Advancing black bass management and conservation to benefit fish populations, fisheries, and people

David P. Philipp¹, Mark S. Ridgway², Cory D. Suski³, Julie Claussen¹, and Steven J. Cooke^{4,*}

¹Fisheries Conservation Foundation, Champaign, Illinois, USA ²Harkness Laboratory of Fisheries Research, Aquatic Research and Monitoring Section, Ontario Ministry of Natural Resources, Peterborough, Ontario, Canada

³Department of Natural Resources and Environmental Sciences, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

⁴Department of Biology, Carleton University, Ottawa, Ontario, Canada

*Corresponding author: Steven J. Cooke. Email: Steven Cooke@carleton.ca.

Since the colonization of North America by Europeans, black bass Micropterus spp. of the family Centrarchidae have been the basis for lucrative recreational fisheries, and even smallscale commercial fisheries. Early accounts by James Henshall in the late 1800s celebrated black bass while acknowledging the importance of sustainable management during periods of intense harvest (Henshall, 1881). Species-specific accounts followed, as well, along with other more holistic, scientific tomes (e.g., Robbins & MacCrimmon, 1974). Pioneers in black bass science such as Homer Swingle, George Bennett, and William Childers generated foundational knowledge on black bass biology, ecology, propagation, and management. Not surprisingly, early efforts focused on the more common species such as Smallmouth Bass Micropterus dolomieu, Spotted Bass M. punctulatus, and what we now know as two separate species, Largemouth Bass M. nigricans and Florida Bass M. salmoides (see Near & Kim, 2021).

Recognizing the stature of black bass fisheries, there have been a number of efforts over the years to assemble black bass scientists and managers in focused symposia to reflect on and advance black bass science and management. The first major symposium, organized by the Sport Fishing Institute (Dick Stroud, Bob Jenkins, Larry Larimore, and others), was held in 1975 in Tulsa, Oklahoma, culminating in what became the bible for bass management for 20+ years (Stroud & Clepper, 1975). The second symposium, organized in conjunction with the American Fisheries Society (David Philipp, Mark Ridgway, and others), was held in 2000 in St. Louis, Missouri, yielding a published proceedings (Philipp & Ridgway, 2002). In 2009, a tome on the biology of centrarchid fishes was published (Cooke & Philipp, 2009), including detailed contemporary species accounts (Warren, 2009). And in 2015, Tringali et al. (2015) published the outputs from a symposium on the diversity of the black bass with a decidedly evolutionary biology and biodiversity conservation focus. Collectively, those bodies of work/syntheses have all served to advance how we think about and manage black bass. Yet, it is also apparent that the challenges of an uncertain future demand that we improve our black bass management and conservation strategies.

Indeed, times they are a changing. Over the past decade, the designation of new black bass species has stretched management capabilities. Climate change is apparent and is having dramatic effects on freshwater ecosystems (Ficke et al., 2007). Invasive species are ubiquitous and, in some cases, black bass are themselves the introduced species (Long & Seguy, 2024), in turn creating novel ecosystems with additional management issues such as interactions with western salmonids. Bass are among the most heavily managed species on the planet with millions spent annually on habitat management, harvest regulations, and stocking (reviewed in Noble, 2002), yet the evidence base supporting such efforts is often weak (Taylor et al., 2019). Conflicts between conservation of black bass diversity and recreational fishing opportunities are intensifying. The social context for black bass fishing is being revisited with growing conflict between other water users and bass tournament organizers in some locales. Given the array of these complex issues, the diverse actors involved in the black bass universe need to come together to find pathways for working collaboratively to advance issues of mutual concern supported by robust scientific research. While others have had similar goals (e.g., Long et al., 2015; Taylor et al., 2019), none of the past efforts have involved the full suite of constituents involved within the black bass universe. For example, early efforts focused almost exclusively on supporting the recreational sector with little appreciation for the role of small-scale commercial fisheries or fish harvested by Indigenous/tribal fishers and community members. Moreover, research priorities have

tended to be discussed independent of perspectives from management agencies or stakeholder groups. There is urgent need to revisit black bass management with a collaborative goal of identifying evidence-based actions that balance conservation and management objectives, and future-proof black bass management for the benefit of black bass and people.

To that end, we are thrilled to announce and welcome you to the 2025 Black Bass Symposium, which will be held in conjunction with the Annual Meeting of the American Fisheries Society in San Antonio, Texas in August 10–14, 2025. What is unique about this black bass symposium is that it is intended to extend beyond scientists and managers. The Symposium's program is being designed to create pathways for diverse actors ranging from high school bass fishing teams to Tribal government leaders to fishing industry representatives to the outdoor media to come together to share and learn. This event is an opportunity to re-envision black bass management and long-term conservation, where bass are managed not only for the benefit of one constituency, but where the goals for long-term sustainability meet the needs for all. Such bold actions will require courage and creativity. The organizers of the symposium are creating opportunities for candid and creative input, including a day-long interactive session with non-scientists and speakers that extend beyond the usual scientific participants (led by Tom Lang and Steve Bardin).

We now are under a year until the BB2025 event, and soon abstracts will be due and travel plans will need to be made. The organizing team will be doing their very best to try to make the event affordable and accessible to all with special rates for non-AFS participants. This will NOT be just another conference or symposium, rather, it is meant to be a catalyst to chart the course for the future of bass management and conservation. However, rest assured that although this "event" will begin soon, its impact will hopefully extend for years afterward through webinars and other activities designed to engage our community. So, stay tuned and add yourself to our mailing list. We look forward to seeing YOU in San Antonio in August 2025.

To be added to the BB2025 mailing list, visit https://forms.gle/2Jvd1WvVWwKsayEk8



BB2025 Website:



FUNDING

None declared.

CONFLICTS OF INTEREST

None declared.

REFERENCES

- Cooke, S. J., & Philipp, D. P. (Eds.). (2009). Centrarchid fishes: Diversity, biology and conservation. Wiley-Blackwell.
- Ficke, A. D., Myrick, C. A., & Hansen, L. J. (2007). Potential impacts of global climate change on freshwater fisheries. *Reviews in Fish Biology and Fisheries*, 17, 581–613. https://doi.org/10.1007/s11160-007-9059-5
- Henshall, J. A. (1881). Book of the black bass. Robert Clarke & Company.
 Long, J. M., Allen, M. S., Porak, W. F., & Suski, C. D. (2015). A historical perspective of black bass management in the United States. In M. D. Tringali, J. M. Long, T. W. Birdsong, & M. S. Allen (Eds.), Black bass diversity: Multidisciplinary science for conservation (Symposium 82, pp. 99–122). American Fisheries Society.
- Long, J. M., & Seguy, L. (2024). Global status of non-native largemouth bass (*Micropterus salmoides*, centrachidae) and smallmouth bass (*Micropterus dolomieu*, centrarchidae): Disparate views as beloved sportfish and feared invader. *Reviews in Fisheries Science & Aquaculture*, 32, 81–98. https://doi.org/10.1080/23308249.2023.2244078
- Near, T. J., & Kim, D. (2021). Phylogeny and time scale of diversification in the fossil-rich sunfishes and black basses (teleostei: Percomorpha: Centrarchidae). *Molecular Phylogenetics and Evolution*, 161, 107156. https://doi.org/10.1016/j.ympev.2021.107156
- Noble, R. L. (2002). Reflections on 25 years of progress in black bass management. In D. P. Philipp, & M. S. Ridgeway (Eds.), Black bass: Ecology, conservation, and management (pp. 419–431). American Fisheries Society.
- Philipp, D. P., & Ridgway, M. S. (Eds.). (2002). Black bass: Ecology, conservation, and management (Symposium 31). American Fisheries Society. Robbins, W. H., & MacCrimmon, H. R. (1974). The black basses in America and overseas. Biomanagement and Research Enterprises.
- Stroud, R. H., & Clepper, H. (1975). Black bass biology and management. Sport Fishing Institute.
- Taylor, A. T., Long, J. M., Tringali, M. D., & Barthel, B. L. (2019). Conservation of black bass diversity: An emerging management paradigm. Fisheries, 44, 20–36. https://doi.org/10.1002/fsh.10187
- Tringali, M. D., Long, J. M., Birdsong, T. W., & Allen, M. S. (Eds.). (2015). Black bass diversity: Multidisciplinary science for conservation (Symposium 82). American Fisheries Society.
- Warren Jr., M. L. (2009). Centrarchid identification and natural history. In S. J. Cooke, & D. P. Philipp (Eds.), Centrarchid fishes: Diversity, biology, and conservation (pp. 375–533). Wiley-Blackwell.