The Takeaway

Policy Briefs from the Mosbacher Institute for Trade, Economics, and Public Policy

Improving Future Wildlife Conservation Programs by Understanding Emerging Stakeholder Values



STUDENT CAPSTONE PROJECT The Bush School of Government and Public Service

Conservation programs depend on participation by private landowners for effective implementation.¹ Future programs aimed at delisting species or preventing additional listings on the Endangered Species Act must relate successfully to the variety of values held by new generations of private landowners in conservation programs. Our study surveyed young, future stakeholders to gauge their wildlife values.

CONSERVATION & PRIVATE LANDS

Monarch butterflies are a candidate species for protection under the Endangered Species Act and their dwindling population demonstrates a need for increased conservation efforts on private agricultural lands. Agricultural lands provide more habitat for conservation efforts than public lands but entail significant economic concerns for landowners. Private landowners who are receptive to conservation practices are crucial stakeholders for future success. Thus, conservation partner-

WHAT'S THE TAKEAWAY?

WORK WITH THE WILLING: Conservation programs should identify and engage private landowners who are most willing to participate.

VARY MARKETING APPROACHES: Conservation programs should be flexible in length, acreage needed, and related features to attract participants with varying values for wildlife.

BUILD ON PRIOR SUCCESSES: Agencies should adapt existing program frameworks for emerging stakeholders in both rural and urban communities.

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Mosbacher Institute for Trade, Economics, and Public Policy THE BUSH SCHOOL • TEXAS A&M UNIVERSITY ships, which rely on long-term commitments, must accommodate the wide variety of values and mindsets held by private landowners as ownership is transferred between generations.

The US Department of Agriculture has developed programs, such as Working Lands for Wildlife, that have successfully designed and implemented conservation programs on public and private lands for sage grouse and monarch butterflies.² Well-designed approaches to restoring habitats for butterflies, bees, and other pollinating species may generate win-win situations where private landowners accomplish agricultural and conservation goals simultaneously.

UNDERSTANDING WILDLIFE VALUE ORIENTATIONS

Contemporary literature's seminal work on wildlife value orientations in the United States is "America's Wildlife Values: The Social Context of Wildlife Management in the U.S.," a research study conducted by Manfredo et al. in 2018.³ The study had two primary aims: first, to identify and illustrate U.S. wildlife value orientations, especially regarding wildlife management; and second, to explain how wildlife value orientations influence voters' approaches to public policy.

The study identified four primary wildlife value orientations:

- **Traditionalists (or Utilitarians)**: believe that wildlife management should benefit people.
- **Mutualists**: believe that humans and wildlife should live in harmony with one another.
- **Pluralists**: alternate between traditional and mutualistic views depending on the context of the human/wildlife interaction.
- **Distanced**: no interest or concern about wild-life.

Our capstone study⁴ uses the original survey instrument developed by Manfredo et al. and adds new questions for future stakeholders that explore private landowner conservation values based on various private agricultural land uses. Survey respondents were asked to identify if they were connected to agricultural land, and if so, whether the primary land use was ranching, crop production, or hunting/wildlife leasing.

Study samples were drawn from the student population of Texas A&M University and then narrowed to respondents in the age range from 18-30 years old. The targeted group is a younger, emerging, stakeholder group of future leaders and decision makers who have an interest in how private agriculture land-use may be mixed with conservation uses. Their opinions and policy preferences will be instrumental in developing conservation legislation and providing political support for future conservation practices.

CHARACTERIZING EMERGING CONSERVATION STAKEHOLDERS

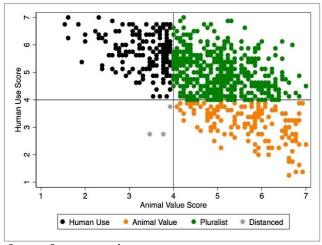
- Across all respondents (with and without agricultural connection), approximately 36% of the sample identified as male and about 60% identified as female.
- Approximately 35% of all respondents were categorized as rural, 35% as suburban, and 30% as urban.
- Three-quarters of respondents were from Texas. One-quarter of respondents were from another state (with at least one response from 34 other states).
- Most respondents identified as white. Only 20% of respondents identified as non-white.
- Most respondents were active outdoors: 81% were active and consumptive (e.g., hunting and

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fishing), 14% were active but not consumptive (e.g., hiking), and 4% were inactive.

• Across the sample population related to private landownership connected to agriculture, 21% of respondents identified as traditionalist (human-use) and 20% as mutualist (animalvalue). As shown in Figure 1, the largest number of respondents are in the pluralist category with high scores on both the traditionalist axis for human-use as well as the mutualist axis for animal-value. The pluralist group represents individuals who are open to multiple interpretations of value for wildlife, including value both in relation to human-use as well as in relation to animals. Only three respondents were identified as distanced. The distanced category was subsequently dropped from the remainder of the analysis due to sample-size issues.

Figure 1: Distribution of Value Orientations



Source: Capstone study survey

BARRIERS TO PARTICIPATION IN CONSERVATION PROGRAMS

The survey provided a scenario for each type of agricultural connection (cropland, rangeland, and hunting lease) to gauge interest in engaging with Natural Resources Conservation Service (NRCS) contracts at different levels of acreage. We asked if respondents would be willing to use 10, 20, or 50 acres of a 400-acre agricultural property for conservation of pollinators such as Monarch butterflies. Value orientation is related to willingness. Willingness declined with increasing commitment to the size of land area in a conservation program. All value orientations were willing to give up land at 10 acres (2.5% total area). But traditionalists' willingness declined from positive to neutral at 50 acres (12.5% total area) while mutualists and pluralist scores remained positive.

Value orientation was also significantly related to willingness to pay for creating pollinator habitat on agricultural land. We asked respondents about the financial feasibility of paying upfront costs (\$18,000) to install 10-acre pollinator plots. While traditionalists were below neutral in their responses, mutualists were slightly above neutral, and pluralists were more positive. Overall, upfront cost may not be a barrier to participation for mutualists and pluralists but an upfront cost of \$18,000 suggests that traditionalists will be unwilling to participate in a pollinator conservation program.

Finally, the survey asked if the installation of a pollinator plot now would be preferable to future restrictions on land use. Respondents across all demographic categories were likely to install a pollinator plot now rather than accept risk later. Value orientation affects willingness to tolerate uncertainty or risk of regulation. Data showed mutualists were more willing to be proactive than traditionalists if future risk may be less.

PROGRAMMATIC RECOMMENDATIONS

The first study recommendation is based on the demographic descriptions of the stakeholders connected to agricultural land who displayed an interest in conservation. Targeting groups that have been most willing to participate in past pollinator conservation programs reveals which groups in future will be more likely to participate and which harder to convince. Mutualists all displayed more willingness to participate in conservation measures. As a result, these groups may require less intense marketing efforts to convince them to participate in conservation programs. Conversely, groups such as traditionalists may require additional communication to reinforce their willingness to participate.

Due to the short timelines and need for as much participation as possible, public agencies could prioritize working with groups who are already willing to cooperate. Furthermore, more varied approaches may be necessary for crop producers, ranchers, and wildlife lease holders. Generally, each group has concerns about signing fixed contracts, future regulatory uncertainty, and how much acreage may be required. Since significant differences exist among these groups, programs aimed at accomplishing pollinator conservation cannot be standardized across all groups. Varying approaches in interacting with different groups allows agencies to design custom contract specifications addressing the needs and concerns of each group. This could lead to increased cooperation and better outcomes for pollinator conservation at regional scales.

Lastly, short timelines and budget realities for building a robust pollinator conservation program mean that new programs cannot be fully researched and designed from a new start. There have, however, been successful programs within the NRCS that can be replicated and modified to pursue pollinator conservation. Such programs for Monarch butterfly conservation could create effective and efficient solutions before the Monarch butterfly and other pollinating species require protection as endangered species.

This policy brief is based on a 2023 Bush School of Government and Public Service student capstone report by Hailey Feik, Sydney Fox, Garion Frankel, Erin Kavanagh, Sangeen Khan, Alman Manzoor, Troy Medeiros, Yvette Mensah, Jaylin Morales, Hunter Parker, Javier Miguel Segura, and William Willingham. Their faculty advisor was Dr. Cole Blease Graham. The report was prepared for the Boone and Crockett Dr. Red Duke Wildlife Conservation and Policy Program with Dr. Perry S. Barboza.

Notes:

¹Clancy, N.G., Draper, J.P., Wolf, J.M., Abdulwahab, U.A., Pendleton, M.C., Brothers, S., Brahney, J., Weathered, J., Hammill, E. & Atwood, T.B. (2020). Protecting endangered species in the USA requires both public and private land conservation. *Scientific Reports, 10*(1). <u>https:// doi.org/10.1038/s41598-020-68780-y</u>

² Natural Resource Conservation Service. (n.d.b). Working Lands for Wildlife. USDA. <u>https://www.nrcs.usda.gov/programs-initiatives/</u> working-lands-for-wildlife

³ Manfredo, M.J., Sullivan, L., Don Carlos, A.W., Dietsch, A.M., Teel, T.L., Bright, A.D. & Bruskotter, J. (2018). *America's Wildlife Values: The social context of wildlife management in the U.S.* National report from the research project entitled "America's Wildlife Values." Fort Collins, CO: Colorado State University, Department of Human Dimensions of Natural Resources. <u>https://www.fishwildlife.org/application/</u> files/9915/4049/1625/AWV - National Final Report.pdf

⁴ Capstone Report. <u>https://sydneyfox85.wixsite.com/mpsa-</u> conservation/publications



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