

Fisheries Extension Enhancement

HUMAN DIMENSIONS

Theme Scope: The primary focus of the human dimensions theme is the involvement of Great Lakes stakeholders in the fishery and its management. This theme includes educational initiatives designed to empower citizen participation in fisheries and management processes, including discussions of balancing resource use among stakeholder groups, as well as improvement of management processes themselves.

Regional Issues Addressed by this Theme

The fisheries of the Great Lakes are an binational resource shared between the United States and Canada. As such, their management falls to the jurisdictions of 2 federal governments, 2 Canadian provincial governments, 8 U.S. state governments, numerous tribal and First Nations authorities and 3 binational Commissions. The Great Lakes Fishery Commission coordinates management under the Convention on Great Lakes Fisheries (1954) and the Joint Strategic Plan for the Management of Great Lakes Fisheries (SGLFMP, 1997). Sea Grant research and outreach support the management of Great Lakes Fisheries under these agreements—many Sea Grant extension staff of the Great Lakes Network serve as members of Lake Management and Technical Advisory committees of the Great Lakes Fishery Commission.

America's fisheries are under extreme stress from many sources, and new management approaches must be found to cope with the difficult challenges. Changes in fisheries affect society. It is important that fisheries managers



know how their decisions might affect people who depend on fishery resources. When changes affect people, it is equally important to help them cope.

The regeneration of Great Lakes fisheries is often linked to an economic renaissance of the associated coastal communities, and as one of the region's original industries, it is an important cultural and historic link to our Great Lakes heritage, including that of the Native American tribes. Ecosystem stressors, such as aquatic invasive species, improper land use, fluctuating nutrients, over exploitation, and disease, challenge the integrity of the Great Lakes fisheries. Well-informed management is critical in this highly populated and environmentally sensitive region.

Current Great Lakes Sea Grant Network Activities

Great Lakes Fisheries Leadership Institute (GLFLI)

The pilot Great Lakes Fishery Leadership Institute was the first project funded in the Great Lakes region under the National Fisheries Extension Enhancement (FEE) Initiative. A joint project of all eight Sea Grant programs, the concept behind the Great Lakes Fishery Leadership Institute is to provide in-depth training to the 'next generation' of leaders - those who are new leaders to their fisheries related organizations, those likely to become leaders of their organizations within the next few years, and those likely to be serving as advisors to Great Lakes fishery related institutions. Participants were nomi-



nated and selected by partner agencies (e.g., Great Lakes Fishery Commission, U.S. Fish and Wildlife Service) and current Great Lakes fishery leadership to represent a variety of organization 'types' – environmental NGOs, commercial fishermen, charter captains, tribes, sportfishing associations, visitor bureaus, science writers, legislators, legislative aides, etc. Sixteen training sessions were held during the 2003-2004 pilot GLFLI which combined to provide training to 145 participants claiming affiliations representing 114 unique organizations. Formal evaluation led by Michigan Sea Grant indicated statistically significant gains in knowledge and skills for nearly all learning outcome areas identified in the program proposal. Program evaluation indicates that 72.7% of participants agreed they had learned or gained what they had originally hoped from their GLFLI experience while 81.8% learned or gained something unanticipated. Networking and opportunities to learn from and about diverse stakeholders were among the elements of the program considered of primary value by participants.

Women: Charter Fishing's Untapped Market

With funding from National Sea Grant (FEE), OH Sea Grant has launched a new initiative to help Lake Erie charter boat captains develop new marketing strategies for including underrepresented female clientele into their business operations. While women represent nearly 20% of the fishing license sales in Ohio, they are currently a largely untapped market. Market-

Fisheries Extension Enhancement

HUMAN DIMENSIONS

> CONTINUED FROM FRONT

ing targeting women (and families) should bolster the industry and enhance its long-term prospects.

View From the Lake

About 500 citizens, reporters, and local officials got a new view of their communities this past summer through the "View From the Lake" project. Twenty trips aboard a research vessel were conducted on the western end of Lake Superior, designed to show people the impacts of land use, development, natural resources and water. Participants took water clarity readings, collected water samples, looked at zooplankton, and were introduced to Global Positioning System and Geographical Information System technology. Cruise spaces sold out quickly due to interest and front-page newspaper articles. Sixty percent of participants said their opinions changed regarding environmental issues facing Lake Superior. Similar cruises are planned for 2005. The project was funded by a grant from the Great Lakes Regional Water Quality Program and grants from the Wisconsin and Minnesota Coastal Programs.

Improving Forage Base Assessment on Lake Champlain

Of particular concern to Lake Champlain is assessment and management of the lake's native rainbow smelt population – the primary forage for native lake trout and native Atlantic landlocked salmon. Lake Champlain Sea Grant staff developed an extension workshop to increase forage base assessment skills among Lake Champlain agency biologists. Twenty-three biologists, faculty and graduate students gained a better understanding of hydroacoustics theory and practical application. A Lake Champlain Fisheries Technical Committee (LCFTC) smelt workshop was designed to extend the findings of a Lake Champlain Sea Grant sponsored study of smelt populations in Lake Champlain. Partner

Integration with National Goals

This theme supports national Sea Grant goals in the areas of: Fisheries, Digital Oceans, Marine Aquatic Science Literacy, and Coastal Communities & Economies.

Fisheries extension enhancements within this theme will support national efforts to:

- Improve coastal community leadership and planning capacities to jointly address economic, environmental and social issues,
- Develop an ecosystem perspective in renewable resource management
- Understand ecological variability and its role in resource management practices
- Develop tools to assimilate data from distributed observatories and connect these assimilated data with various existing computer models
- Provide leadership in enhancing public aquatic sciences literacy from cradle to grave, and
- Provide leadership in the development of well-prepared professionals who understand aquatic science and research.

Priorities for Regional Action

- Facilitate formulation of policies and management strategies,
- Assist managers and users in understanding the implications of management strategies,
- Empower interested citizens to participate in the decision-making process,
- Foster understanding of the historic and cultural significance of the fisheries,
- Develop methods and models (e.g., fish recruitment prediction) to enhance the scientific basis of fisheries management,
- Reverse declines in sport-fishing participation, and
- Increase recreational access.

Additional Information

GLFLI: Institutional Arrangements for Great Lakes Fisheries Management
www.glerl.noaa.gov/seagrant/GLFLI/PublicNotebook/Curriculum/Modules.html

agencies (including VT Dept. of Fish Wildlife and USFWS) have now revised smelt sampling and monitoring procedures to better capture information on smelt year class strength, patchiness,

and age-class structure. The increase in skills and information related to smelt forage will be invaluable as the LCFTC moves forward with lake trout and salmon restoration efforts.



Rochelle Sturtevant
(734) 741-2287
Rochelle.Sturtevant@noaa.gov
www.greatlakesseagrant.org