U.S. Fish & Wildlife Service

Alpena FRO Accomplishment Report

Aquatic Species Conservation and Management

Mussel Surveys Completed on the St. Clair Delta at Walpole Island

Working with biologists from Michigan Department of Natural Resources (MDNR), Environment Canada (EC), Walpole Island First Nation (WIFN), USGS Great Lakes Science Center, and Belle Isle Aquarium, Fishery Biologist James Boase conducted preliminary and follow-up native mussel surveys at multiple locations on the St. Clair River within the St. Clair River Delta. The research was undertaken to identify refuge areas where native mussels can be managed and maintained. Since the introduction of the exotic zebra mussel in the 1980's native mussels have been steadily declining or have been eliminated from most areas of the Great Lakes. Although zebra mussels do not directly parasitize native mussels they do attach themselves in large numbers to the shells of the native mussels thereby preventing the mussels from foraging, reproducing and dispersing their progeny.

Historical research indicates that the highest densities and greatest diversity of native mussels were found in deeper locations in Lake St. Clair while shallow bays located in areas such as the St. Clair River Delta were considered marginal habitat. Today only the areas that were once considered marginal habitat have a surviving population of native mussels.

The St. Clair River Delta is the largest delta system in the Great Lakes forming an international border between the United States and Canada. The St. Clair River splits into three main channels along with multiple smaller channels as it moves through the delta. On the U.S. side the delta has been intensively managed and altered with both residential and commercial use dominating most upland areas. Steel sheet pilings separate most of the interface areas between upland areas and the river. Canals have been dredged connecting once isolated bays to most channels.

In Canadian waters, the Walpole Island First Nation has maintained most of the natural integrity of the delta. Most channels have native emergent plant species which slow the flow of water into them or act as buffers separating upland areas from the river. Numerous isolated bays having a limited access point from the river or from Lake St. Clair are still intact and have not been

breached by man-made channels. Travel within the shallow water bays is restricted and is not impacted by heavy recreational boat traffic unlike most location on the U.S. side of the delta.

The differences in land use practices between the U.S. and Canadian waters of the delta may help partially explain why preliminary results indicate that native mussels are doing better in Canadian than in U.S. waters. Low boat traffic in isolated shallow bays results in less mussels being damaged by props or being dislodged. Bays that have not been breached by canals do not receive a continuous introduction of new zebra mussels, and as a result native mussels have few attached zebra mussels. In general most of the bays sampled on Walpole Island were relatively deeper than what was found on the U.S. side.

Researchers with EC and WIFN have taken some of the first steps by identifying refuge areas in Canadian waters and have been successful at moving native mussels from areas of high zebra infestation to those locations. What has not been determined is if all life history requirements will be fulfilled with those mussels that are placed in those refuge areas. Because most native mussels have specific host fish species needed for survival of their progeny the next question that needs to be answered is if the fish community has changed or if spatially the mussels will never be in contact with their host fish. If we are to maintain a population of native mussels some innovative and intensive approaches to management will have to be considered. Alpena FRO and its partners are planning to continue to identify other potential refuge areas in both U.S. and Canadian waters.

This joint research project provided an excellent opportunity to interact with biologists from other agencies and to explain the Service's mission and efforts to manage resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native mussel populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This outreach event supports the Partnerships and Accountability and Aquatic Species Conservation and Management priorities of the Fisheries Program Vision for the Future.

James Boase

Aquatic Habitat Conservation and Management

Debt for Nature Review in Missaukee County

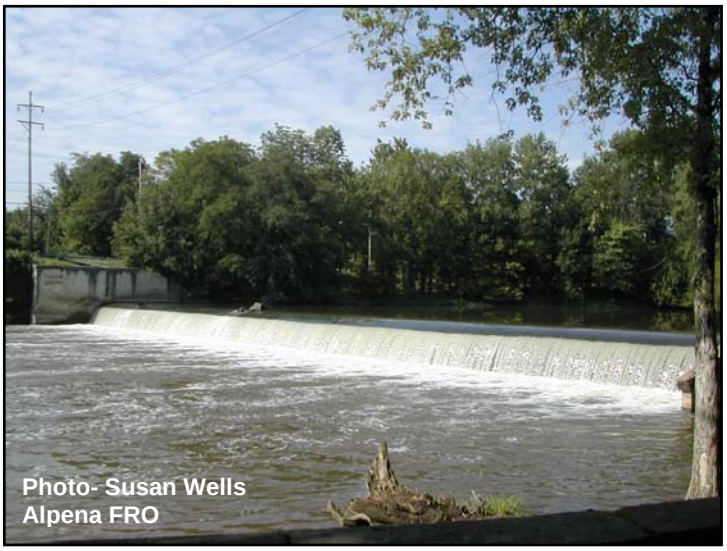
On July 7 Biologists Heather Enterline and Susan Wells attended a Debt for Nature review in Missaukee County, Michigan. Debt for Nature is a Department of Agriculture Program administered by the county Farm Service Agency (FSA) office. This program allows farmers with FSA loans secured by real estate to remove acreage from active farming and place the acreage in a conservation contract of 50, 30, or 10 years. The conservation contract restricts the type and amount of development that may take place on the property covered by the agreement. In exchange the farmers receive a cancellation of a portion of their indebtedness to their FSA loan(s).

The U.S. Fish and Wildlife Service is a member of the review team that provides biological input and management suggestions for the land to be placed into the conservation contract. Other review team members included a representative from FSA, the Natural Resource Conservation

Service and Missaukee Conservation District. This particular landowner was considering placing 100 acres into the program. The acreage was marginal farmland, a cedar swamp, and edges of hayfields (to provide wildlife corridors or buffers from field to forest). Service personnel suggested plantings, both tree and grassland, and recommended on two sites to consider wetland restoration.

Assessment of aquatic habitat restoration projects contribute toward the "Aquatic Habitat Conservation and Management" component of the Service's Fisheries Program Vision for the Future.

Heather Enterline



Ohio DOW Tour

On July 28, Biologist Wells visited 3 dams within the Mahoning River Watershed with representatives from the Ohio Division of Wildlife (ODOW), Trumball County Planning Department, and the US Fish and Wildlife Service (Service) for potential removal using Service Fish Passage Program funds. The dams are located in suburan areas around Youngstown, Ohio and all are less than 20 feet in height. The dams have been identified by the Mahoning Watershed Coalition and partners for removal as part of the Coalition's plan for habitat recovery. The first dam upstream is a superfund site with preliminary contaminant studies underway. The second dam upstream may be removed in the spring of 2006 by the Ohio Department of Transportation (ODOT) for which they will earn mitigation credit. The third dam upstream is located within a county park but local support for removal is not very strong. The Coalition and partners have begun an educational campaign within the community in hopes to gain further support for removal.

Upon conclusion of the tour, Biologist Wells and Joe Mion from ODOW discussed the feasibility of these projects in the near term and discussed other possibilities for Fish Passage Funding for FY 06 and beyond. It was decided that the second dam was the best candidate and will be pursued. Trish Nuskievicz from the Trumball County Planning Department will contact ODOT about potential partnering for removal of this dam and notify ODOW and the Service.

This is an example of collaboration between government and non-profit organizations to enhance aquatic habitat which will benefit fish and wildlife resources. This project provides assistance for enhancing fish passage of northern pike and bass into reaches of the Mahoning River Watershed. This project involves collaboration between many partners and addresses the Service's Fisheries Program Vision for the Future priority of Aquatic Habitat Conservation and Management, and Partnerships and Accountability.

Susan Wells

Partnerships and Accountability

Lake Huron Technical Committee meets in Sault Ste. Marie, Ontario

Alpena FRO staff traveled to Sault Ste. Marie, Ontario on July 19 to participate in the summer meeting of the Lake Huron Technical Committee (LHTC). Project leader McClain attended the meeting on the 19th and 20th and participated in discussions relating to lake trout rehabilitation and preparations for writing the latest State of Lake Huron report and preparing for the State of Lake Huron Conference which will be held in the spring of 2006. McClain will be writing the Invasive Species section of the report and providing an oral presentation at the conference. An outline of the report was provided to the LHTC for comment.

Fishery Biologist Bowen attended the meeting on July 19th to provide an update from the St. Marys River Fishery Task Group (SMRFTG) which she co-chairs and to participate in discussions relating to the Walleye Stocking proposal developed by the SMRFTG. Similarly, Biologist Boase attended the July 19th session of the meeting to provide an update on lake sturgeon management activities and lead discussion on the possible establishment of a Lake Sturgeon Task Group for the LHTC. The LHTC has agreed to establish a Lake Sturgeon Task Group and Boase will serve as the initial chair of the group. Charges for this task group will be developed by the Lake Huron Committee and passed through the LHTC.
Fishery Biologist Woldt attended the final day of the meeting on July 21 to participate in discussions relating to research priorities of the LHTC.

Participation in interagency committees such as the Lake Huron Technical Committee is critical for visibility of Service Fishery programs and for meeting our responsibilities for Great Lakes fisheries management. This activity is consistent with the Partnerships and Accountability, Aquatic Species Conservation and Management, Aquatic Invasive Species and Leadership in Science and Technology priorities of the Service's Fishery Program Vision for the Future.

Jerry McClain

Commercial Fishers Appreciation Dinner

On July 23, 2005, Fishery Biologist Adam Kowalski traveled to Bay City, MI to attend the 8th Annual Commercial Fishers Appreciation Dinner. The Alpena FRO hosts the dinner for Michigan state-licensed and tribal commercial fishers that assist the Service with lake sturgeon work in Lake Huron. These fishers encounter lake sturgeon as by-catch during normal fishing operations and volunteer their time to tag and collect biological information on captured lake sturgeon. Currently, 15 commercial fishers operating 21 boats participate in the study. Approximately 411 lake sturgeon have been tagged and released since the program began in 1995. Certificates of appreciation, coffee mugs, and embroidered shirts were presented to each of the fishers present at the dinner. Approximately 30 individuals representing all participating fishery companies were present at the picnic style pork dinner.

The Commercial Fishers Appreciation Dinner recognizes a long standing partnership between the Service and Lake Huron commercial fishers to track lake sturgeon movement. This outcome is consistent with the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future to develop and improve long-term partnerships.

Adam Kowalski

Pine River Nature Center Newsletter Highlights Lake Sturgeon Presentation

Research conducted by staff at the Alpena FRO was highlighted in the Summer 2005 issue of the Pine River Nature Center Newsletter (http://www.sccresa.org/prnc/newsletters.html). During the spring of 2005 Fishery Biologist James Boase traveled to the Center to answer questions about the ongoing research taking place in the St. Clair River and to present a 45 minute Power Point Presentation about the subject, portions of the meeting were highlighted in the article.

The Center which was recently open to the public in 2003 is situated on the Pine River a tributary of the St. Clair River. The purpose of the Center was to provide an outdoor facility for teaching. The Center is run by the St. Clair County Intermediate School District which integrates the outdoor facility at the Center with its classroom and textbook science curriculum for its K - 12 students. The Center routinely invites natural resource specialists to come and give presentation or run workshops for the benefit of the students, teachers and local citizens.

The article highlights the importance of the St. Clair River for lake sturgeon survival in the Great Lakes. Forums like these reach a wide audience and are excellent opportunities to explain how Alpena FRO is working closely with young students, teachers, and local citizens to identify their responsibilities as stewards of our natural resources.

This highlighted article provided an excellent opportunity to showcase the Service's mission and its effort to restore native fish. Specifically, the article focused on the importance of the St. Clair River and the survival of lake sturgeon in that area of the Great Lakes. This project is consistent with the Partnerships and Accountability, Aquatic Species Conservation and Management, and Leadership in Science and Technology focus areas of the Fisheries Program's Vision for the Future.

James Boase

Public Use

Friday Night! Downtown! In Alpena

On July 29, Fishery Biologists Aaron Woldt and Adam Kowalski staffed a Service information booth at the Alpena Friday Night Downtown! festival. Friday Night Downtown! is a city sponsored family event held every Friday night in the month of July in the downtown city streets of Alpena. Each Friday combines a different mix of live musical entertainment, kid's games,

food booths, pony rides, public safety demonstrations by local law enforcement and emergency services agencies, and informational booths by local businesses, civic groups, and governmental agencies. Biologists Woldt and Kowalski distributed Service pamphlets, children's coloring books, and posters and spoke with over 200 visitors to explain the role of the Service and the Alpena FRO in conserving natural resources. Topics discussed included lake trout rehabilitation, lake trout stocking, potential impacts of double crested cormorants, sea lamprey control, the National Fish Hatchery program, aquatic nuisance sp ecies control, fish passage, endangered species, the Partners for Fish and Wildlife Program, lake sturgeon tagging and tracking, lake whitefish population viability, and lake trout movement patterns.

Alpena Friday Night Downtown! is a large outreach event that allows Alpena FRO staff to meet and interact with large numbers of local community members to provide information about Service programs. This outcome is consistent with the Service's goal of implementing educational and outreach activities to educate public regarding Service activities under the "Aquatic Species Conservation and Management" priority of the Fisheries Program Vision for the Future.

Aaron Woldt

Inland Seas Education Association – Invasive Species Field Course

Biologist Bowen provided a PowerPoint presentation and handouts on the spread of Eurasian ruffe and round goby in the Great Lakes at Inland Seas Education Association's (ISEA)Fourth Annual Invasive Species Field Course on July 21, 2005 in Traverse City, Michigan. The field course, which ran from July 20-22, 2005, is a workshop which provides invasive species education for teachers from around the Great Lakes. A variety of speakers were invited to address and provide information on invasive species. Approximately 30 teachers and other professionals attended the event. The Service applauds this effort on the part of ISEA to continually provide quality information on Great Lakes issues to students, teachers, and the public - particularly regarding the important issue of invasive species education. Invasive species education meets requirements for Aquatic Species Conservation and Management in the Fishery Program's Vision for the Future.

Anjanette Bowen

Biologist Talks at Kiwanis Club Meeting

Fishery Biologist Adam Kowalski was invited to speak at a Kiwanis Club meeting on July 11, 2005. Kowalski gave a 30 minute presentation to 35 club members about the roles and responsibilities of the Alpena FRO and the Service in resource management. Kowalski's presentation highlighted a brief history of projects completed by the Alpena FRO, current projects, and future projects being considered. Meeting attendees asked numerous questions regarding Great Lakes fishing opportunities, salmon and trout population dynamics, lake sturgeon population levels, and impacts of cormorants. Alpena FRO staff have talked at Kiwanis meetings in the past, making this a great opportunity for the Alpena FRO to update the community regarding station activities.

Kowalski's presentation provided a group of community members information regarding USFWS activities in the local community. This outcome is consistent with the service's goal of implementing educational and outreach activities to educate public regarding Service activities under the "Aquatic Species Conservation and Management priority of the Fisheries Program Vision for the Future.

Adam Kowalski