

THE WILD FOODS INSTITUTE

A NEW UNIVERSITY PROGRAMS INITIATIVE FURTHERS THE CLUB'S MISSION TOWARD WILDLIFE CONSERVATION AND SUSTAINABLE USE

For most people, filling the refrigerator or pantry requires simply visiting the supermarket or ordering food online to be delivered to the doorstep. However, for hundreds of millions of people worldwide, hunting, fishing, and gathering remain critical to their livelihoods and the ability to obtain adequate and affordable food. Although our increasing reliance on domestic livestock and commercial agriculture has reduced our need for wild foods, they remain important to many people.

In 2024, to further the mission of the Boone and Crockett Club and the mission of the Club's University Programs, the Boone and Crockett Chair in Wildlife Conservation at Michigan State University (MSU) Jerry Belant and Abigail Bennett, Assistant Professor of Global Inland Fisheries at MSU, established the Wild Foods Institute in MSU's Department of Fisheries and Wildlife to study the importance of wild foods and associated products such as hides, furs, bones, horns, antlers, and ivory, as well as the sustainability of their

harvests. To our knowledge, the Wild Foods Institute (WFI) is the only credentialed academic body addressing these topics. By working with Club members, its partners, and current and future fellows, the Institute will further our understanding of linkages at the intersection of conservation and sustainable use, human livelihoods, food security, and sustainability to help develop effective conservation practices, policies, and governance. In addition, we will work with local communities, non-governmental organizations, and Tribal, regional, and national governments toward our shared goal, applying scientific principles to everything we do.

In addition to projects in the U.S. and Canada, the WFI is now collaborating with colleagues in Africa, Asia, and Latin America. Our current assignments range from a proposal to tap the overabundance of whitetail

deer in Michigan for food security to enhancing gender equality in subsistence fishing in Lake Malawi in East Africa.

We also assess the impact of both sport hunting and subsistence harvesting on the conservation status of various wildlife species. We are developing a five-year agreement with the Food and Agriculture Organization (FAO) of the United Nations to develop standards for quantifying wildlife harvests and collecting and interpreting related data.

Recent social, political, and economic disruptions have made food security more challenging. Today, more than 40 percent of people worldwide cannot afford a healthy diet, with meat being the most expensive item in food budgets. In the U.S., 17 million households experience at least occasional food insecurity. Wild game and fish can

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Many people who hunt or fish have (or develop) an appreciation for nature that has been linked to physical, social, and psychological well-being.



The 2023 report "Illuminating Hidden Harvests" by the FAO, Duke University, and WorldFish estimates that the global value of fish obtained by small-scale operators exceeds \$77 billion.

B&C UNIVERSITY PROGRAMS

The mission of the Boone and Crockett Club University Programs is the development of a diverse community of high-impact wildlife conservation leaders.

MEET THE FELLOWS

DAVID MASON

David is a research scientist with the Wild Foods Institute at Michigan State University and received his PhD in wildlife ecology and Conservation from University of Florida (UF) in December 2022. His dissertation explored how events that generate resource pulses, such as fire and carrion decomposition, influence plant communities through seed dispersal by wildlife. Before attending UF, David graduated from Mississippi State University with a MS in biology and Richard Stockton College of New Jersey with a BA in environmental studies. Beyond his current work, David's research broadly incorporates habitat management, prescribed fire, and plant-animal interactions.



MARK BELL

Mark is a research scientist with the Wild Foods Institute at Michigan State University. He received his PhD in ecology from Utah State University in December 2022. His dissertation investigated nest-site selection, success, and predators of ducks nesting in wetlands surrounding Great Salt Lake, Utah. Mark received his BS in wildlife ecology and management from Utah State University in 2018. Mark's research interests include population and behavior analyses of wildlife and human-wildlife conflicts.



relieve these shortages, with significant dietary benefits. Wild meat contains more protein than domestic meat; it is also low in saturated and trans fats, contains high amounts of important micronutrients, and is free of growth hormones and other commercial additives.

Sustainably harvested wild foods already contribute substantially to global health. For example, the 2021 “Blue Food Assessment Report” identified more than 2,500 species of fish, invertebrates, algae, and aquatic plants that provide 20 percent of the daily nutritional needs for three billion people worldwide. Two-thirds of this bounty comes from small-scale harvesters.

When properly focused and managed, wild harvests pose no threat to conservation. In fact, in addition to improving human nutrition and health, wild harvests can be used to alleviate the negative impacts of some overabundant species. For example, whitetail deer in the eastern US cause billions of

WHITETAIL DEER IN SOUTHERN MICHIGAN—CHALLENGES AND SOLUTIONS

David and Mark are collaborating with the Michigan Department of Natural Resources to produce a comprehensive report that will inform management decisions regarding whitetail deer overabundance in Michigan's Lower Peninsula. This document will summarize the background and current state of whitetail deer management, along with the adverse ecological and economic effects of deer overabundance. The report will also include scientific assessments addressing challenges and projected outcomes of various management strategies, including expanded recreational harvest, professional culls, fertility control, and trap-and-kill or trap-and-relocate approaches. To provide more focused insight, the report will also incorporate data from ongoing research in Michigan alongside these literature reviews. Additionally, David is analyzing wild-harvested game meat donation programs in Michigan and across North America, and Mark is assessing deer crop damage and vehicle collision data to help guide management strategies. Collectively, this comprehensive approach will inform policy not only in Michigan but serve as a template for other states confronting similar issues with whitetail deer overabundance.





Connecting society through sustainable wild harvests

To learn more about our work in using principles of conservation and sustainability to bolster human livelihoods and food security while shaping effective policies, practices, and governance, please visit our website or email us at wildfoods@msu.edu.

LEARN MORE



wildfoods-institute.org

The Wild Foods Institute’s goal of strengthening society through sustainable wild harvests is based on three primary values:

- 1) Involving individuals, communities, organizations, and governments in acquiring and using knowledge about wild harvesting.
- 2) Explaining and enhancing the benefits of wild foods across a broad range of communities.
- 3) Ensuring scientific rigor in collecting, analyzing, and reporting wild harvest data.

dollars in crop damage and vehicle collisions—accidents that also lead to human injury and loss of life. Reducing deer numbers through managed harvests (which could include culling) can lessen these impacts, as well as the environmental degradation of over-browsing, and provide meat to people in need. Wild harvests can also reduce the need for pasture, hayfields, and feed lots for domestic livestock, which preserves natural habitat.

Wild fisheries already contribute substantially to our economies. The 2023 report “Illuminating Hidden Harvests” by the FAO, Duke University, and WorldFish estimates that the global value of fish obtained by small-scale operators exceeds

\$77 billion. Global data on the scope and value of wild game harvests are not yet available, but in 2022, the “National Survey of Fishing, Hunting, and Wildlife-Associated Recreation” found that \$144.6 billion was spent on these activities in the U.S. alone.

Finally, our personal and professional experiences have shown us that, nutrition and livelihoods aside, the social and cultural benefits of wild harvests cannot be overstated. Hunting, fishing, trapping, and foraging foster companionship through shared effort and enjoyment, while food sharing strengthens bonds among families and communities. Many people who hunt or fish have (or develop) an appreciation for nature that has

been linked to physical, social, and psychological well-being. Among Indigenous people, wild harvests, or “living off the land” in traditional ways, also maintain culture, spirituality, and identity.

Wildlife harvesting bolsters food security and broadly benefits society. However, if the values of wild harvest are not widely understood and recognized, the conservation of wildlife and wild lands will suffer to the detriment of all. The need for broad collective investment in conservation has never been greater, and the values that sustain wild food harvests also support the societal and political processes that sustain our environment for future generations. ■

The Wild Food Institute will further our understanding of linkages at the intersection of conservation and sustainable use, human livelihoods, food security, and sustainability to help develop effective conservation practices, policies, and governance.



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