



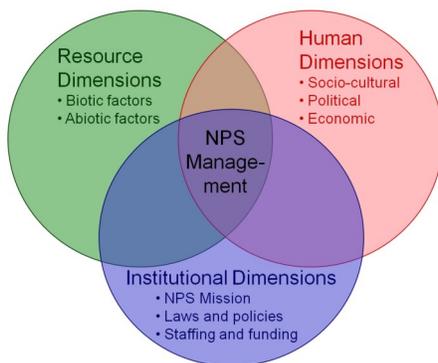
Human Dimensions Program



NPS PHOTO BY BRIDGETTE EVERTSON

Background

The human dimensions of biological resource management are people's values and desires for biological resources and associated management actions. Factors such as culture, personal experience, socio-economics and politics can affect how groups and individuals place importance on biological resources, the benefits they seek and derive from resources, and how they affect and are affected by resources and their management. Virtually all areas of biological resource management involve potentially competing ideas about how to value resources, including wildlife conservation, invasive species management, wildlife disease management, and restoration.



The Human Dimensions Program provides guidance and assists parks and regions in integrating information about people's varied perceptions of biological resources and management to ensure that the public is considered and engaged in the stewardship of our national heritage. Theories and techniques from the social sciences and humanities are utilized to help managers better understand audiences and management contexts and use this knowledge to improve decision-making, stakeholder engagement, communication, and management outcomes that meet ecological and social needs today and into the future.

Highlights and Accomplishments

The Human Dimensions (HD) Program has provided technical assistance to parks and policy recommendations to the NPS on biological resource issues characterized by controversies about perceptions of biological resources or resource management activities, especially human-wildlife interactions and human impacts on resources in parks.

The HD Program has helped integrate diverse stakeholder perspectives in topics involving visitors and neighbors, such as wildlife habituation and food conditioning, winter use, and social outcomes of citizen science. The HD Program also has assisted in projects to improve employee work and living conditions related to mosquito control near employee housing and use of Personal Protective Equipment by wildlife biologists. In addition, the HD Program has contributed to Department-level guidance such as the Adaptive Management Applications Guide. As well as contributing to specific issues, the HD Program regularly assists parks in review of survey instruments, outreach materials, social science proposals and study design, and preparation for the OMB approval process.

The HD Program also collaborates with universities and external partners to advance understanding of emerging HD issues.

More Information

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PHOTO COURTESY PARKER BAYIT

A Texas A&M graduate student surveys participants at the 2012 NPS-National Geographic Society BioBlitz at Rocky Mountain National Park, Colorado, to gain an understanding of the social benefits of participating in citizen science in parks.



NPS PHOTO

Human disturbance may alter wildlife movements. Volunteers with the Bighorn Brigade teach visitors about bighorn sheep ecology and control traffic to reduce disturbance when sheep cross the road in Rocky Mountain National Park, Colorado.

Program Areas

Program staff have expertise in social sciences, including anthropology, social psychology, communications, and planning, as well as natural sciences, including animal behavior, ecology, and biology. These foundational disciplines can provide important information about social aspects of a biological resource management context, such as stakeholder preferences for management actions or outcomes.

In addition, this information can enhance management activities directed towards people. The Human Dimensions Program consolidates resources and develops tools to help managers in the following areas that can be applied towards managing any issue topic:

Framing issues

The definition of a resource issue determines the scope of potential solutions that are considered. Stakeholder concerns and insights are broader than biological impacts. The HD Program has assisted parks in incorporating stakeholder considerations in planning to ensure the scope of issues includes topics highest in the public interest.

Stakeholder engagement and public participation

Public participation processes can range from informed consent to collaborative conservation. The HD Program has developed resources to help managers “match the forum to the fuss” and select participation approaches that best meet civic engagement objectives.

Stakeholder knowledge, attitudes, and behavior

Communication is often used to increase awareness or change attitudes or behavior related to a resource or resource issue. The fields of education, persuasion, and behavior change draw on very different methods and theories; thus messages, incentives, and injunctions used depend on communication objective. The HD Program has helped parks develop and implement audience research and outcomes-based communication planning.

Social Science Methodologies

The HD Program has assisted in integrating social science in biological resource management, from research design, to development of survey instruments or interview guides, consideration of OMB and human subjects requirements, data analysis and application of results.

Topic Areas

The HD Program applies program area learnings to address specific issues common to multiple parks. Some current topic areas include:

Human-Wildlife Interactions

Effectively managing human-wildlife interactions (HWI) involves contributions from planning, to interpretation, law enforcement, and maintenance. The HD Program helps integrate these areas in managing HWI, and involvement with the Human-Wildlife Conflict Collaboration has trained managers to address related identity-based conflicts.

Habituation and Food-Conditioning

HWI may alter wildlife behavior which can have negative effects on wildlife and visitor health, safety and enjoyment. The HD Program developed a framework to help managers plan for and address behavior changes, which has refocused objectives in management plans.

Animals “Out of Place”

Parks are increasingly experiencing situations with animals that may not match cultural expectations, such as urban wildlife and feral animals. The HD Program has helped managers anticipate and address common social reactions to widespread issues such as urban deer.

Status and Future

While the term “Human Dimensions” is most often associated with the field of wildlife management, the same principles and disciplinary expertise apply to all areas of natural resource stewardship.

The HD Program is collaborating with universities and sister agencies (FWS, USGS, BLM) to build a common framework for recognizing and addressing the human dimensions of any resource issue. Tools and trainings are being developed to improve NPS capacity to manage park resources as coupled natural-human systems.

In addition, the HD Program will focus on building expertise in specific issues related to plant and habitat conservation, such as: GMOs, forest health, invasive species, restoration, and critical habitat.