In 1935, Aldo Leopold first argued that the fusion of those that study plant, animal, AND human communities “will perhaps constitute the outstanding advance of the present century”. Nearly a century later, his words ring true. A broader understanding of how to protect wild things and wild places calls for diversity in science—from the natural to the social, interdisciplinary and applied. The conservation social sciences offer theories, methods, and information to better understand the human dimensions of conservation. This includes human perceptions and behaviors related to the environment, the driving forces behind them, and how those behaviors can affect the success or failure of conservation efforts. Our ability to successfully navigate times of sweeping environmental change depends on the level of understanding we have of people and our ability to connect with them.

The Human Dimensions (HD) Branch was stood up within Natural Resource Program Center (NRPC) with a mission to enhance the ability of the National Wildlife Refuge System to address the human dimensions of conservation. Since the Branch’s establishment in 2012, we have endeavored to provide broad support across regions and programs to integrate the social and natural sciences when it comes to decision-making for conservation. We are here to help you troubleshoot, frame up your issues, offer technical assistance, and deliver useful training, tools, and resources to improve your social science literacy and application. This annual report highlights a select few of our accomplishments from Fiscal Year (FY) 2019.

We put the social in science.
Leading the way to improved conservation outcomes through collaboration and socio-ecological integration.

The Human Dimensions Branch supports the U.S. Fish and Wildlife Service’s mission to conserve wildlife and their habitats for the American people by providing adaptive leadership, innovation, and social science expertise. We build agency capacity to integrate the social and natural sciences to transform conservation for improved outcomes.

- Foster social science **understanding**
- Increase social science **capacity**
- Increase the **application** of social science
- Transform conservation approaches through **adaptive planning** and **evaluation**
The end of 2019 marked the second year of the National Visitor Survey effort, with 35 additional refuges participating in the study. The survey is a Refuge System-wide effort to monitor visitor characteristics, experience, and satisfaction, as well as visitor economic contributions to local communities. Refuges that have at least 50,000 visits are surveyed on a rotating basis every five years (approximately 36 stations per year). The survey is led by the HD Branch in cooperation with American Conservation Experience and The Ohio State University. Visitors are contacted onsite, and the survey is administered by mail (with web option) once visitors return home. This effort provides refuge professionals with reliable baseline information and trend data that is being used to plan, design, and deliver quality visitor experiences, communicate the value of wildlife refuges to different audiences, and set future priorities. You can access the reports via [http://u.osu.edu/dietsch.29/](http://u.osu.edu/dietsch.29/).

Better Understanding Communities with the Socioeconomic Profile Tool

In the HD Branch, we care a lot about the people part of the U.S. Fish & Wildlife Service’s mission. That mission acknowledges that we must work with others in our efforts to enhance fish, wildlife, and their habitats for the continuing benefit of the American people. Working with people for people requires that we understand...you guessed it... people!

A good place to start is understanding who lives and works in communities we serve. In FY 19, the HD Branch partnered with Headwaters Economics ([https://headwaterseconomics.org/](https://headwaterseconomics.org/)) to develop a tool that puts this information at your fingertips. With the U.S. Fish & Wildlife Service Socioeconomic Profile Tool ([https://headwaterseconomics.org/tools/usfws-indicators/](https://headwaterseconomics.org/tools/usfws-indicators/)) you can zoom to any Service unit on the map and explore data about the economics, demographics, land use, and other topics in the neighborhoods, cities, counties, and states that surround it. It is free, user-friendly, and continually updated with the latest data as it becomes available. This tool offers consistent information about demographic and economic trends and conditions and can inform planning, stakeholder engagement efforts, designing programs and policies that meet community needs, and many other efforts that support the Service’s mission.
Wildlife crime is a critical concern among conservationists and law enforcement officials both domestically and abroad. Around the globe, wildlife trafficking is on the rise—not only threatening the long-term survival of wildlife, but also global security. It seems no species is spared; from high-profile species such as elephants and rhinos to hummingbirds and turtles in our own backyards, all are targets of poachers, smugglers, and buyers. Fortunately, there is increasing awareness of and interventions to address rising levels of wildlife crime.

Human behavior, specifically non-compliance with wildlife laws, is central to this issue. Historically, the primary strategy for targeting non-compliance has been law enforcement. While enforcement has improved the effectiveness of conservation efforts in many contexts, the complexities of wildlife crime require a more comprehensive approach. The field of human dimensions offers insights into the motivations of individuals and groups and the contexts within which wildlife crime occurs. This improved understanding informs more holistic and effective interventions.

To address this Service priority, the HD Branch produced a studio broadcast with the National Conservation Training Center, entitled Wildlife Crime: Toward an Integrated Approach, as part of the Human Dimensions of Natural Resource Conservation broadcast series. Speakers from the Service’s International Affairs Program and Office of Law Enforcement, along with a conservation criminology expert, provided diverse perspectives on how to address wildlife crime. We also recorded a podcast detailing how the use of social science can inform interventions for wildlife crime. These information products can be found at https://my.usgs.gov/hd/FWS-training. Look for a special issue of our newsletter and more on this conservation priority in FY 20.

Fostering Improved Social Science Understanding

In FY 19, the HD Branch instructed the Human Dimensions Foundations course (CLM 8226), delivered an “HD 101” module in Discover Your Service, and led two regional trainings for Interior Regions 1 and 2. These in-person trainings consisted of human dimensions concepts, theory, methods, tools and resources, and application. The Human Dimensions Foundations training is offered every year, alternating between the National Conservation Training Center and Estes Park, Colorado in concert with the Pathways: Human Dimensions of Wildlife Conference. This year’s training in Estes Park drew participants from several Service programs, other federal land management agencies, universities, nongovernmental organizations, and state fish and wildlife agencies. To learn more about conservation social science from the comfort of your home, visit https://my.usgs.gov/hd/FWS-training for recorded trainings and additional resources to improve your social science literacy.
Understanding the Long-Term Impact of the Service’s Partners Program

With nearly two-thirds of land in the U.S. privately owned, the Service’s work with private landowners to conserve species and habitats at the landscape level is paramount. The Partners for Fish and Wildlife (Partners) Program does just that by building relationships with landowners and offering them technical and financial assistance to restore and enhance wildlife habitat on their land. What happens to the land when agreements end? The Partners Program in Northwest and Southwest regions and Headquarters in collaboration with the HD Branch and Colorado State University set out to evaluate past Partners Program participants’ conservation behaviors and intentions after their agreements with the Program expired.

A survey of past Partners Program landowners offered insight to how their conservation actions persist over time, their satisfaction with the program, and their interest in continued conservation work. Responses from 128 landowners (40% response rate) revealed that over 90% kept their conservation project in place after their agreement had expired and over 80% of those projects are still in place today. Additionally, over 90% of respondents were satisfied working with the Partners Program. Their participation in the program encouraged future conservation actions, with over 75% reporting an intention to continue the type of work they had done with the Partners Program. These results suggest a continued conservation impact of Partners Program activities after agreements end.

These findings provide key insights for continued success and improvements to the Partners Program. First, the reasons landowners enhance habitat on their property are largely altruistic. This means that concise messages about the benefits of a project to fish, wildlife and their habitats are likely to resonate and lead to landowners working with the Partners Program. Second, trust in the Partners Program and willingness to participate are closely tied. Having Partners Program staff around for the duration of the contract and beyond may increase trust and therefore willingness to participate and likelihood of continued conservation work into the future. Findings suggest that clear and targeted messaging, setting realistic expectations about conservation outcomes, low staff turnover, and reduced paperwork burden (among others) lead to increased persistence of conservation actions after contracts end. Look for study results and more detailed recommendations in a project report and recorded webinars in FY 20.
The conservation of wildlife and natural resources is a matter that affects all people. We need all hands on deck for conservation to succeed, so the Service created the Urban Wildlife Conservation Program (UWCP; https://www.fws.gov/urban/) to invest in areas where 80% of the U.S. population lives. The UWCP aims to understand the relevance of conservation to people and provide access and opportunities for them to deepen connections to nature. The HD Branch has supported strategic planning, evaluation, and adaptation of the UWCP since its inception. In FY 19, results from FY 17 assessments of urban refuges informed efforts to strategically strengthen and grow the UWCP across the Service. Specifically, training needs identified in the assessments informed the development of the UWCP’s Community Connections Academy and led to the development of a number of Communities of Practice to support exchanging knowledge, identifying and addressing common problems, and collaborating to improve practice and advance shared goals. The HD Branch is supporting the UWCP Institutional Change Community of Practice, focused on leading change in the Service to be more inclusive and community-focused in conservation. We also continued to support the four flagship urban refuges—John Heinz NWR at Tinicum, Valle de Oro NWR, Southern California (SoCal) UWCP (San Diego NWR Complex and activities in LA area), and Portland-Vancouver UWCP (includes 4 refuges in that area) — in evaluating the outcomes of their programs. Notably, the SoCal UWCP completed a pilot outcome evaluation of their efforts.

A ‘community of practice’ is a relatively new term for an age-old concept—a group of people who share a concern or a passion for something they do and a desire to learn how to do it better as they interact regularly. The HD Branch serves as bridge to strengthen a community of practice around the integration of social science in the Service. Starting with an assessment in 2013 and followed by subsequent outreach, we have identified nearly 70 individuals across the Service with social science expertise in multiple classic and applied disciplines.

The Service’s Expert Directory, served on HDgov, is a space for social science experts, champions, and those new to conservation social science to connect and learn from one another. The Directory is accessible to all Service staff via HDgov with Active Directory credentials (https://my.usgs.gov/hd/team/usfws). Through this directory, you can find experts by region, program, or area of expertise. Connect with an expert the next time you need help—you’ll be amazed at the broad expertise of Service staff.
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