Great Lakes Fisheries Education and Project F.I.S.H. in Michigan: A Targeted Program within the Muskegon River Watershed

FINAL REPORT

Prepared for the

Great Lakes Fishery Trust

by:

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PROJECT OVERVIEW

Project Goals:

- promote better understanding of
 - Great Lakes fisheries biology, ecology, and history;
 - conservation and stewardship needed to sustain this natural resource.
- help youth and families become aware of
 - the values of the Lake Michigan fisheries to all stakeholders,
 - the opportunities Great Lakes fisheries resources provide, and
 - the history and current complexities of fisheries issues and management.

Project Methods:

- provide materials (Project F.I.S.H. Curriculum), training and support for teachers and volunteer mentors who work with youth through schools, clubs, and locally sponsored events.
- involve communities, school educators, fisheries organizations, and resource managers along the Lake Michigan coast and watersheds in the delivery of this youth education project.
- Participating teachers and volunteers will be given survey instruments for monitoring program outcomes for youth. These will be collected and analyzed, with summaries shared with participating sponsors.

GRANT PERFORMANCE MEASURES

Measurable Outcome Objectives:

- To increase knowledge about Great Lakes fisheries among at least 100 educators (per year) (teachers, volunteers, etc.) within this watershed, through their active participation in in-depth, experiential training workshops, including a fisheries and water sampling educational cruise on Lake Michigan.
 - As a result, the non-formal, club-based programs will be partnered with school-based programs within these communities.
- To reach at least 7,500 youth through school and community-based programming within the watershed.
 - As a result, youth knowledge and attitudes toward the Great Lakes fisheries and their watershed will improve.
 - Youth in urban areas along the Muskegon River watershed will particularly benefit.
- To increase the partner base for Great Lakes fisheries education by using a model watershed approach to implementing the Project F.I.S.H. program.
 - At least two workshops will model how to obtain new community-based partners for implementing Great Lakes fisheries and fishing education programs through the train-the-trainer workshops and ultimately to youth. A watershed approach will garner these additional, new partners. These models will be summarized for future program participants to see the impact of using this watershed approach in Great Lakes fisheries education through Project F.I.S.H.

SPECIFIC PROJECT ACCOMPLISHMENTS

November, December 2000, January February 2001

- Established new and strengthened existing partnership relationships throughout the watershed.
- Worked specifically with GVSU Outreach and Education through the Annis Water Resources Institute, the Wege Whittenbach Agriscience Center in Lowell, Michigan 4-H Foundation through the Kettunen Center in Tustin toward early spring programming.
- Contacted a variety of target audiences including: MUCC's sportsmen's clubs located within the watershed, Muskegon Public Schools and Intermediate School District, MDNR District Biologists, and 4-H/Extension agents of counties within the watershed.
- Video/audio and print media press releases were prepared for marketing these teacher-training workshops.
- Prepared instructional and evaluative materials.
- Brought the "Wet and Wild World of F.I.S.H." to the Outdoorama Sport and Travel Show- This 10 day cooperative educational exhibit between the MDNR, MUCC, MDEQ, and MSU Extension educated an estimated 8000 visitors about Great Lakes watersheds, fish, fisheries management, human influences on our water ecosystems and fishing. Reached statewide audience through this promotion.
- Evaluation was conducted.

<u>March 2001</u>

- Conducted educator training workshop for 29 participants in Lowell in cooperation with the Wege Whittenbach Agriscience Center and Muskegon Schools. Participants included teachers, curriculum superintendents, 4-H agents, boys and girl clubs, religious leaders, sportsmen, nature center staff and others. Those trained from the Muskegon River watershed area were charged with conducting a workshop in Muskegon for May 2001.
- Participants implemented materials in Muskegon Schools immediately following the workshop.
- Participants made Project FISH presentations to the Muskegon Public and Private school boards to promote the use of the materials in classrooms and the May workshop.
- All media type press releases were sent for future workshops.
- Evaluated workshop. General comments about the program are as follows:
 - "This program is a "Diamond in the Rough." I wasn't sure about doing this but I'm glad I did."
 - "Great indoor activities and still cover fishing. Sometimes indoors is all we have."
 - "Lots of fun. Keep up the great work."
 - "I'm going to get involved in local groups to help teach more kids."
 - "I will use this programming for our camp program."
 - "I loved connecting with the people who are willing to share their expertise with me."

<u> April 2001</u>



- Conducted training workshop for 17 participants (all 4-H leaders, 1 DNR parks staff) at the Kettunen Center in Tustin. (Oceola County)
- Worked with the MDNR Cadillac field office who provided fish for filleting.
- Special presentation by Children's Charters about this fishing program within the watershed.
- All media type press releases were sent for future workshops.
- Evaluation was conducted. General comments about the program are as follows:
 - "Outstanding program! Everything was great."
 - "I'm an avid fisherman and I didn't know a lot of the stuff we learned."
 - "I'm going to love my new 4-H project."
 - "We'll need future training on this subject. There is so much to learn. Awesome!"

<u>May 2001</u>

- Conducted training workshop for 23 participants that included GVSU staff teachers, 4-H leaders, sportsman club members, community organizations, school principals and others. This workshop was conducted by those trained at the March workshop.
- Held at the Annis Water Research Center, P.J. Hoffmaster State Park, Muskegon Area Math and Science Center, and Muskegon Conservation Club. New Great Lakes fisheries education partnership was formed.
- Video news story went out immediately following the workshop.
- Evaluation was conducted. General comments about the program are as follows:
- "One of the few available means of passing on sportfishing to the next generation."
 - "Now I can teach my husband to fish!"
 - "I'll set up an entire year of programming in the fall!"
 - "I hope you get continued funding for this great program."
 - "I'll use this next fall and plan a fishing trip for both fall and spring 2002."
 - "I'm going to start a Project FISH club for the kids at school."

<u>June 2001</u>

- Muskegon Conservation Club fishing Derby. 100 participants and their families fished during Free Fishing Weekend.
- Muskegon schools fishing outings to culminate the newly started program. 180 elementary kids participated at a local fishing pond.
- Intergenerational Elherhostl at the Kettunen Center in Tustin.



32 grandchildren and their grandparents participated in this 3 day training course.

• Participated in Outdoor Expo with a collaborative "Fishing Village" that included MDNR Fisheries, MDEQ, MUCC and MSU Extension. This three-day event provided hands-on experiences related to aquatic resources and fishing to nearly 7000 visitors. 560 kids fished after a basic casting lesson.



* This graph is a comparison of self-rated knowledge levels of the participants prior to and after the Project F.I.S.H. workshop. Dramatic increases were found in all categories but especially so in human impact on the environment, Fisheries Management and community support for sportfishing programs.

Mid June, July, August 2001

- 120 youth from across the state participated in Project FISH activities on the MSU Campus through 4-H Exploration Days. Activities included 2-day training classes in aquatic ecology, fishing, fly tying and fish decoy carving.
 - "This class was a lot different than the usual stuff at Exploration Days."
 - "I made something that I can use for fishing."
 - "My instructor was fun and kept us interested."
- Intergenerational Elherhostl at the Kettunen Center in Tustin. 32 grandchildren and their grandparents participated in this 3 day training course

September, 2001 through January, 2002

- Outdoor Consumer Science Class was approved by the school board, and established at Hartford High School.
 - "Our hope is that this class might steer our students toward a career along with a lifetime hobby"
- Attempted to conduct a Newaygo/Mecosta (mid-watershed) county workshop but had to cancel due to very low registration. Reschedule for fall of 2002 or spring of 2003.
- Cancelled an additional workshop in Osceola County, the northern area of the Muskegon Watershed due to lack of registration. Reschedule for fall of 2002 or spring of 2003
- Met with Muskegon Public Schools, MSU 4-H Youth Programs and the City of Muskegon to plan summer, after school programming, and family neighborhood fishing clubs. Community partnerships were established with these and Muskegon Sportfishing Association, Muskegon Conservation Club, and Grand Valley State University.
 - Muskegon County 4-H has partnered with the City of Muskegon and has started 21st Century after school programs. These programs are targeted at inner city youth in the watershed.
 - Michigan Anglers Association is setting up continued contact programs with the church community, scouts and 4-H.
- 567 kids participate in continuous contact programming in Muskegon, through school and after school fishing clubs.
- Began the process of youth evaluation by meeting with Gander Mountain Stores and national database/information management firm, Ancor, to discuss data tracking system throughout the state.
- KATCH Grants were offered to local youth groups for on-the-ground habitat projects done by youth with partnership dollars from the National Fish and Wildlife Foundation, the Michigan 4-H Foundation and Harold and Jean Glassen Foundation. Seven of the fifteen applications received are from Project FISH trained volunteers.
- Over 40% of the Fishing Tackle Grants received from the Fisheries Division of the MDNR are Project FISH volunteers and 20% of these are from the Muskegon Watershed.







GVSU Annis Water Resources Institute 740 W. Shoreline Drive Muskegon, Michigan

May 1st, 3rd, 8th, 10th

May 1st at GVSU, May 3rd at MAISD, May 8th at PJ Hoffmaster State Park , May 10th at Muskegon Conservation Club

5:30 to 8:30 pm each night

Project FISH (Friends Involved in Sportfishing Heritage) invites teachers, educators and volunteers to four evenings of:

"Sportfishing and Aquatic Resource Education."

Coordinated by Michigan State University's, Department of Fisheries and Wildlife, Project FISH has partnered with schools, agencies, sportsman organizations and communities throughout Michigan to educate young people about our natural resources through "FISHING."

Attending this workshop will provide you with materials and partnerships to assist you in developing hands-on outdoor community education. This workshop will offer activities in Aquatic Ecology, Tackle Crafting, People and Fish Management and actual Angling Skills. *"All activities are aligned with the Michigan Curriculum Framework."* Participants will come away with activities, equipment, even a fishing rod & reel and an awesome curriculum/activity guide. Workshop is partially funded through a grant from *the Great Lakes Fishery Trust* and a gift from the *Hal & Jean Glassen Memorial Foundation*. A light dinner will be provided.

Cost for the Workshop is only \$50.00

*And may be partially covered with Eisenhower dollars

For registration information contact Mark Stephens 517-432-2700; steph143@msu.edu Registration Deadline is April 20th, 2001. Early registration will insure your participation, as space is limited.

All registration information can be downloaded at http://www.projectfish.org

project F.I.S.H. Workshop



Wittenbach AgriScience & Environmental Center and Wege Natural Area. 11715 Vergennes Lowell, Michigan

March 6th, 8th, 13th, 15th

5:30 to 8:30 pm each night

Project FISH (Friends Involved in Sportfishing Heritage) invites teachers, educators and volunteers to four evenings of:

"Sportfishing and Aquatic Resource Education."

Coordinated by Michigan State University's, Department of Fisheries and Wildlife, Project FISH has partnered with schools, agencies, sportsman organizations and communities throughout Michigan to educate young people about our natural resources through "FISHING."

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Cost for the Workshop is only \$50.00

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For registration information contact Mark Stephens 517-432-2700; steph143@msu.edu or Tammy DeBaar 616-987-1002. Registration Deadline is February 28th, 2001. Early registration will insure your participation, as space is limited.

All registration information can be downloaded at http://www.projectfish.org

PROJECT FISH COMES TO OSCEOLA COUNTY, MICHIGAN

There is a lot to be learned in a weekend sessions-. Project FISH (Friends Involved in Sportfishing Heritage) will be At the Kettunen Center on April 20-22, 2001 to educate interested teachers and volunteers on the fine art of fishing and the importance of caring for Michigan's vital aquatic resources. Each training session will have the same theme "Let's get kids to care for our aquatic resources by learning to fish".

Project FISH is a mentor based community supported program that will involve many partners including schools, 4-H, sportfishing organizations, and mentoring groups within the community. Project FISH is a Michigan State University, Department of Fisheries & Wildlife education program in cooperation with the Great Lakes Fishery Trust, the Michigan Department of Natural Resources, Michigan State University Extension and Michigan United Conservation Clubs. Our goal in Michigan communities is to educate interested teachers and volunteers with our very exciting and hands on activities and lessons and leave them with the materials and resources to get kids excited about fishing. Here are the main components of Project FISH:

Michigan Aquatic Ecology: Learn about the things that make our aquatic ecosystems tick by using some very interesting activities involving our Great Lakes watersheds, invertebrates and neat sampling experiments designed to get you INVOLVED. Participants will be given a Pond and Stream Safari education kit for use in their programs. Additional resources and contacts will be given to teachers for follow up and continued support.

People and Fish: "How many fish are in that pond and what effect do I have on them?" These are the types of questions that will come up in this fish management and ethics session. What is the difference between an ethic and a regulation? You'll learn this as well as come up with your own code of ethics. You may learn more about a person by exploring their tackle box. Find out about Great Lakes issues and human involvement, like commercial vs. sportfishing, allocation and game laws. You may even say "hmm" a few times. Catch a fish, put it on your shirt, permanently!

Tackle Crafting: This session will get you making the equipment you can use to catch fish. You will use what you learned in aquatic ecology to reproduce an artificial tool for your attempt at catching fish. Fly tying, jig making, snelling hooks and creating worm/crawler harness are only a few ingredients of this part of Project FISH. Each participant will be given the materials for making harnesses and the knowledge to make these and other look-alikes. In addition, resources for expertise and partners will be given to all participants. This class is a lot of fun.

Angling Skills: This class is the bread and butter. How do I use this fishing pole? Pop can casting and basic skills will lead to proficiency with a variety of rod and reel types. Learn how to catch bass in your backyard and receive the game to teach you and your youth. You will also find the sources of materials to get kids actively involved with fishing, and they can do it in their own backyard. Take home a fishing rod for inspiration and a learning/teaching tool.

During your Project FISH training, you will be introduced to a variety of individuals and organizations in your area to call on for assistance and expertise. Don't miss this chance to become involved in introducing this education style to your community. *IT'S FOR THE KIDS*!

project F.I.S.H. Workshop



Wolf Lake Fish Hatchery Mattawan, Michigan near Kalamazoo

June 12th, 13th, 14th

9:30 am to 2:30 pm each day

Project FISH (Friends Involved in Sportfishing Heritage) invites teachers, educators and volunteers to four evenings of:

"Sportfishing and Aquatic Resource Education."

Coordinated by Michigan State University's, Department of Fisheries and Wildlife, Project FISH has partnered with schools, agencies, sportsman organizations and communities throughout Michigan to educate young people about our natural resources through "FISHING."

Attending this workshop will provide you with materials and partnerships to assist you in developing hands-on outdoor community education. This workshop will offer activities in Aquatic Ecology, Tackle Crafting, People and Fish Management and actual Angling Skills. "*All activities are aligned with Michigan's core content standards*." Participants will come away with activities, equipment, even a fishing rod & reel and an awesome curriculum/activity guide. Workshop is partially funded through a grant from the **Great Lakes Fishery Trust** and the **Harold and Jean Glassen Memorial Foundation**. A light lunch will be provided.

Cost for the Workshop is only \$50.00

*And may be partially covered with Eisenhower dollars

For registration information contact Mark Stephens 517-432-2700; steph143@msu. Registration deadline is June 1st, 2001. Early registration will insure your participation, as space is limited.

*** Further information about this workshop is available at www.projectfish.org***





February 12th, 14th, 19th, 21st, 2002 6:00 p.m. to 9:00 p.m. each day

Project FISH (Friends Involved in Sportfishing Heritage) invites teachers, educators and volunteers to three evenings of:

"Sportfishing and Aquatic Resource Education."

Coordinated by Michigan State University's, Department of Fisheries and Wildlife, Project FISH has partnered with Ionia County Extension 4-H, Orleans Township Board, Michigan United Conservation Clubs, schools and community service organizations, to educate young people about our natural resources through "FISHING."

This workshop will offer activities in Aquatic Ecology, Tackle Crafting, People and Fish Management and actual Angling Skills. "*All activities are designed to the Michigan MEAP & DOE Frameworks.*" Participants will come away with curriculum activities, equipment, even a fishing rod & reel, and access to supplies and resources to begin a successful fishing program/club with children. Workshop is partially funded through a grant from the Great Lakes Fishery Trust and The Hal & Jean Glassen Memorial Foundation.

Cost for the Workshop is only \$50.00

For registration information contact Mark Stephens at 517-432-2700. Registration Deadline is February 8th, 2002. Early registration will insure your participation, as space is limited.

Registration Material can be downloaded at www.projectfish.org