The 2014-2015 Fenske Fellowship

Furthering the Future of Fisheries Management in the Great Lakes Basin



Molly Good (center) with her two Fenske mentors, Dr. Bill Taylor (left) and Bob Lambe (right, photo: T. Lawrence).

What does the future have in store for the Great Lakes Basin, and are we ready for it?

This is a critical question to consider, especially in regard to emerging issues and potential threats that could affect the Great Lakes and its abundant aquatic and fisheries resources.

The Great Lakes Basin comprises 20% of the world's surface freshwater and is home to immense biological diversity, including more than 150 native fish species. The basin also provides extensive and economically significant tribal, commercial, and recreational fisheries, all worth more than \$7 billion annually. However, cultural and anthropogenic influences including overexploitation of fish stocks, climate change, pollution, land use changes, potential introductions of new invasive species such as the Asian carp, and even international border control threaten the Great Lakes. Though we cannot use a crystal ball to foresee the Great Lakes Basin environment decades from now, it is possible, and recommended, that fisheries researchers, managers, and other stakeholders discuss potential changes in the environment and whether the management structure within the Great Lakes Basin is best equipped to address these changes.

After a successful application process, I was awarded the 2014-2015 Fenske Fellowship for a project proposal that was related to my dissertation research and addressed the importance of these types of discussions. Through the Fenske Fellowship, I have been fortunate to work closely with my professional mentor, Bob Lambe, my graduate advisor at Michigan State University, Dr. Bill Taylor, and other members of the Great Lakes Fishery Commission (GLFC) to accomplish two main goals. First, I wanted to gain a better understanding of the GLFC's complex, bi-national governance and management structure. Second, I hoped to become involved in the manner in which the GLFC fulfills its responsibilities to acquire knowledge about and facilitate implementation of management decisions for aquatic and fisheries resources in the Great Lakes Basin – both now and for the future. As a Fenske Fellow, I feel poised to use my new understanding of the GLFC, coupled with some high-level management and decision-making experience, to positively impact the future of our Great Lakes through my personal and professional endeavors.

The Great Lakes Fishery Commission

The Great Lakes Basin is a complex system of management, due mainly to its geography, size, associated values, and its many governing bodies. These governing bodies include two countries - the United States and Canada - eight U.S. states, the province of Ontario, a number of federal agencies, federal programs, intertribal agencies, and numerous local and county governments. Amazingly, all of these governing bodies come together and work within the Joint Strategic Plan for the Management of Great Lakes Fisheries (JSP), which is facilitated by the GLFC.

The GLFC's mandate is determined by the Convention on Great Lakes Fisheries, signed in 1954 (to learn more about the Convention, please visit: www. glfc.org/pubs/conv.htm). The aguatic and fishery resources within the Great Lakes Basin do not recognize geographical and political boundaries; thus, the GLFC facilitates bi-national, multi-jurisdictional cooperation to improve, manage, and sustain these resources.

The GLFC is comprised of four Canadian Commissioners appointed by the Privy Council of Canada and four U.S. Commissioners appointed by the President of the United States; the United States also appoints an "Alternate Commissioner" to serve in the absence of one of its four commissioners. Michigan State University's own Dr. Bill Taylor has served as the U.S. Commissioner (Alt.) since 2002! A primary mission of the GLFC is to provide for



The GLFC gathers for their Annual Meeting's plenary session. In the front row, left to right, are Commissioners Tom Melius (U.S.), Trevor Swerdfager (Canada), Bill Taylor (U.S.), Don Pereira (U.S.), Robert Hecky (Canada), Tracey Mill (Canada), Doug Stang (U.S.), and James McKane (Canada). Commissioner David Ullrich (Canada) is not pictured. (photo: T. Lawrence)

the control of sea lamprey, a destructive aquatic invasive species that has seriously impacted the sustainability of Great Lakes fisheries. As a result of GLFC efforts, the sea lamprey is the only non-native Great Lakes species that is controlled basin-wide and at an ecosystem scale. The GLFC also facilitates fisheries research and management throughout the basin for fish species of common concern including shiners, bass, lake trout, and walleye.

Ensuring Fish for the Future

Building on its past success, the GLFC continues to assess how it can respond to emerging issues or potential threats to the Great Lakes fisheries. As part of my Fenske Fellowship, I assisted the GLFC in the development and execution of a two-day retreat held early in 2015 to discuss these issues and gain a better understanding of the GLFC's responsibilities and roles. The retreat provided excellent fodder for discussion

and revealed key perspectives of the Convention on Great Lakes Fisheries and the GLFC among retreat participants. First, Commissioners and staff confirmed that their organization is critical, and successful, in facilitating multi-jurisdictional research and collaboration throughout the Great Lakes Basin. Second, they concluded that the Convention on Great Lakes Fisheries enables the GLFC to engage in emerging issues or potential threats to the basin. I believe this particular conclusion is especially insightful, as it indicates the GLFC possesses the flexibility to adapt to new issues and engage in future actions not necessarily spelled out in the Convention.

I shared this material and our conclusions with other GLFC staff at their Annual Meeting in June 2015. There, we confirmed that the GLFC remains ready and generally able to play its part in protecting and sustaining the Great Lakes Basin's aquatic and fisheries resources for the foreseeable future.

Managing Fish Means Managing People

As the GLFC concluded during the two-day retreat this spring, I have also learned that fisheries managers manage more than fish. Collaboration and partnerships between states, tribes, federal agencies, and even stakeholders, policymakers, researchers, and others are necessary aspects of effective fisheries management. Preparing for the future management of resources in the Great Lakes Basin will be a continuing challenge due to the plethora of individuals, agencies, and

organizations that share a vested interest in the sustainability of these resources and must work together to provide for effective management of them. Fortunately, in my opinion, the GLFC stands at the helm of enabling collaboration and successfully facilitating partnerships with other agencies and organizations. With its proven track record, the GLFC is uniquely positioned to promote future cooperation toward the sustainability of Great Lakes fishery resources in the Basin and their environments.

By beginning these discussions about the future with the GLFC,

I am learning how to best prepare organizations to be able to address potential changes in the Great Lakes environment. I am grateful to Michigan State University and the Fenske Fellowship Committee, and for Bob Lambe and Dr. Bill Taylor in particular, for providing me with abundant experiences to work closely with the GLFC Commissioners and staff. Most importantly, I am thankful for the opportunity to become immersed in a management and decision-making process that has and will continue to effectively protect the fishery resources of our magnificent Great Lakes.

What is the Fenske Fellowship?

Fellowship History and Description

Jan Fenske was the first female fisheries biologist of the Fisheries Division of the Michigan Department of Natural Resources. For 27 years, Jan worked passionately to protect and conserve the state's aquatic and fisheries resources. As an advocate for equality, Jan served as a mentor to many future professionals in the field of fisheries science and management. The Janice Lee Fenske Excellence in Fisheries Management Fellowship honors her and her significant legacy. The fellowship program is in its ninth year and has supported eleven students. For more information about the Fenske Fellowship, please contact Dr. Dana Infante (infante@msu.edu) or visit: http://www.fw.msu.edu/graduate/graduate_fellowship_opportunities



Jan Fenske

Molly's Motivation to Apply

I was inspired to apply for this fellowship because I greatly admire Janice Lee Fenske's passion for the sustainability of aquatic and fisheries resources she displayed during her lifetime. I was eager to find an opportunity that would enable me, like Janice, to make my own impact on fisheries sustainability in the Great Lakes Basin.

Molly's Fenske Project

In addition to helping the GLFC conduct an evaluation of the organization's future (covered in this article), I was also tasked with establishing a working relationship with members of the GLFC Law Enforcement Committee. One outcome of this relationship included a half-day symposium on fisheries sustainability, crime, and enforcement held at the 2015 American Fisheries Society meeting in Portland, OR.

Molly's Lessons Learned

I can proudly say that I finally understand the basic structure and function of the GLFC. I also learned that effective decision-making is a huge challenge, especially with so many stakeholders at the table. Through the many meetings and seminars I have attended with the GLFC, I have learned that relationships and partnerships are the key ingredients to a successful decision-making and management process.

Molly's Application beyond the Fellowship

This fellowship provided me with opportunities that have enabled me to grow as a graduate student and future professional in the field of fisheries science and management. I am more confident to pursue a permanent position with a state, federal, or even provincial management agency, and I know better how to become an effective fisheries manager capable of making positive change.