

Assessing the Economic Impact & Significance of Recreational Angling on Pennsylvania's Lake Erie Waters: A \$40 Million Annual Economic Input

Overview:

Recreational fishing is a cornerstone of the economy in the Erie, Pennsylvania region.

In 2016, Pennsylvania Sea Grant funded researchers at the Pennsylvania State University to assess the economic impact of the recreational fishing industry within Pennsylvania's section of Lake Erie, and to garner angler feedback about their experiences and activities.

Lake Erie is the shallowest, warmest, and most biologically productive of the five Great Lakes, supporting over 100 species of cold and warm water fish species, attracting anglers from around the world.

The Research:

The overarching goal of the research study was to assess the economic impact and significance of the recreational angling industry within the Pennsylvania Lake Erie watershed.

For a guiding framework, the study utilized an exploratory mixed methodology which resulted in 1,189 completed online and mail-back questionnaires, 516 completed on-site questionnaires of Lake Erie anglers, and approximately 15 hours of stakeholder interviews.

Overarching Economic Observations:

- In 2016, angling related activities brought in an estimated \$40.6 million in revenue to Erie County, Pennsylvania.
- For every \$1 spent on recreational fishing within the Pennsylvania section of Lake Erie in 2016, \$1.65 was generated for the Erie County, Pennsylvania gross regional product.
- Erie-based anglers spent an average of \$459 on items like groceries, gas, groceries, fishing rods, reels, and other fishing equipment.
- Anglers visiting the region reported spending \$503 on expenditures such as overnight lodging and accommodations, gas, and food and drinks at restaurants and bars.
- Pennsylvania Lake Erie angling supported approximately 539 jobs within Erie County in 2016.
- Angler expenditures provided more than \$13 million in income for Erie County residents in 2016.
- A total of \$19.9 million of employee compensation, proprietor income, indirect business taxes, and other property type income was generated in Erie County, Pennsylvania as a result of angler spending in 2016.

Dr. Alan Graefe and Dr. Andrew Mowen, Penn State University; and Dr. Mike Ferguson, University of New Hampshire, conducted the study from 2016-18, with funding from the Pennsylvania Sea Grant College Program.

Mail-in or Online Questionnaire Results:

The following observations were received through 1,189 mail-in or online questionnaires, completed by anglers.

- Approximately 74% of respondents live in Pennsylvania but reported traveling an average of 103 miles to their fishing destination.
- Approximately 78% of the anglers polled indicated that they had a strong personal connection to the region.
- Anglers identified a variety of reasons and motivations for visiting the area, including: to be outdoors, to experience natural surroundings, to be close to nature, to get away from the regular routine, for relaxation, and to do things with companions.
- More than 60% of anglers reported being satisfied with the water quality, cleanliness, and habitat conditions.
- Anglers were most likely to fish from a private boat (41%) or the shoreline (39%), while angling from a pier (13%), a charter boat (7%), a rental boat (< 1%), and ice fishing (< 1%) represented the smaller angler segments.
- Anglers primarily sought to catch Steelhead (27%), Walleye (26%), Yellow Perch (18%), Smallmouth Bass (11%), and Largemouth Bass (9%). Other species included Brown Trout (5%), Crappie (2%), Muskellunge (2%), and Bluegill/Sunfish (2%).

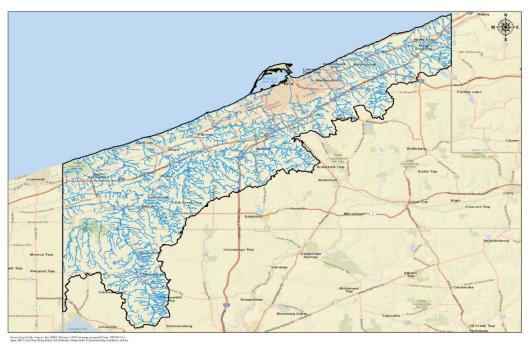
In-person Questionnaire and Interview Results:

The following observations were garnered through 516 completed on-site questionnaires and approximately 15 hours of stakeholder interviews.

- Approximately 91% of respondents live in Pennsylvania but report traveling an average of 69 miles to their fishing destination.
- Anglers identified a variety of reasons and motivations for visiting the area, including relaxation, enjoyment of nature, challenge seeking, and social and family togetherness.
- Anglers reported high levels of satisfaction with the setting and environmental conditions, with more than 72% reporting being satisfied with the weather, water quality, cleanliness, and habitat conditions.
- Anglers were most likely to fish from the shoreline (38%) or a private boat (22%), while angling from a charter boat (3%), a rental boat (< 1%), and ice fishing (< 1%) represented the smaller angler segments.
- Anglers primarily sought to catch Yellow Perch (49%), Walleye (17%), Steelhead (10%), Smallmouth Bass (9%), and Largemouth Bass (6%). Other species targeted included Bluegill/Sunfish (6%), Brown Trout (1%), and Crappie (1%).

Applying the Research:

• This research can be used to assist natural resource managers, business owners, decision-makers, agencies, and others to inform decisions and actions that will sustain the Pennsylvania Lake Erie recreational fishery for generations to come.



The Pennsylvania Lake Erie shoreline extends 76.6 miles between the borders of New York and Ohio.