## **Integrating Ecological and Social Networks in Fisheries**

## **Bill Fisher, President**

This is the third and final article about the theme of the 2012 American Fisheries Society Annual Meeting (afs2012.org) in St. Paul–Minneapolis, Minnesota, "Fisheries Networks: Building Ecological, Social and Professional Relationships" and the plenary speakers who will address it. In this article, I highlight Dr. William W. Taylor – a Past President of the American Fisheries Society (1997–1998) and University Distinguished Professor in Global Fisheries Systems in the Department of Fisheries and Wildlife Center for Systems Integration and Sustainability at Michigan State University. For his plenary talk, Bill will address "Fisheries Sustainability: The Science and Art of Coupling Human and Natural Systems." Bill is an active leader in fisheries at local, regional, and international levels and brings valuable perspective to this topic.

Fisheries science has been progressively moving from disciplinary and multidisciplinary science conducted by individual or groups of ecologists and sociologists toward interdisciplinary and transdisciplinary research conducted by teams of scientists from a broad range of fields that also include economists, geographers, anthropologists, and others. Integrated studies of coupled ecological (natural) and sociological (human) systems have revealed complex patterns and processes that were not evident when studied separately by ecologists and sociologists (Liu et al. 2007). Though this integrated approach has been used in marine fisheries for some time, it has more recently become an objective of freshwater recreational fisheries and aquaculture management (Cowx and Anrooy 2010). Disciplinary strength is needed and will remain important to fisheries management; the challenge for fisheries scientists will be learning the language and methods of other disciplines as we work in teams.

Collaboration is needed across disciplines, involving policy makers and policy influencers (e.g., legislators, business leaders, nongovernmental organizations) to help identify what is needed from the scientific community and the pathways of solutions rather than just the processes leading to the problems (Palmer 2012). This approach, called "actionable science," focuses on what motivates the science priority questions and themes as well as who is engaged in the process of identifying those priorities. Initiating the research process with policy needs rather than ending it with them would be a new path for many researchers and scholars. Clearly, this new way of thinking will challenge many fisheries scientists but is needed to better integrate fisheries management across natural and human systems.

Bill Taylor is an internationally recognized expert in Great Lakes fisheries ecology, population dynamics, governance, and management. Throughout his career, Taylor has been active in the American Fisheries Society, serving as president of the society, the Michigan Chapter, and the North Central Division. Currently, he holds a U.S. Presidential appointment as a U.S. Commissioner (alternate) for the Great Lakes Fishery Commission. In addition, he has held a gubernatorial appointment to Michigan's Aquatic Nuisance Species



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Coordinating Council and a U.S. Secretary of Interior appointment to the Sport Fishing and Boating Partnership Council, which he chaired for 8 years. He is also the associate director of the Michigan Sea Grant College Program. Bill has received numerous awards and published more than 120 articles in the scientific literature and has coedited five books, including the first edition of Great Lakes Fishery Policy and Management. He has a keen interest in environmental policy and management from a local to global perspective.

Bill's broad experience and perspectives will help tie together ecological and social networks that build sustainable fisheries. He will also address the importance of networking to fisheries professionals. I invite all of you to attend this year's plenary session to hear our outstanding speakers talk about fisheries networks and to witness the presentation of the society's most prestigious awards.

## REFERENCES

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## COLUMN President's Hook