National Park Service
U.S. Department of the Interior

Natural Resource Program Center
Biological Resource Management Division

Human Dimensions Program

Background

Biological resources in parks are assigned many values and meanings and can be seen as: indicators of ecosystem health, a fundamental part of a culture's identity, a source of recreational opportunities, habitat for threatened and endangered species, and/or a contrast and refuge from an increasingly urban lifestyle. Factors such as culture, personal experience, socio-economics and politics can affect how individuals think about and interact with biological resources in specific contexts. This variety of meanings affects people's desires and behaviors related to park resources and associated management actions.

The Human Dimensions of Biological Resource Management Program was established in September 2007 to address the critical interface between the human and ecological components of biological resource management. Human dimensions inquiry helps managers describe, predict, affect, and learn from stakeholder thought and action towards biological resources and their management in parks, thereby improving the sustainability, durability, and acceptability of biological resource management decisions.

Developing Program Areas

Stakeholder engagement and public participation. Program involvement on the Human-Wildlife Conflict Collaboration Steering Committee provides NPS with training opportunities in identity-based conflict resolution. This approach fosters long-term civic engagement and cooperative conservation.

Understanding risk communication, education, and persuasion. Understanding how target audiences perceive risks related to resources is fundamental for effective outreach. Two current projects examine perceptions of wildlife associated disease and human-wildlife habituation to reduce health and safety risks to humans and wildlife and to increase enjoyment.

Recreation and biological resource management. Unmanaged recreation can negatively impact biological resources. A visitor-focused project initiated by the Oceans Branch of the Water Resources Division utilizes social science to reduce recreational threats to marine resources, such as boat grounding, fishing violations, and wildlife disturbance.

Citizen science and stewardship. Citizen science engages the public directly with park resources and management. A Centennial Challenge initiative is evaluating how citizen participation in biodiversity exploration furthers the NPS mission and affects participants': understanding of biodiversity, likely participation in future stewardship activities, and support of parks.

NPS Historic Photograph Collection. Horace Albright at Yellowstone National Park, circa 1922. Wildlife feeding was once an acceptable and encouraged practice in parks. As risks to humans and wildlife began to outweigh benefits, laws and policies changed. The human dimensions program ensures NPS has a current understanding of how society values biological resources.

Next Steps

Projects and partnerships will be expanded and added in each of the developing program areas. Initiatives are being pursued in areas such as: Thinking Like a Manager training that promotes systems thinking to integrate human dimensions considerations in the decision-making process; employee perceptions of risk that affect safe work practices; conservation criminology, applications from the field of criminal justice to human behavior affecting wildlife management; evaluating effectiveness of Friends Group activities in supporting biological resource management in parks.

Ultimately, systematic understanding of visitor and stakeholder perceptions of biological resources and associated management actions will: improve NPS ability to protect resources while providing for enjoyment, acknowledge and incorporate diverse views in management decisions, identify partnerships, resolve management controversies, and ensure parks remain relevant.

More Information

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