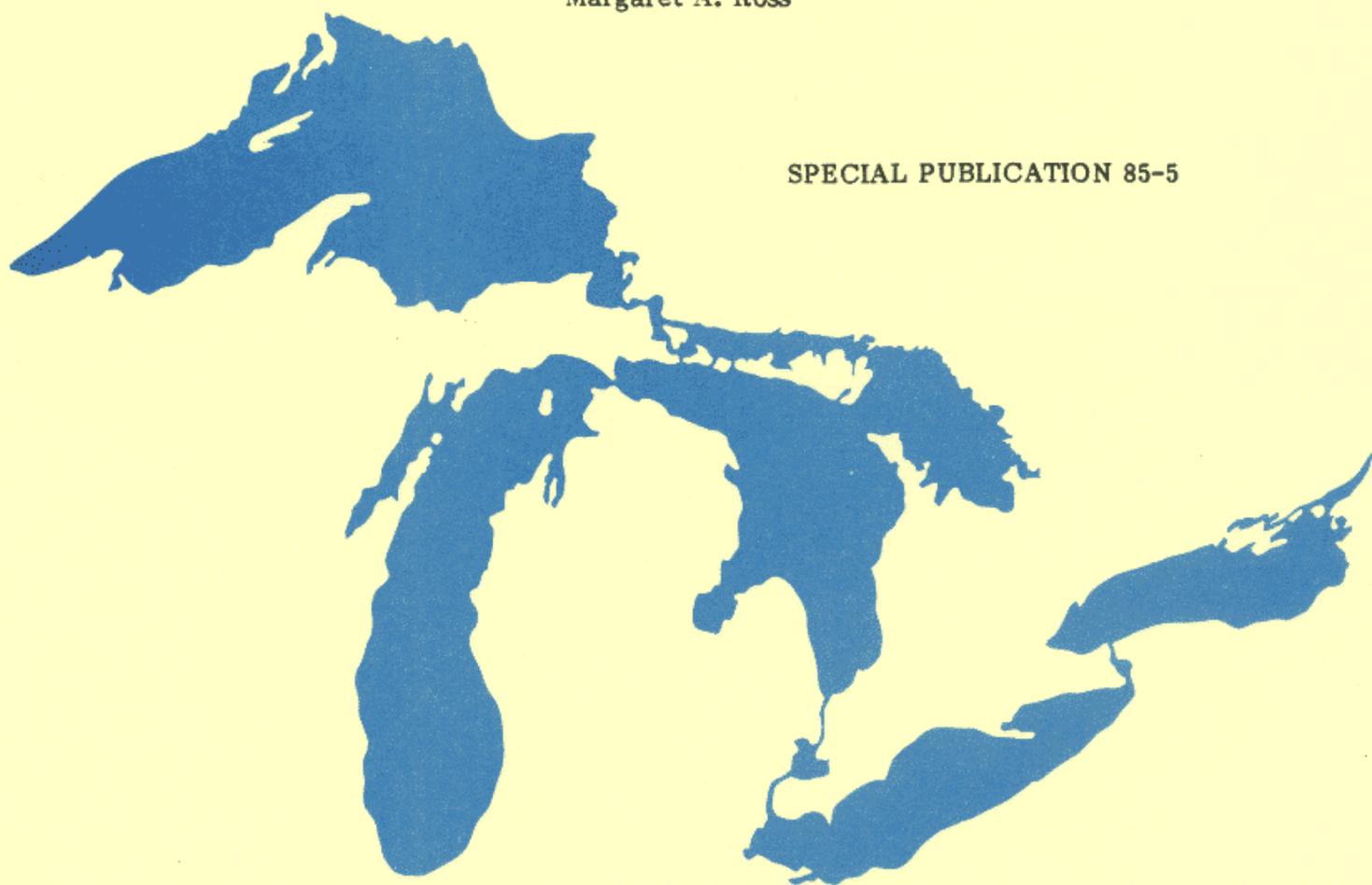


**GREAT LAKES LAW ENFORCEMENT/FISHERIES
MANAGEMENT WORKSHOP
(REPORT OF THE 21, 22 SEPTEMBER 1983 MEETING)**

Edited by
Wilbur L. Hartman
and
Margaret A. Ross

SPECIAL PUBLICATION 85-5



Great Lakes Fishery Commission

1451 Green Road
Ann Arbor, Michigan 48105

November 1985

The Great Lakes Fishery Commission was established by the Convention on Great Lakes Fisheries between Canada and the United States, which was ratified on October 11, 1955. It was organized in April 1956 and assumed its duties as set forth in the Convention on July 1, 1956. The Commission has two major responsibilities: first, develop coordinated programs of research in the Great Lakes and, on the basis of the findings, recommend measures which will permit the maximum sustained productivity of stocks of fish of common concern; second, formulate and implement a program to eradicate or minimize sea lamprey populations in the Great Lakes.

The Commission is also required to publish or authorize the publication of scientific or other information obtained in the performance of its duties. In fulfillment of this requirement the Commission publishes the Technical Report Series, intended for peer-reviewed scientific literature, and Special Publications, designed primarily for dissemination of reports produced by working committees of the Commission. Technical Reports are most suitable for either interdisciplinary review and synthesis papers of general interest to Great Lakes fisheries researchers, managers, and administrators or more narrowly focused material with special relevance to a single but important aspect of the Commission's program. Special Publications, being working documents, may evolve with the findings of and charges to a particular committee. Sponsorship of Technical Reports or Special Publications does not necessarily imply that the findings or conclusions contained therein are endorsed by the Commission.

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GREAT LAKES LAW ENFORCEMENT/FISHERIES

MANAGEMENT WORKSHOP

(REPORT OF THE 21, 22 SEPTEMBER 1983 MEETING)

Edited by

Wilbur L. **Hartman**¹

and

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November 1985

GREAT LAKES LAW ENFORCEMENT/FISHERIES

MANAGEMENT WORKSHOP

(REPORT OF THE 21, 22 SEPTEMBER 1983 MEETING)

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IMPROVING THE EFFECTIVENESS OF LAW ENFORCEMENT

IN GREAT LAKES FISHERIES MANAGEMENT

(REPORT OF THE 21, 22 SEPTEMBER 1983 MEETING)

BACKGROUND

Recent undercover investigations of fishery activities in the Lake Erie basin and the upper Great Lakes have revealed that substantial quantities of valuable fish have been illegally harvested and marketed during the past few years. An interagency "sting" operation focused on the western basin of Lake Erie from 1976-1980 revealed that nearly half a million pounds of walleye were illegally transported to markets outside of Ohio and suggested that at least as much more had been sold illegally within the state. More recently (1982-83), another interagency covert operation focused on Lakes Michigan and Superior intercepted 120,000 pounds of illegal lake trout being sold by 40 fishermen. This figure was estimated to represent approximately only 5% of the Chicago market, and suggests that as many as 2 million pounds of illegal lake trout from Lakes Michigan and Superior may be marketed annually in Chicago. The massive scale of these illegal withdrawals of valuable fish clearly rivals the harvest by legitimate fisheries in some areas of the Great Lakes.

Recognizing the implications to both individual and cooperative agency efforts to meet society's needs "for wholesome food, recreation, employment and income," the Council of Lake Committees appealed to the Great Lakes Fishery Commission for financial assistance in order to study the problem. The objective was to review current efforts to detect and curb illegal withdrawals, and to determine what cooperative measures might better allow Great Lakes fisheries agencies to manage the fishery for the benefit of all citizens. In view of the potential impact that illegal extractions might have on the progress of lake trout rehabilitation, and, because of the possibility of developing recommendations for joint or individual action by agency cooperators in keeping with the SGLFMP accord, the Great Lakes Fishery Commission agreed to support a workshop on the subject of law enforcement aspects of Great Lakes fishery management.

In September 1983, the Great Lakes Fisheries Law Enforcement Workshop was convened at AM Arbor, Michigan. Enforcement and management representatives from all federal, state, and provincial jurisdictions across the Great Lakes basin met in an unprecedented effort to pool the expertise of all Great Lakes law enforcement and fisheries management agencies in a common effort to examine institutional arrangements and develop or recommend methods and mechanisms to reduce the illegal harvest of Great Lakes fishes.

WORKSHOP GOAL

In order to maintain and restore viable fish resources in the Great Lakes in the face of increasing evidence of illegal extractions, the goal of this workshop was to examine institutional arrangements and develop/recommend methods and mechanisms to control illegal harvest.

PROCEDURES AND TOPICAL AGENDA

The goal statement above and the following topical agenda were the products of a planning session convened two months prior to the workshop. Participants in the initial planning exercise were responsible for developing the terms of reference for the workshop by identifying the issues relevant to law enforcement needs. These issues were subsequently aggregated into broad subject areas that could be addressed by groups of technical experts or specialists within the participating agencies. Six subject areas, thus defined, became the basis for the agenda of the workshop, and provided a focus for nomination of workshop participants.

The structure of the workshop included an introductory plenary session which sketched the overall problem in light of the findings of the earlier covert investigations. Participants were then assembled into six Task Forces that met in concurrent sessions to discuss in considerable scope and depth the following topics:

- Task Force 1. Interjurisdictional Intelligence Information Network
- Task Force 2. Documentation of Fish in Transport
- Task Force 3. Consistent Regulations and Commensurate Penalties
- Task Force 4. Covert Enforcement Operations
- Task Force 5. Overt Enforcement Operations
- Task Force 6. Fisheries Forensic Science

The specific objective for each Task Force was to produce a document identifying issues and the means for addressing problems related to Great Lakes fisheries law enforcement. Special emphasis was to be placed upon identifying opportunities for enhancing the effectiveness of law enforcement efforts.

The results of the deliberations of each Task Force, including recommendations for action, were presented and discussed at the final plenary session of the workshop. Modestly edited reports from each Task Force constitute the body of this report to the GLFC Council of Lake Committees.

WORKSHOP STEERING COMMITTEE

- Chairman: Don Woods - Minnesota Department of Natural Resources
- Members: Don Burger - U.S. Fish and Wildlife Service
- Eric Gage - Ontario Ministry of Natural Resources
- Will Hartman - U.S. Fish and Wildlife Service
- Lee Kernan - Wisconsin Department of Natural Resources
- Marg Ross - Great Lakes Fishery Commission
- George Spangler - University of Minnesota

REPORT OF TASK FORCE 1

INTERNATIONAL INTELLIGENCE INFORMATION NETWORK

Fish observe no state or international boundaries, and move freely back and forth between jurisdictions. Because of these transboundary movements of live fish, management efforts of all agencies must be coordinated to ensure optimum production and wise use. This involves the fisheries management agencies of the various states, provinces, and federal governments. Unfortunately, the best management efforts can be for naught, if the harvest cannot be controlled at the levels established by management agencies. This control involves a special side of management-ENFORCEMENT.

Following harvesting, these fish frequently cross state or international boundaries on their way to the consumer. The recent (1982-83) lake trout sting operation conducted by U.S. federal and state enforcement officers indicated the extent of the illegal harvest and its potential to negate the best management and rehabilitation efforts. For this reason, it is felt that the GLFC and its committees must continue to aid and encourage the natural resource agencies in curtailing unauthorized and illegal harvests.

The enforcement and management activities are both carried out by the same office in Ontario. The situation in the United States is that, although the management and enforcement staff may be in the same department, they are frequently in different administrative offices, reporting to different middle or senior level executives. The Fish and Wildlife Service also has enforcement duties and responsibilities.

In the past there has been limited coordination and exchange of information, not only between the management and enforcement staffs within agencies, but also between the enforcement staffs of the different agencies.

One of the most urgent needs for improved enforcement is for an Intelligence Information Network. No formal structure exists for agencies to share their intelligence information. In fact, various agencies do not even know what information is available from each other.

The discussion task force determined that the following two activities would greatly assist enforcement agencies:

1. Determine what intelligence information is available, how it may be accessed, and develop mechanisms whereby the information may be transmitted between participating agencies for law enforcement purposes.
2. Encourage participating agencies to acquire and provide information on request.

INFORMATION

At present, law enforcement agencies have little knowledge of the intelligence information available from other agencies, or even what information is gathered and maintained by them. A questionnaire could be used to canvass all the agencies to determine what information they have, and the availability of that information to others. A contact person within each agency could be identified.

In developing a questionnaire, the following needs should be addressed:

1. The type of information maintained by, or available from, each agency, e.g. prosecution records, daily catch reports, wholesale reports, sale transactions etc.
2. The contact person in each agency for disseminating each type of information.
3. Means of access, e.g. phone conversation, mail, personal visit etc.
4. Means of classifying the confidentiality of the information.

A suggested questionnaire was developed and a volunteer committee was struck for the initial compilation and analysis of the results into an information directory for distribution to the agencies.

The possibility of a centralized data bank was discussed, but due to logistical, financial, and confidentiality constraints, the idea was not considered feasible, at least at this time.

Recommendation: That the proposed questionnaire (with improvements, if suggested) be circulated to all the pertinent agencies, requesting that the form be completed and returned to the volunteer committee, to analyze and compile into an information directory for distribution to the agencies.

Volunteers for this job are Dale Gartley (OMNR) and Bruce Gustafson (MDNR).

KEEPING THE INFORMATION DIRECTORY CURRENT

The preceding recommendation, if adopted, would result in an information exchange mechanism. However, this needs at least an annual updating if it is to be current and of full value. The Council of Lake Committees would appear to be a logical body to ensure an annual update, perhaps through someone assigned from the Secretariat staff (GLFC).

Recommendation: That the Council of Lake Committees accept the role of ensuring that the Information Directory be maintained and updated annually.

ENFORCEMENT CONSIDERATIONS WITHIN THE INFRASTRUCTURE OF THE GLFC

The recent sting operations uncovered a scale of illegal harvest and sales of lake trout and walleye that certainly detracts from, and could preclude rehabilitation of those species. Because of the great importance of these fish, both to the stability of the fish community and to the health of the tourism economy, the GLFC has to be concerned.

Cooperation in enforcement matters between agencies can be assisted by the involvement of enforcement staff in GLFC Lake Committees and Council of Lake Committees meetings.

Recommendation: That law enforcement become an integral part of the Lake Committees and subcommittee structure, and that Lake Committee representatives on the CLC ensure that enforcement is incorporated in the Council's considerations and proceedings, and that one enforcement person from the United States and Canada be invited to attend each CLC meeting.

NEED FOR RECORDS OF CATCH AND SALE TRANSACTIONS

Currently, the “paper audit trail” is very difficult to follow in many jurisdictions. The recording of catch cannot in many, and possibly in most, states and the province be verified. Unless and until requirements for improved record keeping of catching, selling, buying, and transporting freshwater fish are made, the apprehension *of* those involved in illegal harvest and trade will be difficult, costly, and only occasional.

Recommendation: That the GLFC encourages regulatory agencies to improve record keeping and inspection requirements which pertain to people engaged in taking, buying, selling, and transporting freshwater fish.

MEMBERSHIP

Chairman: Dave McMullen - U.S. Fish and Wildlife Service
Members: Ralph Christensen - Wisconsin Department of Natural Resources
Bruce Gustafson - Michigan Department of Natural Resources
Mike Lucckino - Michigan Department of Natural Resources
Bob Zasadny - Great Lakes Indian Fishery Commission
Rapporteur: Peter Jacobson - Great Lakes Indian Fishery Commission
Steering Committee Representative:
Eric Gage - Ontario Ministry of Natural Resources

REPORT OF TASK FORCE 2

DOCUMENTATION OF FISH IN TRANSPORT

The illegal harvest of high-value fish from the Great Lakes has become so substantial and widespread that the rational allocation of the legal harvest no longer controls the dimensions of the fish populations. Until the harvest can be controlled to acceptable numbers, the rehabilitation of fish populations in the Great Lakes will be seriously impeded. The task force recognized that traffic in illegal fish must be controlled so that:

1. Lake trout rehabilitation can be achieved as quickly and efficiently as possible;
2. Economic and other public benefits will be increased from the legal commercial and sport fisheries; and
3. Fishery agencies can effectively regulate the harvest of fish through quotas when necessary.

The task force also recognized that certain basic policies and activities must be approved and implemented by the responsible agencies if the control of the illegal fisheries is to be successful. The basic need addressed by this task force was how to provide the capability for law enforcement and fisheries staff to identify and effectively track commercially caught fish from the net to the final purchaser at the local, interstate/provincial and international level.

RECOMMENDATIONS

1. Cooperation - All must cooperate to the fullest degree, including providing funds, manpower and equipment necessary to carry out enforcement activities on a lakewide-basinwide scope.
2. Tagging - All trout, Pacific salmon and walleyes commercially transported or processed in the Great Lakes jurisdiction must be tagged by the individual fishermen before being docked, and tags must remain on the fish until sale for final consumption. Tags should be supplied by every agency which is responsible for regulating a fishery.

The task force feels that this is the key to controlling illegal traffic in these high value fish species.

The task force feels that mandatory tagging of these species is the most practical and cost effective method of controlling illegal harvest, transport, and sale, and will provide accurate harvest information for management. It will be effective in controlling the illegal sale of these species from the sport fishery as well as the commercial fishery.

It is felt that a tagging requirement, with centralized tagging records and normal documentation of sales, would provide a tracking record from producer to consumer. Responsible agencies could note traffic of various tagged fish through their jurisdictions.

One of the advantages to the use of tags is that it is a tested, successful technique that has been effectively applied in the fur trade and by some states in quota-controlled fisheries.

For mandatory tagging to be most effective, some basic tenets must be observed:

- a. The cooperation of all states, tribes and Ontario in requiring mandatory tagging of these fish species in their respective fisheries, preferably initiated at the same time. Other agencies outside the Great Lakes that administer commercial harvest of these species should be encouraged to require tagging as well to avoid confusion where markets overlap.
 - b. All Great Lakes agencies should adopt regulations that all commercially caught fish of these species must be tagged at the point of origin (or landing) before being brought into their respective jurisdictions.
 - c. This tagging requirement would not include the physical tagging of individual pieces of smoked or chunked fish of these species.
 - d. Tags shall remain fastened to fresh or frozen fish until sale to the final consumer. If sold as single filets, half of the tag shall accompany each packaged filet.
 - e. Tagging systems need to be developed to allow fileting without total separation of filets until final sale or packaging for final sale. Tags fastened around the tail (caudal peduncle) and double numbered tags were suggested.
 - f. Tagged fish must be packaged and transported in such a way that tags are readily accessible for inspection and identification.
 - g. Tags should identify species, issuing agency, fisherman issued to, and year of use. Cost of tags could be included in license fees.
3. Information Exchange - There must be a central information/data clearing house. Unless all agencies responsible for Great Lakes fisheries resources cooperate fully in providing information to each other to control illegal fishing- and transport and sale of fish at the intrastate/provincial, interstate/provincial and international level, there will be areas where the illegal fishery will continue to flourish and even increase as outlets for 'laundered' fish increase. This could prevent attaining lake trout rehabilitation in some or all Great Lakes, and seriously reduce legitimate benefits to the sport and commercial fisheries. If an effective surveillance system is implemented, it could reduce actual field time and enforcement costs required to curb the illegal fisheries.

Priority information needs are:

- a. To provide a computerized phone-accessible data base of all tagged fish from the Great Lakes for use by all fish management and enforcement agencies.

- b. A list of licensed wholesale fish dealers, buyers, and companies involved with Great Lakes fish stocks.
 - c. A list of commercial fishing licensees and associated data.
 - d. A directory of personnel active in the enforcement/fisheries management program.
4. Catch Statistics - Management agencies must make their licensed commercial fishermen provide accurate monthly catch reports. Historically, Great Lakes commercial fishermen, for several reasons, have submitted inaccurate catch figures, particularly for high value species, that we suspect are usually much lower than the poundage actually caught and sold. Inaccurate reporting makes management of the legal fishery and quota management ineffective and complicates control of illegal fisheries.

This task force feels that a system that requires individual licensees to carry the report forms while fishing and write down an estimate of the catch by species before landing provides the best potential for enforcement of accurate reporting, short of tagging. Commercial licensees should be required to report the disposition of their catches, including the names of buyers, except for retail sales of small quantities.

5. Receipt System - There may be occasions when a receipt system would be desirable to provide a paper trail for some untagged species. It is not our intention to eliminate any existing paper trails (receipt systems etc.). There is a need for monthly reports on all species. However, tags on specific species would provide more accurate and complete data on these species. The tag system, with rapid computer recall, provides the enforcement officer/fish manager/biologist with specific information on who, when, where, and what happens to the tagged species.

Tagging will provide comparative checks through a three-copy receipt document (sequentially numbered): one copy to remain with the fisherman, one copy to accompany shipment, and one copy to the management agency. This mode of documentation would be required for all sellers of freshwater fish within the agency's jurisdiction.

6. Sales Records - All wholesale fish dealers should be licensed and required to file monthly reports on their sales, purchases and transfers. At the present time, when an illegal or legal fish reaches a wholesaler it can no longer be accurately tracked. The wholesaler should be required to document all transactions to make it possible for enforcement personnel to track fish through the various wholesalers to the retailer, and in the case of tagged fish, to the ultimate consumer.
7. Bio-Tracking - Use of contaminant levels, fish scales, electrophoretic data, micro-tagging and physiological characteristics may also be used to identify the specific source of transported fish. This task force requests the Forensic Task Force to address this issue (which it did).
- a. Lake Committees - All Lake Committees should include a law enforcement subcommittee in their organizational structure. Law enforcement has been recognized as a major necessary part of successful fisheries management in

the Great Lakes. The Lake Committees are the interagency coordinating mechanisms for fishery agencies. Law enforcement personnel should be included as an integral part of the Lake Committees if law enforcement is to achieve full effectiveness in the Great Lakes.

9. Council of Lake Committees - There should be two law enforcement advisors to the Council of Lake Committees, one each from the U.S. and Canada. The Council of Lake Committees covers multilake problems, one of which is illegal harvest, transport, and sale of *fish*. Law enforcement representatives from U.S. and Canada will be essential as advisors to the CLC when addressing law enforcement issues on a multilake level.
10. Interagency Cooperation - Cooperation and coordination between fishery, law enforcement and tax agencies might be desirable under certain situations. Commercial fishermen's monthly catch records are considered confidential and are not open to public inspection. However, when there is proof that a fisherman is involved in illegal fishing operations, the cooperation of tax agencies may be desirable to resolve the problem.
11. Documentation - All U.S. and Canadian fishery agencies should be canvassed to obtain information on how they document their commercial fisheries, including licensees, catch, transport of the catch, and sales.

The most efficient system of documenting and reporting the catch, transport, and sales of fish is essential to an effective program to curb the illegal fishery in the Great Lakes. Therefore, all U.S. and Canadian fishery agencies should be contacted to determine what system(s) they use. A task force member (Wisconsin's Dave Ives) has agreed to make these contacts. Then, a model system will be developed for consideration by Great Lakes agencies.

MEMBERSHIP

Chairman: Bill Pearce - New York Department of Environmental Conservation
Members: Jerry Austin - New York Department of Environmental Conservation
Tom Busiahn - Great Lakes Indian Fishery Commission
Dick Hoaglund - Great Lakes Indian Fishery Commission
Jim Shepherd - Ontario Ministry of Natural Resources
Rapporteur: Dave Ives - Wisconsin Department of Natural Resources
Steering Committee Representative:
Don Woods - Minnesota Department of Natural Resources

REPORT OF TASK FORCE 3

CONSISTENT REGULATIONS AND COMMENSURATE PENALTIES

It has become apparent in recent law enforcement initiatives, such as Operation Gillnet, that increasingly sophisticated and organized illegal operators in the fishing industry are utilizing and unduly benefiting from weaknesses in the law enforcement fabric of the Great Lakes. These weaknesses include a lack of uniformity in Great Lakes fishery management regulations, a less than optimal level of cooperation among jurisdictions in law enforcement, and a lack of information on the magnitude of the cumulative illegal harvest. This absence of information means that support may not be available for needed intensified policing of the harvest and application, where necessary, of penalties that may serve as deterrents.

Agreements among state, tribe, and provincial jurisdictions, backed by federal legislation such as Canada's Fishery Act, the U.S. Lacey Act, and the Canada/U.S. Convention on Great Lakes Fisheries may be used to achieve the desired and necessary level of dialogue and cooperation. Of primary importance are initiatives which would evaluate regulations of various jurisdictions and identify opportunities for greater coordination. Essential to increasing effectiveness of law enforcement in the Great Lakes is the ability to identify fish harvested in various jurisdictions and to distinguish between legal and illegal catches, plus a mechanism which will allow greater cooperation and communication among management agencies.

Society must be encouraged to examine their assumptions regarding illegal commercialization of the Great Lakes fishery, in particular its magnitude and cost to society, and the nature and identity of participants. This may facilitate a sense of common ownership of the resource, support both financial and moral (e.g. in Michigan's "Report All Poachers" program) for law enforcement efforts, and support for penalties commensurate with criminal gains. Public pressure and censure may be the most effective deterrent.

RECOMMENDATIONS

Regulation of the Great Lakes Fishery

1. Efforts to standardize statutes and regulations pertaining to the Great Lakes fishery are strongly endorsed when and where possible.
2. Concise plain language summaries of pertinent fishery regulations of each jurisdiction should be compiled and distributed to cooperating law enforcement agencies.
3. More extensive and uniform documentation on the purchase and sale of fish should be required by agencies, e.g. the tagging of legally caught fish. The specific approach employed by each agency for various fisheries may by necessity vary, but it is hoped that consultation among management agencies will allow increasing coordination and standardization. High value, quota-regulated species such as lake trout are the most appropriate candidates for tagging.

4. Regulations governing the charter boat fishery should be reevaluated in light of that fisheries' growing commercialization and increasing impact on the resource.

Enforcement of Fishery Regulations

5. Greater use of available statutes, for example the U.S. Lacey Act and the U.S. deputy game warden authority, is urged. Agencies should seek legal evaluation of the Lacey Act for its further possible utilization as a law enforcement tool, and Ontario should seek enactment of legislation providing similar restraints on interprovincial and/or international movement of illegally harvested fish.
6. Agencies should each appoint a staff member to receive and handle inquiries from other jurisdictions related to law enforcement.

Coordinated and Commensurate Penalties

7. Penalties for violation of fishing regulations should be standardized among agencies, and brought into line with the seriousness of the offense. This would include catch and equipment seizures, jail terms, restitution, fines, license revocation or suspension, and public censure.
 - a. A basinwide penalty point system should be established that would recognize and accumulate violations of each jurisdiction's regulations, rendering an individual subject to license suspension and ineligibility for obtaining a commercial fishing license in any jurisdiction. Such a system could be patterned after those already in use by states and provinces for licensing of automobile operators.

Support for Enforcement of Fishery Regulations

9. Agencies are encouraged to initiate a public information program to heighten public awareness of the problems faced in fishery management and law enforcement.
10. It is strongly recommended that the Great Lakes Fishery Commission advise agencies of the need to provide sufficient budget and manpower in support of enforcement activities.

MEMBERSHIP

Chairman: Ed Manhart - Pennsylvania Fish Commission
Members: Ken Forness - Chippewa/Ottawa Treaty Fishery Management Authority
Dave Gates - Illinois Department of Conservation
Doug Howell - Ontario Ministry of Natural Resources
Lee Lisenbee - U.S. Fish and Wildlife Service
Clint Parish - Chippewa/Ottawa Treaty Fishery Management Authority
Rapporteur: Henry Buffalo - Great Lakes Indian Fishery Commission
Steering Committee Representative:
Marg Ross - Great Lakes Fishery Commission

REPORT OF TASK FORCE 4
COVERT ENFORCEMENT OPERATIONS

Law enforcement is a vital tool in the management of our fish and wildlife resources, and covert operation is a proven effective part of the law enforcement effort. It is recommended that ongoing covert operations should be maintained and new covert operations be initiated on the Great Lakes. The major objective of a covert operation is to investigate, to penetrate the organization, and to apprehend commercial and habitual violators who have evaded detection by traditional means.

In recent years two major multiagency operations have been conducted on the Great Lakes that have given member agencies valuable intelligence on just how extensive the illegal harvest of fish has been. The walleye operation in Lake Erie divulged information about additional harvest that was previously only speculation. The tremendous penalties that resulted most certainly should be a future deterrent. The five state fish stings produced facts on marketing and supply sources that were previously unknown.

GOAL

The goal is to reduce the illegal harvest through effective use of covert law enforcement investigations so that this threat to the Great Lakes fisheries resources will be significantly reduced.

STRATEGY TO ACHIEVE THE GOAL

1. Gain universal acceptance of the need for covert operations. This would be accomplished by demonstrating that the very nature of illegal fishing violations requires the use of covert methods due to the limitations of traditional enforcement. The illegal harvest is interstate and international in scope. The extremely large geographic area of the Great Lakes is patrolled by an inadequate number of personnel whose diverse duties leave insufficient time to devote to this enforcement. The violating groups use sophisticated methods including equipment and accounting. It is a closed fraternity often comprised of families and groups who are steeped in tradition. Covert operations using fewer personnel can complement traditional enforcement by targeting major violators and reducing the marketing opportunities for illegal fish. The results will identify the true extent of the illegal harvest which will assist management in reaching their objectives.
2. An agreement would be obtained from all member agencies to participate in joint covert activities involving Great Lakes fisheries. This would be achieved by having each agency commit personnel, assure their proper training and provide their appropriate share of funding. The possible legal problems of exchanging key personnel between agencies would be addressed and, hopefully, solved so that personnel of specific expertise could be utilized in an operation regardless of its geographic location.
3. Formal and informal meetings would be held and attended by representatives of all agencies. Agencies will share information, determine methods to be used, set priorities, discuss constitutional limitations and inventory technical skills and equipment in anticipation of their exchange between agencies.

4. Implementation of Specific Covert Operations
 - a. The roles of each participating agency will be clearly established and a memo or agreement will be composed and endorsed by all.
 - b. An enforcement objective will be set *for* the specific operation to be undertaken, a chain of command established and the furnishing and allocation of funds and resources will be decided.
 - c. Intelligence dissemination will be limited to a "need to know" basis.
5. Conclusion of the Investigation

When it has been mutually agreed that the operation has reached its culmination, a plan for raid and prosecution will be developed and following prosecution, appropriate information gained will be compiled and disseminated to the member agencies, and to the news media.

Achievement of this goal will assist in management programs of member agencies by providing more information on total harvest, by improving populations through reduction of the illegal harvest, and the positive publicity received will provide a deterrent to future violations.

RECOMMENDATIONS TO THE COMMISSION

1. The Great Lakes Fishery Commission incorporate law enforcement within the GLFC structure, e.g. as invited advisors to Lake Committee meetings.
2. The CLC endorse covert operations as a valuable tool of law enforcement management.
3. The CLC encourage all member agencies to develop covert capabilities.
4. The CLC lobby for increased funding and manpower for covert operations.
5. The CLC appoint a standing committee or subcommittee comprised of active law enforcement personnel from all member agencies that will meet annually, and at other times as the need arises.

MEMBERSHIP

Chairman: Don Hastings - Indiana Department of Natural Resources
 Members: Jim Ekdahl - Michigan Department of Natural Resources
 Bob Hodge - Minnesota Department of Natural Resources
 Jerry Ladd - Ohio Department of Natural Resources
 Rolland Lee - Wisconsin Department of Natural Resources
 Gary Moore - Pennsylvania Fish Commission
 Phil Ohmit - Indiana Department of Natural Resources
 Andrew Pierce - U.S. Fish and Wildlife Service
 Bob Wells - Ontario Ministry of Natural Resources
 Rapporteur: Gerry Austin - New York Department of Environmental Conservation
 Steering Committee Representative:
 Don Burger - U.S. Fish and Wildlife Service

REPORT OF TASK FORCE 5

OVERT ENFORCEMENT OPERATIONS

DEFINITION

The day-to-day operation of officers in a department or agency, whether uniformed or not.

OUTLINE OF SIX PROBLEM AREAS AND POSSIBLE SOLUTIONS

Problem 1. Lack of Communication and Cooperation Between Agencies

1. Standardize throughout the region investigative report content and format:
 - a. Specifically, suspect personal data, suspect method of operation
 - b. Standard form or report throughout Great Lakes fishery for distribution through key personnel to other agencies (e.g. Ontario form)

Problem 2. Difficulty of Monitoring and Maintaining Accountability of Harvested Fishery Resource from Point of Origin to Destination (e.g. Fisherman, Wholesaler, Retailer)

1. Establish, by regulation, laws that require accurate recordkeeping and accountability.
 - a. Fisherman catch-sale reports, wholesale-retail, buy-sell reports.
 - b. Apply more enforcement emphasis to wholesale records as a check on fisherman catch and sale.
2. Establish by regulation, access by law enforcement officers to all mandated records, invoices, and other pertinent data.
3. Develop better documentation, by the overt officer, of commercial fishing activities through routine checks of license, boats, and records, observation and informants.
4. Develop informants, especially those in a position to obtain relevant and updated information.
5. Pass on all information to other enforcement personnel and have it accessible to other agencies with related problems or incidents.

Problem 3. Accountability of Interstate Transported Fish

1. Standardization of required documentation throughout the Great Lakes fishery when interstate transportation is involved.

2. State or provincial specific regulations regulating all fish being transported into that state or province.

Problem 4. Need for an Interagency Enforcement Team

1. Each agency select personnel who can be quickly mobilized to form an effective interstate/interagency response team, and establish legislation to allow for the deputization *of* personnel on response team or adjacent jurisdictional agencies.

Problem 5. Some Overt Officers Lack Commercial Fish Enforcement Knowledge

1. Training workshops or updates.
2. Actual on water experience with knowledgeable officers.

Problem 6. Lack of Enforcement Personnel to do Effective Job

1. Use of specific and detailed enforcement preplanning, and assign manpower to assigned areas for the most efficient use of personnel.
2. Establish work teams in geographic areas to increase officer motivation and efficiency.

MEMBERSHIP

- Chairman: Terry Humberstone - Ontario Ministry of Natural Resources
Members: Walt Evans - Ohio Department of Natural Resources
Roy Fitzsimmons - Illinois Department of Conservation
Emerson Gorham - Pennsylvania Fish Commission
Ken Graves - Great Lakes Indian Fishery Commission
Mark Shepherd - Ontario Ministry of Natural Resources
Gerry Spaziani - New York Department of Environmental Conservation
Rapporteur: Bill Eger - Chippewa/Ottawa Treaty Fishery Management Authority
Steering Committee Representative:
Lee Kernen - Wisconsin Department of Natural Resources

REPORT OF TASK FORCE 6

FISHERIES FORENSIC SCIENCE

Many years and millions of dollars have been spent by state, provincial and federal resource agencies to control parasitic sea lamprey and restore abundant populations of lake trout, walleyes, and other valuable sport and commercial fishery resources in the Laurentian Great Lakes. The success of this interagency program is evidenced by the resurgence of healthy resources and fisheries therein in many areas of the Great Lakes-with an economic value approaching \$2 billion annually. However, recent sting operations by state and federal enforcement officers aimed at documenting and arresting some of those persons involved in the illegal capture and sale of Great Lakes fish have uncovered a massive scale of operations that in some areas rivals harvests by legitimate fisheries. To make law enforcement efforts more effective, especially with respect to the development of supportive evidence, credible in court, there is an urgent need for wider application across the Great Lakes basin of fisheries forensic science. We need to be able to assist law enforcement agents by acquiring information/expertise/methodology from our colleagues across the country, or promoting further research, to aid in answering such fundamental questions as:

1. How long has a lake trout, walleye, or whitefish been dead?
2. What lake or lake region did a lake trout, walleye, or whitefish come from?
3. Is a filet from a lake trout, salmon, whitefish, walleye, or some other species?

Much discussion ensued within the task force regarding: (1) the use of electrophoresis for identifying fish filets to species-very likely; (2) the use of contaminant concentrations to identify the lake, possibly the lake region or origin for lake trout, walleye, and whitefish; (3) chemical and morphological examination of fish scales; and (4) research on physiological changes and their rate in fish tissue following death, etc. It became evident that we need to tap expertise in fisheries forensic science across the country and develop a communications/data retrieval system.

RECOMMENDATIONS

1. To encourage dissemination of information within the field of fish forensic science, to enhance effectiveness of law enforcement efforts, and to stimulate research and development of new techniques in the field, we endorse and recommend that a clearing house and repository of information be established and maintained to advance the state of the art and improve communications in fish forensics. This data bank would provide bibliographic updates, listings and centers of expertise, names of forensic specialists, sources for test reagents and field kits, and other advice as developed. We invite the Secretariat of the Great Lakes Fishery Commission to consider lending its offices and support to this worthy endeavor.
2. A letter/questionnaire has been drafted that could be sent to scientists across North America involved in fish forensics to determine their interest and capabilities in this field. Also a letter has been drafted that we recommend be sent to agency heads to precede the above mailing, announcing our objectives and requesting their cooperation in allowing us to obtain pertinent data through questionnaires sent to their employees.

3. We also recommend and urge that periodic workshops be convened to foster fisheries forensic science with emphasis on: (1) the practical application of field and laboratory techniques; (2) guidelines for collecting and preserving evidence; (3) guidance vis a vis court appearances; and (4) the marking of fish.

MEMBERSHIP

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Paul Greenwalt - Indiana Department of Natural Resources
Rich Hess - Illinois Department of Conservation
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Rapporteur: Dan Bumgarner - U.S. Fish and Wildlife Service
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SYNOPSIS

The Great Lakes Law Enforcement/Fishery Management Workshop, in and of itself, was an unqualified success. For the first time ever, state/provincial/federal law enforcement officers from all corners of the Great Lakes basin, representing all agencies that share jurisdiction and stewardship of the extremely valuable sport and commercial fishery resources in the five Great Lakes, met, shared information, discussed common problems, and established contacts for future cooperation and coordination. Beyond that more than sufficient justification for convening the workshop, all attendees participated in six Task Forces that addressed in considerable scope and depth: (1) development of an interjurisdictional intelligence information network; (2) documentation of illegal fish harvest; (3) consistent regulations and commensurate penalties; (4) covert enforcement operations; (5) overt enforcement operations; and (6) fisheries forensic science. Reports of the deliberations and recommendations of those Task Forces form the body of this report.

A statement that Bill Pearce (New York Department of Environmental Conservation) made at the kickoff plenary session stressed the sense of urgency in solving the problem of massive illegal harvests of valuable fishery resources, and the absolute necessity for teamwork, not only between law enforcement agencies across the Great Lakes basin, but between law enforcement officers and fishery managers.

Within the individual six Task Force reports are a number of recommendations for consideration by agencies individually and collectively, as well as GLFC Lake Committees and the Council of Lake Committees. Considerable thought and discussion by the participants were spent in developing them. It seems redundant to repeat all of them here, yet, we do want to briefly highlight some of those that had broad implications or consensus across most, if not all, Task Forces:

1. Law enforcement efforts must be better focused in order to more effectively curb illegal harvest in the Great Lakes fishery. This focusing might be accomplished through better description by managers of problem areas and goals for the Great Lakes fishery and through development of a forum in which joint coordinated approaches to common problems may be considered.
2. The increased effectiveness of a focused, coordinated approach will depend on the level of support afforded by concerned agencies. Initially, much flexibility will be required of agencies in assignment of funds and manpower and in the development of supportive regulations and procedures.
3. Public support is increasingly recognized as essential to the success of any law enforcement program. Every effort should be made to engender a sense of ownership and responsibility for the resource and to incorporate where possible citizen participation and support in managing Great Lakes fisheries.
4. Training opportunities are needed to develop skills for activities such as overt enforcement in the field, covert operations, and gathering evidence for forensic analysis.
5. Many recommendations addressed the improvement of documentation and inspection procedures. A review of current record-keeping practices of Great Lakes fisheries agencies was suggested.

6. There was much interest in facilitating information sharing among agencies. Recommendations ranged from a simple identification of a contact person for each agency to establishment of a central data bank. Information needs such as documentation of available forensic expertise, kinds of intelligence information held by each agency, and highlights of each jurisdiction's regulations were covered.
7. Participants were greatly concerned that the expertise of the various agencies be deployed as effectively as possible on a regional basis. Among the specific recommendations were improved interjurisdictional access to specialists in matters such as forensics and covert activities, creation of multi-agency "response" teams and teams with responsibility for discrete geographical areas, and greater use of mechanisms such as the Lacey Act, cross-deputization and cooperative control of illegal marketing of Great Lakes fish.
 - a. A major concern of workshop attendees was that an enforcement forum be established under the umbrella of the GLFC. The forum would permit a more focused approach to law enforcement needs, a closer working relationship with Great Lakes fishery managers, and a regional approach to the problem of illegal capture, transport, and sale of Great Lakes fish. Recommendations for formation of subcommittees and for appointment of advisors to individual Lake Committees and the Council of Lake Committees were submitted for consideration.

Where do we go from here? The potential impact of illegal activities on legitimate users of the Great Lakes fishery has been recognized. Evident at this workshop were enthusiasm and initiative in among law enforcement officers for addressing enforcement problems in the Great Lakes. In order to harness this capability on a continuing basis, a forum or structure within Lake Committees and/or the Council of Lake Committees is suggested. The purpose of such structure(s) would be

- to attract the attention of law enforcement officers to the problems and needs of the Great Lakes fishery,
- to allow incorporation of law enforcement considerations into joint programs under the Strategic Great Lakes Fishery Management Plan,
- to develop regional cooperation and coordination in addressing shared law enforcement concerns for the Great Lakes,
- to draw needed levels of support from the public and agencies for law enforcement programs designed to protect the resources and the rights of the legitimate user.

GREAT LAKES LAW ENFORCEMENT / FISHERIES

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(REPORT OF THE 21, 22 SEPTEMBER 1983 MEETING)

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SPECIAL PUBLICATIONS

- 79-1 Illustrated field guide for the classification of sea lamprey attack marks on Great Lakes lake trout. 1979. E. L. King and T. A. Edsall. 41 p.
- 82-1 Recommendations for freshwater fisheries research and management from the Stock Concept Symposium (STOCS). 1982. A. H. Berst and G. R. Spangler. 24 p.
- 82-2 A review of the adaptive management workshop addressing salmonid/lamprey management in the Great Lakes. 1982. Edited by J. F. Koonce, L. Greig, B. Henderson, D. Jester, K. Minns, and G. Spangler. 40 p.
- 82-3 Identification of larval fishes of the Great Lakes basin with emphasis on the Lake Michigan drainage. 1982. Edited by N. A. Auer. 744 p.
- 83-1 Quota management of Lake Erie fisheries. 1983. Edited by J. F. Koonce, D. Jester, B. Henderson, R. Hatch, and M. Jones. 39 p.
- 83-2 A guide to integrated fish health management in the Great Lakes basin. 1983. Edited by F. P. Meyer, J. W. Warren, and T. G. Carey. 262 p.
- 84-1 Recommendations for standardizing the reporting of sea lamprey marking data. 1984. R. L. Eshenroder, and J. F. Koonce. 21 p.
- 84-2 Working papers developed at the August 1983 conference on lake trout research. 1984. Edited by R. L. Eshenroder, T. P. Poe, and C. H. Olver.
- 84-3 Analysis of the response to the use of "Adaptive Environmental Assessment Methodology" by the Great Lakes Fishery Commission. 1985. C. K. Minns, J. M. Cooley, and J. E. Forney. 21 p.
- 85-1 Lake Erie fish community workshop (report of the April 4-5, 1979 meeting). 1985. Edited by J. R. Koonce and R. B. Kenyon. 58 p.
- 85-2 A workshop concerning the application of integrated pest management (IPM) to sea lamprey control in the Great Lakes. 1985. Edited by G. R. Spangler and L. D. Jacobson. 97 p.
- 85-3 Presented papers from the Council of Lake Committees Plenary Session on Great Lakes predator-prey issues, March 20, 1985. 1985. Edited by R. L. Eshenroder. 134 p.
- 85-4 Great Lakes fish disease control policy and model program. 1985. Edited by J. G. Hnath. 24 p.

