Fisheries Extension Enhancement ECONOMICS

Theme Scope: This theme focuses on efforts to understand the economic value of the Great Lakes fisheries, disseminate information about this value, and support efforts to improve both the economic value of the fishery and fisheries-dependent economic sectors. It includes efforts to balance the needs of disparate users and promote sustainable use as well as improving the economic viability of fisheries-related industries. Economic impacts of invasive species are considered separately in the invasive species theme.

Regional Issues Addressed by this Theme

The Great Lakes are home to arguably the most important freshwater fishery in the world, one that supports a multibillion-dollar sport fishery, tribal subsistence fisheries, and a valuable commercial fishery.

In 2001 Great Lakes anglers spent \$1.3 billion on fishing trips and equipment (2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation). Trip related expenses were \$776 million, and equipment expenditures were



\$498 million. This is about 6% of the total \$21.3 billion spent on freshwater fishing in 2001. In 2002, the estimated 1,746 Great Lakes charter firms made more than 93,000 charter trips. In the Great Lakes region, these charter-fishing firms brought in estimated total sales of \$34.5 million.

Commercial fishing in the Great Lakes produces 55 million pounds of fish each year. In 2000, the landed value of the U.S. Great Lakes harvest was estimated at over \$17 million. However, the processed value of these fish significantly raises both the economic value of the commercial fishery and its benefit to the region; experts suggest the processed value to be 1.5 to 2.5 times the landed value.

Hidden in these regional numbers is the economic impact of the Great Lakes fisheries on local communities. Tribal and commercial fisheries are the mainstay of many small coastal communities in the region. Other communities have developed their shorelines with sport anglers in mind. Coastal tourism for most of these communities relies on the sport fishery to attract tourism dollars.

Current Great Lakes Sea Grant Network Activities

Determining Socio-Economic Value

The Great Lakes Sea Grant Network has worked on various socio-economic studies of Great Lakes fisheries in order to document the social impacts, economic value and economic impacts on coastal economies of the Great Lakes fisheries. The Great Lakes Sea Grant Network has the best data set



on the economics and business aspects of the charter industry of any of the Sea Grant regions. Ohio Sea Grant recently conducted a steelhead angler survey documenting this fishery in Ohio. Dr. Brent Sohngen is working on a fact sheet outlining a process that watershed groups can use to estimate the economic value of improved water quality on Ohio streams. A Wisconsin Sea Grant researcher is using economic models to estimate demand for major finfish species in several regions of the U.S. The results will be useful to public agencies for policy analysis and in price forecasting for private industry.

Support to Charter Fisheries

The existing sport fisheries of the Great Lakes were established in the 1960s and 1970s, when species of trout and salmon were stocked. Angler participation in the 1980s quickly increased in response to these developing fisheries, but began to decline in the early 1990s, negatively impacting sport fishing-dependent businesses such as charter boat operations. The Great Lakes Sea Grant Network has worked to identify the past and current status of the Great Lakes charter boat fishing industry and to identify industryrelated trends over the past three decades. We have worked to provide information on the status, characteristics and economics of the charter fishing industry in the Great Lakes. The paper, "The Great Lakes Charter Fishing Industry: 1973 to 2002", by Diane Kuehn, Frank Lichtkoppler and Chuck Pistis was published in the March 2005 issue of FISHERIES, the Monthly News Magazine of the American Fisheries Society.

Fisheries Extension Enhancement ECONOMICS

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Hundreds of licensed Ohio charter boat captains gained knowledge and skills to improve their business operations at the Annual Ohio Charter Captains Conference. Industry response to this outreach effort has been positive; the conference is in its 23rd year with annual attendances ranging from 140 to 270 licensed captains. Among captains attending over the last five years, 66% report increased profits by using conference information. Operating practices were modified by 84% of attendees, and 95% said they use conference information in some aspect of their businesses.

Whitefish Marketing

Michigan's commercial fishery is undergoing a fundamental change that threatens the long term viability of the industry. Loss of traditional markets, foreign competition, changes in regulatory requirements, ecological change, and fishery population dynamics have impacted the marketability and competitiveness of Great Lakes whitefish. In partnership with fishery stakeholders and with fisheries extension enhancement funding from the National Sea Grant Office, Michigan Sea Grant has initiated a five year project to assess the Michigan whitefish market, identify and cultivate new markets, enhance consumer awareness and create a "brand' identity for whitefish products. Primary objectives include assessing present markets and identifying new markets, enhancing consumer awareness of whitefish, improving quality control and product consistency, differentiating Great Lakes whitefish from inferior inland lake imports, developing value added products and enhancing cooperative initiatives among disparate segments of the Michigan whitefish industry.

Integration with National Goals

The Economics Theme supports National Sea Grant goals in the areas of Fisheries, Coastal Communities & Economies, Seafood Science & Technology, and Biotechnology.

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

Help coastal communities achieve economic and environmental sustainability

Priorities for Regional Action

Promote sustainable use of economically important coastal fisheries by:

- Working with commercial, tribal, and sport fishers to lead efforts to enhance and promote the economic viability
- Developing capabilities to predict socio-economic responses of coastal communities to changes in fishery resources or accessibility.

Support balanced use of coastal and fishery resources by:

Calling for national research to determine the economic impacts of various types of coastal recreation

- Improve the shelf-life and marketability of existing and new seafood and seafoodderived products.
- Encourage and support a wide range of freshwater and marine biotechnology research for developing new pharmaceuticals, biomaterials and bioprocesses.
- Designing and evaluating approaches to enhance opportunities
- Identifying, assessing and encouraging the use of innovative techniques and technologies to reduce the environmental impact of coastal and fisheries businesses in a cost-effective manner

Enhance the efficiency, effectiveness, cost competitiveness, and profitability of fisheries-dependent businesses by improving management, operation programs, marketing strategies and responses to regulations and management policies.

Additional Information

Great Lakes Charter Fishing Surveys

www.glerl.noaa.gov/seagrant/GLFLI/PublicNotebook/Curriculum/Projects.html

Great Lakes Sea Grant Fisheries Leadership Institute: Great Lakes Commercial Fisheries www.glerl.noaa.gov/seagrant/GLFLI/PublicNotebook/Curriculum/Projects/GLCommercialFinal.pdf





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