of new ship designs and technologies to manage ballast water.

In support of the Commission's letter, Tom Gorenflo, Director of the Chippewa/Ottawa Treaty Fishery Management Authority, captured the sentiments of Great Lakes fishery managers. He stated: "The greatest threat to Great Lakes fish communities, and the fisheries they support, is the continued influence of nuisance exotic species and the potential for further invasions. Ballast water discharge, in particular, poses such an obvious and proven risk that it is hard to believe that it has not yet been aggressively addressed by the U.S. and Canadian Governments." ≈

Excerpts... The 40th Anniversary Mee

from the Chairman's Address

At our very first annual meeting, held in 1956 in Ann Arbor, the then-new Commission faced many challenges. There was a pressing need for international cooperation in fishery management. The Convention on Great Lakes Fisheries between the United States and Canada was, after all, only ratified one year earlier.

In many ways, today's goals are strikingly similar to those identified at the first annual meeting. Then, and now, we are focusing on alternative techniques for the control of sea lampreys. We remain steadfast in our continuing efforts at fostering and improving partnerships in fishery management. We continue to rely on sound science as a basis for planning and management. And we are still strongly committed to promoting sustainable use of the Great Lakes fishery.

> "Since adoption of the Joint Plan by signatory agencies, fish management in the Great Lakes has become more cooperative, resulting in forward-looking initiatives such as multi-jurisdictional lake trout refuges in the upper lakes, and in joint assessment and management in Lake Erie." —Buzz Besadny

Healthy Aquatic Ecosystems

Over the past year the Commission has been active in dealing with problems associated with sea lamprey predation, overfishing, disease, exotic species, loss of physical habitats, and inputs of contaminants. For instance, we are facilitating a review of institutional arrangements which will hopefully improve the linkage of RAPs, LAMPs, and the Joint Strategic Great Lakes Fishery Management Plan into a framework for an integrated approach to ecosystem management.

Integrated Sea Lamprey Management

While we have made progress in producing all of the required analyses, we are still behind schedule in completing target levels for sea lamprey suppression. We are moving forward with a bold goal of greatly reducing TFM use. We have made substantial progress in developing non-chemical control methods, and we continue to devote significant resources to construction of permanent and inflatable barriers.

Building Partnerships

Current Fish Community Objectives have been produced for each lake (except Lake Ontario). The Board of Technical Experts has produced a statement on fishery research priorities.

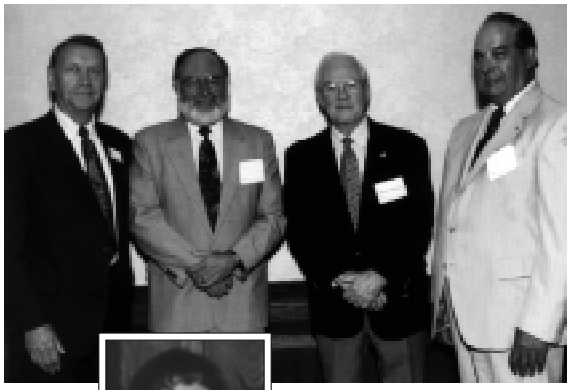
The Joint Strategic Plan for Management of the Great Lakes Fishery

The Joint Plan formalized and further developed institutional arrangements in fishery management. Since adoption of the Joint Plan by signatory agencies, fish management in the Great Lakes has become more cooperative, resulting in forward-looking initiatives such as multi-jurisdictional lake trout refuges in the upper lakes, and joint assessment and management in Lake Erie.

Despite serious financial constraints that all programs face, we, as members of the Great Lakes community, must continue our strong cooperative commitments to sound fishery management. ≈

Former Commissioners, Ambassador Blanchard, Control Agents Honored at Annual Meeting

Chairman Buzz Besadny honored former Commissioners Jim Cady, Paul Sutherland and Harry Whiteley for their dedicated service to the Commission. Also receiving awards at the annual meeting was Ambassador James J. Blanchard for his leadership in international cooperation to restore and maintain the Great Lakes ecosystem; Alan Sawyer, for his dedication to the Sea Lamprey Integration Committee; Rosalie Schnick, for her leadership in the lampricide registration program; and sea lamprey control agents (accepting group awards) Kim Fredericks, Gary Klar, Dennis Lavis, Larry Schleen, and Terry Bills for reducing TFM use by 20 percent. ≈



Commission Chair Buzz Besadny honors former commissioners at the annual meeting. L-R: Buzz Besadny, Paul Sutherland, Harry Whiteley, and Jim Cady.

Commissioners elected Gail Beggs (Can.) as new Commission Chairman.

ting of the Great Lakes Fishery Commission

Great Lakes Fishery Commission Holds Annual Meeting in Toronto

FUTURE OF GREAT LAKES RESEARCH, NON-CHEMICAL LAMPREY CONTROL EMPHASIZED

Great Lakes programs should not "get caught up in this feeding frenzy over how to dismantle government," stated Blanchard in his keynote address.

The Great Lakes Fishery Commission held its 40th-anniversary annual meeting and executive sessions June 5-9 in Toronto to focus on a wide variety of fishery management issues and to review the year's progress in controlling the sea lamprey. Participants included Commissioners, government officials, sea lamprey control agents, academia, and citizen advisors. The future direction of Great Lakes research and sea lamprey control strategies were of particular interest to the participants. The meeting was also a forum for presenting *State-of-the-Lake* reports, perspectives on ecosystem management, and reports from the several boards and committees of the Commission.

The Commissioners used this annual meeting as an opportunity to elect Commissioner Gail Beggs as new Commission chair. Commissioner Buzz Besadny's chairmanship expired in early June.

U.S. Ambassador to Canada James J. Blanchard initiated the meeting with an address on U.S.-Canadian cooperation in management of Great Lakes resources. He was concerned that anticipated budget cuts would not be based on careful consideration of needs versus funding resources.

"There are always threats [to the lakes], and not all of the threats are environmental," Blanchard stated. "My experience in 20 years in public office is that ignorance is the greatest threat. Every year we have to fight to prevent [program] cuts." Blanchard added that Great Lakes programs should not "get caught up in this feeding frenzy over how to dismantle government."

Meeting participants were indeed particularly alarmed by proposals in both the United States and Canada to reduce or possibly eliminate funding for key Great Lakes research facilities.

"The Commission has relied heavily on Fisheries and Oceans Canada, National Oceanic and Atmospheric Administration, and National Biological Service science in discharging its duty to study and advise Canada and the United States on issues affecting the long-term use of the Great Lakes resources," commented Commissioner Gail Beggs. "While our two nations obviously need to respond to budget problems, unilateral cuts could undermine gains of the last 40 years in rehabilitating the Great Lakes and its resources."

The Commission's sea lamprey control program was also a major topic of discussion during the annual meeting. Chairman Besadny noted that although TFM has been indispensable in achieving the current level of sea lamprey suppression, public concern about the use of any chemicals in the aquatic environment compels the Commission to develop alternate control techniques. The Commission, thus, has set a goal of reducing TFM use by 50 percent by the decade's end.

Reports presented during the annual meeting suggest the Commission is on schedule in meeting that goal. Indeed, since the 1980s, the Commission has reduced its TFM use by about 20 percent. Terry Bills of the U.S. National Biological Service noted that efforts to reduce lampricide through more efficient application has greatly reduced the amount of chemical used to treat an area. Vic Gillman of the Canadian Department of Fisheries and Oceans described new developments in the use of permanent, electrical, and inflatable sea lamprey barriers and the potential to expand the use of these non-chemical control methods. And Peter Sorenson of the University of Minnesota reported that pheromones may serve as attractants and could improve effective use of traps.

During the annual meeting's executive session, the Commission approved a proposal to devote more than 30 percent of its lamprey management budget by 1997 to application, research and development of non-chemical control methods. ≈

GLU to Host Conference on Commercial Fishing

Great Lakes United will host a conference on December 2–3, 1995 in Detroit, on sustainability of commercial fishing in the Great Lakes. Speakers will provide a historical perspective on Great Lakes commercial fishing and present various perspectives on commercial fishery management. Discussions will focus on commercial fishery management problems and will help identify issues for policy development.

The conference is cosponsored by the Great Lakes Fishery Commission, Trout Unlimited, the Assembly of First Nations, and the American Fisheries Society. For registration information, contact Dave Mahoney of GLU at 716-886-0142.

The Great Lakes Fishery Commission: A Perspective of a New Retiree

by Art Holder

My active association with the Great Lakes Fishery Commission began in 1973 when I first became Ontario's representative to the Lake Erie Committee, and I have been involved in some capacity almost continuously since that date. During those years, I have watched the Commission evolve successfully in response to the changing environment in the Great Lakes basin in a manner few other institutions have been able to match.

Why has it been so successful?

I can think of at least three reasons. First, consider the makeup of the Commission. Over the years, the appointees to the office of Commissioner have been a mix of governmental fisheries managers, university professors in the field, and entrepreneurs with a strong interest in the Great Lakes. Tenure has been relatively long and political influence has been low. Biological systems do not respond well to political whim, and the continuity of purpose inherent in a stable membership has served the Commission well.

Not unrelated to the first reason has been the consistently strong scientific focus of the Commission's boards and committees. Science has formed the common script with which the various governments and agencies have been able to communicate and to conduct business in a non-confrontational manner.

The third major contributor to the Commission's success lies in the Commission's early recognition and subsequent leadership regarding the concept of biological and physical interrelationships in the fisheries community—an idea which since has evolved into the ecosystem concept. Long before ecosystem became the catchword, members of the Commission were pushing for a broader perspective on fisheries management, recognizing both the need to integrate traditional fish management with water quality and physical habitat and the need to integrate these components with human behavior.

What have been some of the Commission's successes?

One which I consider to be particularly important is the Commission's role in the creation of the Joint Strategic Plan for the Management of the Great Lakes Fisheries. This document represents a concurrence in approach among fisheries management agencies throughout the basin. Since its creation, it has served as the base of a number of subservient agreements such as the Fish Community Objectives and Lake Trout Rehabilitation Plans for the individual lakes .

Equally important has been the Commission's role in fostering a climate of interest and support for applied research directed toward current and anticipated fisheries management issues. This role includes encouraging interagency dialogue and cooperation through the promotion of the Lakes Committees and other interactive bodies.

Courtesy: *The Great Lakes Fisherman*, Ontario

Art Holder (right), former director of the Great Lakes Section of the Ontario Ministry of Natural Resources, celebrates with fellow retiree Bruce Shupp, former Chief of the Bureau of Fisheries of the New York State Department of Environmental Conservation. Mr. Shupp has been invited to submit his perspective in a future issue.

In addition, the Commission has experienced success in its mandate of sea lamprey control and the associated restoration of the cold-water fishery. The progress achieved thus far has been sufficient to generate enormous public benefit and to ensure ongoing public support for continued efforts toward the original goals.

What lies in the future?

The Commission is currently facing some difficult challenges. The Commission's roots lie in the traditional support of consumptive users (commercial and sport fishermen), while support for environmental agencies and their rehabilitation plans seem more firmly rooted in the non-consumptive "don't touch" community. These two different philosophies must be brought together if common goals and objectives are to be established and achieved. Signs of this dichotomy of opinion have recently surfaced as a result of the unexpected rapid success of phosphorous reduction in the lower Great Lakes. Efforts of environmental agencies, and perhaps some unexpected aid from the zebra mussel, have resulted in phosphorous reduction in Lakes Erie and Ontario to a level that threatens current levels of fish production. Fisheries users and management agencies are now questioning the suitability of target levels for phosphorous proposed by environmental agencies. Can these two communities of interest work together to find an acceptable compromise? Surely the Commission has a role to play in this issue.

In conclusion, I would like to point out that the current trend is to throw rocks at all governments and government-sponsored agencies; the Great Lakes Fishery Commission is not immune to such criticism. However, in my opinion, the need for such an agency has never been greater. ≈

The Great Lakes Fish Health Committee: *A Record of Success*

by Leslie TeWinkel

One of the several interagency committees within the Great Lakes Fishery Commission framework is the Great Lakes Fish Health Committee. In its 20-year history, the Committee has been responsible for establishing a disease control policy, model program, and quarantine guidelines for the Great Lakes fishery that have fostered prevention and control efforts for infectious diseases that threaten the Great Lakes fishery.

The Great Lakes Fish Health Committee (formerly the Great Lakes Fish Disease Control Committee) was organized in 1973 by fish pathologists from federal, state, and provincial natural resource agencies. Representatives from commercial aquaculture groups in Canada and the U.S. joined the Committee in the early 1980s. In 1995, the first tribal representatives joined the Committee. By forming a Committee, the members empowered themselves to give collective guidance about fish diseases for the basin as a whole —guidance that informs and influences decisions made by individual agencies.

The Committee was formed at a time when the need for cooperative action to control fish disease was particularly urgent. In the 1970s, hatcheries began to rely increasingly on fish strains from outside the Great Lakes region for stocking purposes. While stocking increased the probability of spreading diseases already in the basin, the introduction of these non-native stocks risked introducing diseases from other parts of the country.

In order to address this potential problem, the Committee created the Great Lakes Fish Disease Control Policy which the Great Lakes Fishery Commission adopted in 1975. Through this policy, individual agencies have been encouraged to create regulations that prohibit the release and prevent the rearing of seriously diseased fish.

The Committee also developed a model program for disease control to help agencies implement the control policy. The program outlines a procedure for inspecting and classifying hatcheries. It recommends that a hatchery be inspected annually and be classified accordingly with upgrades allowed after two years of demonstrated freedom from a disease. If a disease is found within a hatchery, the model program recommends different responses depending on the range of the disease and its severity. For example, hatcheries with whirling disease classification are subject to more stringent requirements than a hatchery infected with bacterial kidney disease as whirling disease only occurs in a few locations in the Great Lakes, whereas bacterial kidney disease is ubiquitous.

In addition to the Fish Disease Control Policy and Model Program, the Fish Health Committee has developed quarantine guidelines for agencies intending to import a new broodstock of fish from outside the Great Lakes region. These guidelines contain explicit procedures to ensure the detection and containment of disease pathogens not currently in the Great Lakes. The Committee also produced "A Guide to Integrated Fish Health Management in the Great Lakes Basin" that identified an integrated and structured approach to fish health management at all operational levels.

These efforts to encourage cooperative action amongst agencies have had significant, practical results. Through cooperative action, agencies have adhered to a self-imposed ban on fish imports from the West Coast that do not meet stringent inspection requirements. Two severe diseases which affect salmonids on the West Coast—viral hemorrhagic septicemia (VHS) and infectious hematopoietic necrosis virus (IHNV) have been denied a foothold in the Great Lakes. Additionally, these agencies, having identified the responsible pathogens, have been successful in containing epizootic epitheliotropic disease (EED) and infectious pancreatic necrosis (IPN).

Not all decisions made by the Committee have been popular. Nevertheless, by wielding their collective professional judgment, member agencies of the Committee have been able to support one another in difficult decisions such as destroying diseased fish, limiting imports, and closing a hatchery.

The Committee's no-nonsense policies have earned it a reputation as an effective instrument for ensuring a healthy Great Lakes fish community. Policies that it has pioneered have been duplicated on both coasts of North America in an attempt to control diseases in those regions as well.

As the Committee enters its third decade, it will be faced with ongoing challenges, such as BKD mortalities in Lake Michigan, in addition to a suite of new challenges. In the past few years, a disease syndrome labelled Early Mortality Syndrome (EMS) has become a significant problem for certain Great Lakes hatcheries. Research coordinated in part by the Committee is focused on discovering both a short-term remedy and the root cause of this syndrome. In addition, recognizing that existing disease control policies are directed primarily at public agencies, the Committee continues to strive for better inclusion of the private sector. Such efforts will help ensure that the fishery will remain a valuable ecological and economic resource for the Great Lakes region. ≈

For more information on the Great Lakes Fish Health Committee, contact Joe Marcino, Great Lakes Fish Health Committee Chair, 612/296-3043.

Background Scene courtesy: NOAA

Highlights
FROM THE LAKE COMMITTEES

The 1980 Joint Strategic Plan for Management of Great Lakes Fisheries was signed by each of the state, provincial, federal, and tribal natural resource agencies in the Great Lakes basin. In this document, the Commission's individual lake committees were identified as the "major action arms for implementing the strategic plan and developing operational procedures." Since that time, the lake committees and the Council of Lake Committees have addressed a wide variety of issues critical to a healthy Great Lakes ecosystem. Their decisions have become part of the guiding frame-work for future fishery and environmental management in the basin. [a]

LAKE SUPERIOR COMMITTEE
Bill Horns, WDNR, Chair
Bob Thompson, OMNR, Vice-Chair

• adopted lake trout stocking criteria in areas where restoration has been successful.
• as requested, provided the Binational Program (Lake Superior LaMP) with aquatic ecosystem indicators and feedback on objectives and proposed format.

LAKE MICHIGAN COMMITTEE
John Trimberger, MDNR, Chair
Jim Francis, IDNR, Vice-Chair

• upon request of the Lake Michigan LaMP, will assist with LaMP ecosystem objectives to ensure consistency with the Lake Michigan Committee's fish community objectives.
• as requested by the Fish Chiefs, will develop a lakewide stocking and harvest strategy that will ensure that intensive management can be undertaken without threat to native species.

LAKE HURON COMMITTEE
Tom Gorenflo, COTFMA, Chair
Rod DesJardine, OMNR, Vice-Chair

• is finalizing the establishment of a lake trout refuge on Six Fathom Bank by asking the Lake Huron Law Enforcement Subcommittee for assistance in selecting enforceable perimeters.
• won Commission support for applying the Sustainability of Intensively Managed Populations in Lake Ecosystems (SIMPLE) model to help understand the long-term viability of food stocks for sport and commercial fish in Lake Huron. The Principal Investigator is Dr. Jim Bence of Michigan State University.

LAKE ERIE COMMITTEE
Ken Paxton, ODNR, Chair
Vacant, OMNR, Vice-Chair

• based on continuing population strength in walleye, recommended an allowable harvest of 9 million fish. Concern over the status of yellow perch led to a reduced recommended allowable harvest of 4 million pounds.
• accepted the final draft revision of Lake Erie fish community goals and objectives.

LAKE ONTARIO COMMITTEE
Bob Lange, NYDEC, Chair
Phil Smith, OMNR, Vice-Chair

• directed the Lake Ontario Technical Committee to continue to evaluate the feasibility of reintroducing native prey species.
• requested Great Lakes Fish Health Committee guidance with discussion on how to proceed with use of fish from hatcheries or watersheds infected with whirling disease.

THE COUNCIL OF LAKE COMMITTEES
Doug Jester, MDNR, Chair
Ron DesJardine, OMNR, Vice-Chair

• recommended tighter implementation of existing ballast management and regulations, and supported the development of new technologies for the shipping industry.
• expressed appreciation for health officials' efforts in attempting to reconcile Canadian and U.S. sportfish consumption advisories.
• expressed deep concern over proposed cuts in Great Lakes research capabilities, i.e. the Great Lakes Science Center (NBS), the Great Lakes Fisheries and Aquatic Sciences Laboratory (DFO), and the Great Lakes Environmental Research Laboratory (NOAA) . ≈

Recent Publications

Early changes in the fish community of Lake Ontario. April 1995. S.H. Smith. 38 p. (Tech. Rep. 60)

Fish-community objectives for Lake Huron. 1995. R.L. DesJardine, T.K. Gorenflo, R.N. Payne, and J.D. Schrouder. 38 p. (Special Publication 95-1)

Methods of modifying habitat to benefit the Great Lakes ecosystem. Canada Institute for Scientific and Technical Information, 1995. J.R.M. Kelso, and J.H. Hartig. 294 p.

Calendar

MEETING	DATE	LOCATION
IJC Concurrent Session on Exotic Species	25 Sept 1995	Duluth, MN
GLFC Interim Meeting	28 Nov 1995	Ann Arbor, MI
GLU Conference on Commercial Fishing	2-3 Dec 1995	Detroit, MI

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