

Safe Operating Space for Walleye Fisheries: Applications & Tests

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Abstract: Threats to inland recreational fisheries include warmer water, habitat loss, and expanding populations of predators. These threats are not directly confronted by the usual tools of fishery management. In view of this mismatch, the safe operating space or SOS approach aims to “manage what you can to protect what you want”. In some cases, reduced harvest or increased stocking may offset some impacts of deteriorating habitat. In other cases we learn that “you can’t stock your way out of poor habitat”. Direct removal of predators may help restore natural recruitment; recent case studies will be summarized. Restoration of shoreline and wetlands could directly improve Walleye habitat. With continued change of land use and climate, some large deep lakes may continue to support Walleye, others may become warm-water Centrarchid fisheries, and some lakes could continue as Walleye fisheries under appropriate management. Our next task is to identify Walleye fisheries that could be maintained and actions that could preserve them.

Presenter Background: I am fascinated by lakes as microcosms of all complex systems, and have been lucky to work on Wisconsin’s lakes for the last 48 years while spending most of my career at the Center for Limnology of UW-Madison. Most of the projects combined whole-lake experiments with ecosystem models to study trophic cascades, biomanipulation, fish habitat restoration, algal blooms, and cycling of nutrients and contaminants. My perspective expanded beyond ecosystems to social-ecological systems of people and nature. In 2000-2005 I served as co-leader for the Scenarios Working Group of the Millennium Ecosystem Assessment, the first global survey of nature’s benefits to people. I continue to work on global change projects through the Beijer Institute of Ecological Economics and the Stockholm Resilience Centre where I serve on the International Science Council. As Emeritus Professor at the Center for Limnology, I am writing about long-term change and developing new quantitative tools to measure resilience of complex systems.

To Be, or Not to Be an Effective Communicator: What Shakespeare can teach us

Julie Claussen, Director of Operations, Fisheries Conservation Foundation

ABSTRACT:

We in the scientific community have organized our findings in the same organizational structure for decades, following the Introduction, Methods, Results, and Discussion model. This trusted format is often how we present our science to various audiences, assuring our listeners that our methods are sound, and that our data provides the evidence that logically leads to the conclusion on how to move forward. Despite this logical organization, there exists a disconnect in our ability to have broader audiences understand or trust our findings. There is often a rift between what we as fisheries professionals say, and what our constituents are feeling. In short, our methods in communicating science have fallen short. We will explore this disconnect and what we can learn from the most successful of bard's on how to elicit the impacts we desire.

Presenter Background

Julie Claussen spent 30 years as a fisheries research biologist and academic professional at the Illinois Natural History Survey, University of Illinois. In 2003, she helped found the Fisheries Conservation Foundation in order to directly work with stakeholders and decision-makers in their development of science-based solutions for fisheries issues. She now serves full-time as Director of Operations for the foundation. Through her work with FCF and the International Finance Corporation, she has work on several field-based international project including Canada, Bahamas, Thailand, Nepal, Pakistan, and Bhutan. In the communications arena, Julie has organized and moderated consensus building roundtables and workshops and currently co-directs the Climate Ambassadors and Fellows Program and serves on the advisory team for the ABT narrative training course. Julie is an active member of the American Fisheries and has served as President of the International Fisheries Section and the Science Communication Section. She also serves on the Advisory Council for Go Conscience Earth, an NGO focused on the community conservation in the Congo and on the IUCN SSC Freshwater Fish Specialist Group.

Climate Change and Wisconsin fish, fisheries, and fishing

Alex Latzka – Wisconsin DNR Bureau of Fisheries Management

Abstract: Wisconsin boasts 15,000 inland lakes and 84,000 miles of rivers and stream that support diverse fishes and fishing opportunities. Our landscape enables choice for an angler – choice in what species to target, what size structure, what type of environment in which to fish – and much of that choice hinges on the diversity of temperatures Wisconsin offers, which enables cold, cool, and warmwater species to thrive. But as Wisconsin warms, cool and cold lakes are warming and shifting to warmwater fish communities. Coldwater trout streams may be threatened by warming and increased flooding, and many of those that remain are likely to shift from native Brook Trout to introduced Brown Trout. These changes portend a massive decline of choice on our fishing landscape. However, there are numerous opportunities to resist, accept, and direct climate-driven changes so that we can maximize the possible diversity of future fishing opportunities, protect vulnerable species and habitats, and amplify a few “brightspots” that may result from climate change. In this talk, I will summarize recent research led by myself and many colleagues at WDNR and our partner universities and agencies that highlights climate-driven changes in our fisheries to date and projections for the future. I will discuss management frameworks that could maximize possible angler choice in the future, and communication strategies for fisheries researchers and managers that are becoming increasingly vital for the long-term management of diverse Wisconsin fish, fisheries, and fishing.

Presenter background: I’m a Wisconsin transplant thankful for its landscape of rich aquatic resources and legacy of thoughtful natural resource management. As an angler, I reap the benefits of these resources and their stewardship, and as a researcher and manager, my goal is to unite research and management for continued, effective stewardship into the future. As a statewide WDNR Fisheries Systems Biologist and liaison between many researchers and Fisheries Management, I am lucky enough to work with dozens of other colleagues at WDNR, in WICCI, in partner agencies, and at universities both in and outside of the state who share this mission. Prior to beginning my WDNR Fisheries career in 2017, I received a B.S. in Natural Resources from Cornell University, a Ph.D. in Freshwater and Marine Science from UW-Madison, and completed postdoctoral fellowships at McGill University and as a joint fellow between UW-Madison and WDNR Bureau of Water Quality. I enjoy fishing, deer hunting, mushroom hunting, hiking, football, craft beer, spending time with my fiancé and our two dogs, and combining as many of those activities as possible (and safe) into grand adventures across our state.