Why is Conservation Social Science Needed?



Wildlife Management Institute

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MSCG Project Intent

- Not to replicate or create conservation social scientists in state agencies
- Provide basic information to increase awareness of and about the acquisition and application of conservation social science in agency decision making
- For the purposes of these modules, we'll use the more modern and broader terminology of conservation social sciences rather than human dimensions of wildlife management
- Our use of the term wildlife includes mammals, fish, birds, insects, reptiles, etc.
- WMI deeply appreciates the contributions of Dr. Daniel J. Decker and Dr. Lou Cornicelli to this project

"The pervasive human dimensions problem for professionals responsible for managing <u>common</u> natural resources is the same: recognizing the interests of many people and coordinating the use, distribution, and abundance of resources to optimize value while sustaining the resources."

Decker, Riley & Siemer (2012: p3)

Agency Mission Statement Examples

- AZ Conserve Arizona's diverse <u>wildlife resources</u> and manage for safe, compatible outdoor recreation opportunities for <u>current and future</u> <u>generations</u>
- FL Managing fish and <u>wildlife resources</u> for their long-term well-being and the <u>benefit of people</u>
- MN Work with Minnesotans to protect and manage the state's <u>natural</u> resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates <u>a</u> <u>sustainable quality of life</u>
- NY Conserve, improve and protect New York's <u>natural resources</u> and environment and to prevent, abate and control water, land and air pollution, to enhance the <u>health</u>, safety and welfare of the people of the state and their overall economic and social well-being

Commission Decision Space





Bennett, N.J., et al. 2017. Conservation social science: Understanding and integrating human dimensions to improve conservation. Biological Conservation 205, 93-108.

Conservation Social Science Informs Management Actions

- Core beliefs and values are difficult to change
- Attitudes, opinions and motivations can change based on experiences
 - Over-abundant deer population and near-car collisions may change people's attitudes about deer management actions
- People's experiences in other states or countries may find that traditions of outdoor recreation behaviors may be different
 - These may change over time (e.g., reduction of social acceptance of rattlesnake round-ups, foraging on public lands)
- Most conservation challenges are related to humans

What is Conservation Social Science?

Application of social science theory and methods to natural resource/environmental management issues. It attempts to describe and understand human thought and behavior toward wildlife resources to improve management.

Conservation Social Science

Management and research focusing on...

- How and why people value natural resources
- How people want these resources to be managed
- How people affect or are affected by...
 - Natural resources
 - Management decisions and actions

 Demands from a broader range of people whose interests and concerns about wildlife management differ from those previously engaged with the agency

- Increased co-management of natural resources with tribal nations
- People's changing concerns about the welfare of individual animals versus animal populations
- Concerns about private property rights and access to public lands
- Increase in negative human-wildlife interactions
- Nonnative species impacting native species and ecosystems

- Monitoring and mitigating impacts of climate change
- Increased participation in shooting sports but not hunting
- Increased expectations of landscape-level collaboration
- Increased focus on nongame species
- Increased attention to diversity, equity, inclusion and environmental justice issues
- Increased expectation to partner with environmental and public health officials (e.g., One Health)
- Increased activism to broaden Commissions composition and improve Commission and agency governance practices

- US conservation issues are now global issues
- Increased human development impacting fish and wildlife habitat
- Decrease in the public's ability to handle nuisance wildlife issues
- Generally decreasing or static staffing of state agencies
- Limited funding for agencies to meet increased public demands and expectations
- Decrease in traditional outdoor recreation; increase in nontraditional outdoor recreation
- Implications of decreasing tenure of agency directors

- Illegal wildlife trafficking (international and in US)
- Increased public interest in operational-level agency management actions
- Continued decrease in trust in government and science
- Increased agency response to natural disasters
- Increased expectation of drug/domestic violence interdictions or public protection details with partner law enforcement organizations
- Increase in detection, monitoring, research, and eradication of wildlife diseases
- Declining water quality and quantity



Percent Change in the Hispanic or Latino Population by County: July 1, 2022, to July 1, 2023





Patrica Greenfield 2013

America's Wildlife Values

- Intent was to understand growing conflict around wildlife management
- Built on 2004 study of wildlife values in western states
- Surveyed people in all 50 states in 2018
- Categorized into 4 major wildlife value orientations

- Traditionalists = 28%
- Mutualists = 35%
- Pluralists = 21%
- Distanced = 15%



- WAFWA
- Colorado State University
- The Ohio State University
- Responsive Management

(National 2018 data)

Wildlife Value Orientation Types

- Utilitarian wildlife are for people to use
- Mutualism humans and wildlife are relatively equal
- Pluralistic mix of utilitarian and mutualism depending on context
- Distanced not connected to wildlife

Wildlife Orientation Values for Minnesota



MN DNR Staff

General Population

Modern Conservation Challenges Can't be Solved With Ecological Science Alone

- Wildlife conservation has moved beyond the restoration of habitat and species
- Changes in human demographics are impacting people's connections to wildlife and the natural world
- The conservation community needs people to be aware of the direct and indirect benefits they get from wildlife conservation actions
- The conservation community needs support from those that receive benefits from conservation (e.g., everyone)
 - Conservation friendly practices (e.g., recycling, water conservation)
 - Participation in outdoor recreation
 - Participation in conservation decision making
 - Support for conservation friendly legislation/candidates (at all levels)
- Must include the "human" dimension of wildlife management

Case Study: Stakeholder Engagement MN DNR Annual Roundtable

- Started in 1991 with a Fishing Roundtable traditional stakeholders and issue-focused
- Expanded in 1995 to add Hunting Roundtable
- Expanded in 2001 to add an Ecological Roundtable (e.g., nongame, rare species, natural communities)
- Has created a network of knowledgeable, engaged and politically active stakeholders that support wildlife conservation policies and programs





DNR Roundtable

- DNR is convener and facilitator for discussion; not a decision-making forum
- Plenary presentations on contemporary conservation issues
- Breakout sessions for Fisheries, Wildlife, and Ecological stakeholders
- Important venue for networking of conservation interests outside the structured program



Resources

- AFWA Commission Guidebook (Guidebook)
- Wildlife orientation values study (<u>https://sites.warnercnr.colostate.edu/wildlifevalues/results/</u>)
- <u>Relevancy Roadmap (https://www.fishwildlife.org/afwainforms/resources/blue-ribbon-panel/relevancy-roadmap)</u>
- <u>https://www.frontiersin.org/articles/10.3389/fcomm.2020.00</u>
 <u>oog/full</u>