

1992

# ANNUAL REPORT OF THE GREAT LAKES FISHERY COMMISSION

## 1992 NEWS BRIEFS

- ▶ The commission published its *Strategic Vision of the Great Lakes Fishery Commission for the Decade of the 1990s* detailing priorities and milestones for healthy Great Lakes ecosystems, sea lamprey control, and strengthening partnerships.
- ▶ The U.S. General Accounting Office (GAO) released a report concluding that the commission supports an ecosystem management approach to its programs. The GAO recommended that the commission develop a comprehensive research strategy to fully support an increased alternative control research budget.
- ▶ Carlos M. Fetterolf, who served as GLFC Executive Secretary for 16 years, retired. Bob Beecher was appointed as new Executive Secretary.

## COMMISSIONERS

### Canadian Section:

F. William H. Beamish  
Gail Beggs  
Cheryl Fraser  
Paul Sutherland, Chair

### U.S. Section:

C.D. (Buzz) Besadny, Vice-Chair  
James Cady  
J. Michael Hayden  
Charles C. Krueger  
Harry H. Whiteley, alternate

## SEA LAMPREY MANAGEMENT AND RESEARCH

- ▶ Lake Erie was declared a full operational component of the commission's sea lamprey control program.
- ▶ The commission approved funds to begin planning of an innovative electrical barrier on the Pere Marquette River. The Pere Marquette barrier was to be modeled after the successful electrical barrier on the Jordan River.
- ▶ The commission approved funds for Dr. Peter Sorenson's (U of Minn) project to determine why the sea lamprey olfactory system is extremely sensitive to bile acids.
- ▶ Dr. Barbara Zielinski (U of Windsor) received funds to study developmental changes in embryonic, larval, juvenile, and adult lamprey olfactory receptor cells.
- ▶ The commission provided funds for the design of an improved trap at the Great Lakes Power site on the St. Marys River, in hopes of creating a source of male lampreys for the Sterile Male Release Technique (SMRT) program.
- ▶ Agents successfully field tested the SMRT program in Lakes Superior and Huron.

## FISHERY MANAGEMENT, ENVIRONMENT, AND RESEARCH

- ▶ The commission agreed with the Habitat Advisory Board's plans for a major workshop on Habitat Restoration, the publication of the Habitat Criteria document, and the publication of the Tumor Manual.
- ▶ The commission wrote to the governments of Canada and the United States concerning ruffe in Lake Superior. In the letter, the commission urged that priority be given to studying the biology and distribution of ruffe, to researching chemical and physical means of suppression, to preventing its spread to other watersheds, and to developing a sterile male release technique. The commission also urged the two countries to move quickly to establish a coordinated approach to containing and managing ruffe in North America.

## PUBLICATIONS

- ▶ *Strategic Vision of the Great Lakes Fishery Commission for the Decade of the 1990s.*
- ▶ *Toxicity of [Bayer 73] to Three Genera of Larval Lampreys*, by Scholefield and Seelye. (TR 57)
- ▶ *Effects of pH on the toxicity of TFM to Sea Lamprey Larvae and Nontarget Species During a Stream Treatment*, by Bills and Johnson. (TR 57)
- ▶ *Effects of the lampricide [TFM] on Dissolved Oxygen in Aquatic Systems*, by Dawson, Johnson, and Sullivan. (TR 57)
- ▶ *Surficial Substrates and Bathymetry of Five Historical Lake Trout Spawning Reefs in Near-Shore Waters of the Great Lakes*, by Edsall, Brown, Kennedy, and French III. (TR 58)
- ▶ *Ruffe in the Great Lakes: A Threat to North American Fisheries.*

# COMMITTEE ACTION, RESOLUTIONS, AND REPORTS

## *LAKE COMMITTEES*

- ▶ The **Council of Lake Committees** endorsed the management plan for ruffe in the Great Lakes and added that "surveillance of currently uninfested river mouths are not a high priority if eradication techniques are not available; treatment should only be undertaken with a reasonable expectation of eradication; trawling would probably be inefficient to suppress ruffe numbers in Duluth Harbor."
- ▶ The **Lake Erie Committee** reiterated its 1991 request of the commission to declare Lake Erie an operational component of the sea lamprey control program. The committee directed the Cold Water Task Group to prepare an annual consolidated lake trout rehabilitation status report.
- ▶ The **Lake Huron Committee** discussed the feasibility of measuring the effect of traps and the sterile male release technique on St. Marys sea lampreys. The committee accepted its technical committee's proposal for stocking early life stage lake trout pending a written proposal including dates and responsibilities.
- ▶ The **Lake Michigan Committee** supported stocking of early life stage lake trout in astroturf sandwiches in alternate years on an isolated reef with the understanding that the project would not compromise yearling production. The committee recognized that the establishment of new environmental objectives under the Great Lakes Water Quality Agreement had the potential to greatly influence fishery management, and, thus, asked the commission to organize and develop an effective, coordinated approach to ensure fishery agency input in initiatives such as LaMPs.
- ▶ The **Lake Ontario Committee** noted that Seneca strain lake trout appeared to afford special benefits for rehabilitation efforts in Lake Ontario, and, thus, requested that hatcheries develop and maintain that broodstock.
- ▶ The **Lake Superior Committee** saw a need for resource managers to better connect with environmental managers. The committee discussed the need for adequate sampling in studying siscowet stock dynamics.

## *BOARD OF TECHNICAL EXPERTS*

- ▶ Completed a long range research plan (to be reviewed every five years) which followed the commission's vision statements of healthy ecosystems, integrated management of sea lamprey, and institutional/stakeholder partnerships.
- ▶ Proposed a 3-part program to provide improved understanding of environmental effects and density dependent responses in ammocete populations. The focus will be on diet effects, density effects, and performance in the wild.

## *GREAT LAKES FISH DISEASE CONTROL COMMITTEE*

- ▶ Reported a major breakthrough with respect to epizootic epitheliotropic disease research: a new ultrafiltration and concentration technique had produced sufficient quantities of the virus to proceed with the development of field diagnostic tests.
- ▶ Indications were good that erythromycin treatment of chinook fingerlings in hatcheries had resulted in increased survival in the wild. Far fewer bacterial kidney disease lesions were seen in the young fish captured during the summer of 1991.

## *HABITAT ADVISORY BOARD*

- ▶ Recommended that fisheries managers become as involved as possible in the LaMP process as well as in the RAP process. Fish community goals should be a part of LaMPs, as lake-wide planning must be holistic and ecosystem-focused.
- ▶ Expressed concern about the IJC Water Level Reference and its apparent focus on the needs of navigation, power, and riparian landowners to the exclusion of fish and wildlife interests. HAB noted that most of the scenarios for water level management in the Great Lakes were modeled for level stabilization when, in fact, fluctuating water levels were needed to renew plants in wetlands for optimal fish and wildlife production.

## 1992 BUDGET

The commission received the following funds from the United States and Canada (in U.S. dollars):

	United States	Canada	Total
Sea Lamprey Management and Research	\$7,325,900	\$3,048,686	\$10,374,586
Administration and General Research	\$454,100	\$424,398	\$878,498
<b>Total</b>	<b>\$7,780,000</b>	<b>\$3,473,084</b>	<b>\$11,253,084</b>