

The role of social science research in the national parks: An opportunity for true civic engagement

Ryan L. SharpUniversity of Georgia

Min Kook Kim
University of Maine

Edgar Espinoza University of Miami

Abril AguirreColorado State University



P.O. Box 65 Hancock, Michigan 49930-0065 USA www.georgewright.org

© 2010 The George Wright Society, Inc. All rights reserved

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions and policies of the U.S. government, any of the other co-sponsoring or supporting organizations, or the George Wright Society. Any mention of trade names or commercial products does not constitute an endorsement by the U.S. government, any of the other co-sponsoring or supporting organizations, or the George Wright Society.

"Scientists alone can establish the objectives of their research, but society, in extending support to science, must take account of its own needs."

— John F. Kennedy

Introduction

The Park Break 2008 seminar at Acadia National Park provided a unique chance to discuss civic engagement issues with park managers, professionals, and graduate students, as well as the role of social science research in improving civic engagement in the National Park Service (NPS). Civic engagement, with the aid of social science, is indispensable in terms of prioritizing park management issues and minimizing potential conflicts between stakeholders in the area (or maximizing communication to reduce a potential conflict among local stakeholders). Social science research conducted in NPS is considered an effective means to demonstrate and understand how well parks are managed from the perspective of visitors. Is NPS providing real enjoyment and satisfaction to visitors? Are park managers effectively taking into account the needs of visitors and adjacent communities when developing management plans? Social science can provide critical input on such questions because the park service could obtain potential information associated with visitors' attitudes and perceptions that might not be represented in the management decision-making process (Cheng et al. 2003).

The social scientist can therefore provide a substantial contribution to this task through research that aims toward a more concerted interaction with the visiting public and adjacent communities while relaying the information to the park managers for improved decision-making. Although the public has adequate opportunities to comment through such forums as the National Environmental Policy Act (NEPA), the results of these efforts are often scattered and not scientifically analyzed. A visitor survey will allow a particular park to craft a series of questions that can directly answer questions that relate to the issue at hand. Opportunities such as NEPA often provide questions of an open ended nature with very little guidance or direction on how to best answer the questions. Public comments have their place in park planning (as well as it being the law), but a survey, when possible, can offer a more well-rounded look into a particular issue.

Knowing how to best manage the resources within the national park system is also of critical importance: the conservation of not just the lands administered by NPS, but also other biologically and culturally significant sites, has been identified as one of the major challenges facing humanity this century (McNeely 1994; Lubchenco 1998). The intermingling of both a biologically supported approach to park management plus the contributions of social science research can be the key to effective management of national parks and other protected areas, under the umbrella of the philosophy of George Melendez Wright, who advocated for more scientifically sound natural resource management in national parks (Crompton 2006). In that regard, this paper reviews the role of social science, discussing how it contributes to understanding through interactions with visitors and adjacent communities, and describing how this information can be used in the future.

Civic engagement

Civic engagement, in the context of NPS, is primarily concerned with developing partnerships and "win–win" healthy relationships with the communities that are most vested in the parks to ensure "the long term relevance of the NPS' resources and programs" (NPS, n.d.). The concept of civic engagement has not been actively implemented in the national parks until recently because there were few well-defined structural pathways in which visitors (and local residents) could take part. However, civic engagement now has been formalized into an initiative for reflecting

and displaying a greater commitment to public involvement (NPS, n.d.). This recent commitment to civic engagement is required to make amends for some past management actions that tended to disregard public involvement in protected area decision-making (Agrawal and Gibson 1999). The National Park Service is now being asked to take public concerns into greater consideration and recognize the importance of such inclusion in the planning process (Linenthal 2008). This newfound commitment to civic engagement is encouraging for managers as it has been empirically shown that public involvement in the decision-making process can aid in breaking down barriers to successful management practices (Campbell 2005; Luloff et al. 2005; Wagenet and Pfeffer 2007; Sick 2008). This approach will obviously create more ownership when compared with traditional top-down management styles.

It does not take a leap of faith to see the links between social science and civic engagement. The social scientist can provide crucial answers to questions from park managers that aim to better accommodate the needs of the visitors, by studying local communities that are affected by how the parks are managed. Park managers can then use this information to develop well-thought-out and inclusive policy initiatives that help to balance the clash of divergent interests that usually occur (Reed and McIlveen 2006). It is important to recognize that communities adjacent to NPS public lands will have an "intimate knowledge of, and greater concern for, protecting the resources" (Sick 2008, 95). Conversely, areas surrounding parks may also prove to be the biggest adversary to proposed park policy. Therefore, through collaborative work, social science research and civic engagement have immense potential to affect how NPS develops policy and integrally manages the parks alongside communities.

Social science contributions

Within NPS, social science has been playing an important role investigating a series of human dimension issues for many years (Sellars 1997). Much of the early research focused on observation of visitor behaviors and use patterns, which was mainly related to descriptive information within NPS (Manning 1999). Gathering descriptive information was useful to produce a simple baseline for park management, such as the idea of visitor density within a certain area (Absher and Lee 1981). As time passed, more diverse research related to social, cultural, and managerial aspects, including visitor attitude and perception, carrying capacity, crowding and satisfaction, and visitor impact monitoring (Manning 1999). This early work of social scientists provided a foundation for the contributions of social science research in developing better management practices with visitors in mind.

Park managers gradually recognized that the majority of the issues facing the NPS were inherently anthropocentric in nature (Henning 1970) and consequently required social science research to achieve effective interaction with the public. NPS now recognizes that visitors' values and perceptions must be incorporated in management plans (Reed and Brown 2003).

There have been many studies about visitor attitudes, norms, and values at NPS sites (e.g., Bultena et al. 1981; Noe et al. 1997; Anderson et al. 1998; Alessa et al. 2003; Bullock and Lawson 2008). There have also been numerous efforts to identify visitors' attitudes and perceptions toward management actions (e.g., Gramann and Vander Stoep 1987; Alder 1996; Cole et al. 1997; Bullock and Lawson 2008). This shift from a strictly preservationist to a more socially oriented management approach is proving to be a major challenge (Venteret et al. 2008). Fundamental objectives of many social science studies include the preservation of natural resources by providing quality information about visitor perspectives. Much of the research within NPS has focused on the needs and perceptions of the individual visitor and not as much on a common collective, such as local community participation. With the newfound commitment of NPS to civic engagement, an opportunity arises to examine what forms of engagement are most effective and what methods need further development by means of social science research.

Ideas for effective engagement

The fundamental part of public involvement may be helping local communities "take on more responsibility and receive more direct benefits" from the collaborative process (Durrant and Durrant 2008, 371). Public involvement can also prevent monopolistic appropriation of the decision-making process (Bryan 2004). As stated above, much of past and current social science research has focused on investigating how individual visitors experience the national park system. Various research methods have been developed and employed, such as visitor surveys (both qualitative and quantitative) and focus groups, and then extrapolated to the larger population. These research methods could still be applied in developing a civic engagement tool. Social science can contribute to the better understanding of stakeholder and management viewpoints and also prevent alienating the public from the decision-making process (Endter-Wada et al. 1998). There has also been a call for the increased involvement of social scientists to instruct discussants in the processes of civic engagement (Dalton 2005). Because bringing a wide variety of stakeholders together is not an easy task and is in many ways a "new way of doing business for public officials" (Wondolleck and Ryan 1999, 119), determining what is the best way to constructively and successfully engage stakeholders is an important question that social scientists can tackle.

Public involvement in the decision-making process is currently being widely advocated, not only within NPS, but in protected area management more generally (Conley and Moote 2003). However, due to the novelty of this approach, it is still uncertain how to best undertake such a process (Conley and Moote 2003; Dougill et al. 2006), since the public rarely constitutes a homogeneous group and more often includes diverse stakeholders that hold disparate attitudes and beliefs (Armitage 2005). The risk is lumping all the actors into one uniform group (Agrawal and Gibson 1999). Without question, trying to appease everyone is not an easy endeavor, and attempting to minimize the winner–loser mentality requires a delicate balance (Allan et al. 2008). Acknowledging the plurality of the stakeholders, and incorporating it into the decision-making process, can enhance park management and increase benefits to local populations. This is inherently a process based on the core foundations of the American political system.

Can we get people involved?

Individualism, which benefits the self at the expense of the collective interest, is a major obstacle to overcome if NPS is to get the public more involved in the decision-making process (Funk 2008). Strong public involvement in all realms of society tends to lead to stronger, more tight-knit communities (Putnam 1993). However, the question remains: How do we develop stronger involvement in what is, directly or indirectly, a political process? Education seems to be a strong predictor of civic engagement (Dudley and Gitelson 2003), but if education is indeed a good indicator of civic engagement, then how do we go about educating people about the importance of being involved in the decision-making process? How do we get all levels of society involved and not just cater to the "educated" group? This is a question beyond the scope of this paper, but worthy of reflection nonetheless.

Providing the public a voice in the management practices of NPS can allow for a rich and meaningful experience (Daniels and Walker 1996). Civic engagement can start to bring communities together around national parks and curb the rampant trend of individualism hindering effective park management scenarios. NPS can be a conduit to bring "thoughtful public dialogue and a desire to practice once again the arts of democracy using NPS sites as a forum" (Linenthal 2008, 6). Social scien-

tists can contribute to this awakening by helping to develop better understanding of stakeholder interests, beliefs, and attitudes about NPS management policies.

Moving forward

As a critical first step, NPS has taken the initiative to try and get the American public more involved in the decision-making process. Indeed, putting increased effort into grasping the public's attitudes and beliefs through social science research takes time and resources, which may have represented a significant obstacle in the past. However, NPS is now committed to gaining the necessary information to ensure the success of this new civic engagement initiative (NPS, n.d.). It is, however, still open for debate as to how to evaluate the effectiveness of such dialogue (Conley and Moote 2003), as more research needs to be done on how to assess the effectiveness of such engagement. Ideally, social scientists can continue to contribute to the body of knowledge about visitors' attitudes and perceptions as well as support or lack thereof for various management practices. Surveys will continue to be tools to elicit information from visitors, but we suggest that these surveys should also move outside park boundaries. Policies instituted by NPS often have the most direct impact on people situated outside the park. The effort to move outside of park boundaries with our surveys has been done in the past, but the effort needs to be greater moving into the future.

The centennial of NPS is approaching, and with that there is the possibility of a newfound interest in America's parks, representing a perfect opportunity to get people involved. This may provide an unprecedented chance to educate people about NPS and how the average citizen can have a true, meaningful say in how the parks are managed, that through social science, their voice can and will be heard. The idea of setting aside cultural and historical sites as well as preserving natural wonders was a novel idea that materialized almost 100 years ago and that has proved to be a role model for similar endeavors around the globe. The National Park Service, through its commitment to civic engagement, along with the help of the scientific community, has the opportunity to once again to be a role model.

References

- Absher, J.D., and R.G. Lee. 1981. Density as an incomplete cause of crowding in backcountry settings. Leisure Science 4(3), 231-247.
- Agrawal, A., and C.C. Gibson. 1999. Enchantment and disenchantment: The role of community in natural resource conservation. World Development 27(4), 629-649.
- Alder, J. 1996. Effectiveness of education and enforcement, Cairns Section of the Great Barrier Reef Marine Park. Environmental Management 20, 541-551.
- Alessa, L., S.M. Bennett, and A.D. Kliskey. 2003. Effects of knowledge, personal attribution and perception of ecosystem health on depreciative behaviors in the intertidal zone of Pacific Rim Park and Reserve. Journal of Environmental Management 68, 207-218.
- Allan, C., A. Curtis, G. Stankey, and B. Shindler. 2008. Adaptive management and watersheds: A social science perspective. Journal of American Water Resources Association 44(1), 166–174.
- Anderson, D.H., D.W. Lime, and T.L. Wang. 1998. Maintaining the Quality of Park Resources and Visitor Experiences: A Handbook for Managers. Publication no. TC-777. St. Paul: University of Minnesota, Department of Forest Resources, Cooperative Park Studies Unit.
- Armitage, D. 2005. Adaptive capacity and community-based natural resource management. Environmental Management 35(6), 703-715.
- Bryan, T.A. 2004. Tragedy averted: The promise of collaboration. Society and Natural Resources 17(10), 881-896.

- Bullock, S.D., and S.R. Lawson. 2008. Managing the "commons" on Cadillac Mountain: A stated choice analysis of Acadia National Park visitors' preferences. *Leisure Sciences* 30(1), 71–86.
- Bultena, G., D. Field, and P. Womble. 1981. Closing the gates: A study of backcountry use-limitations at Mount McKinley national park. *Leisure Sciences* 4(3), 249–267.
- Campbell, K.B. 2005. Theorizing the authentic: Identity, engagement, and public space. *Administration and Society* 36(6), 688–705.
- Cheng, A.S., L.E. Kruger, and S.E. Daniels. 2003. "Place" as an integrating concept in natural resource politics: Propositions for social science research agenda. *Society and Natural Resources* 16(2), 87–104.
- Cole, D., et al. 1997. *High-use Destinations in Wilderness: Social and Bio-physical Impacts, Visitor Responses, and Management Options*. Research Paper no. INT-496. Odgen, Utah: U.S. Department of Agriculture–Forest Service.
- Conley, A., and M.A. Moote. 2003. Evaluating collaborative natural resource management. *Society and Natural Resources* 16(5), 371–386.
- Crompton, J.L. 2006. George Melendez Wright: Pugsley Bronze Medal 1936. In Twentieth Century Champions of Parks and Conservation. Vol. I: The Pugsley Medal Recipients 1928–1964. Urbana, Ill.. Sagamore.
- Dalton, T.M. 2005. Beyond biogeography: A framework for involving the public in planning of U.S. marine protected areas. *Conservation Biology* 19(5), 1392–1401.
- Daniels, S.E., and G.B. Walker. 1996. Collaborative learning: Improving public deliberation in ecosystem-based management. *Environmental Impact Assessment 16*, 71–102.
- Dougill, A.J., et al. (2006). Learning from doing participatory rural research: Lessons from the Peak District National Park. *Journal of Agricultural Economics* 57(2), 259–275.
- Durrant, M.B., and J.O. Durrant. 2008. The influence of location on local attitudes toward community conservation on Mount Kilimanjaro. *Society and Natural Resources* 21(5), 371–386.
- Dudley, R.L., and A.R. Gitelson. 2003. Civic education, civic engagement, and youth civic development. *PS: Political Science and Politics* 36(2), 263–267.
- Endter-Wada, J., D. Blahna, R.S. Krannich, and M. Brunson. 1998. A framework for understanding social science contributions to ecosystem management. *Ecological Applications* 8(3), 891–904.
- Funk, C.L. 1998. Practicing what we preach? The influence of a societal interest value on civic engagement. *Political Psychology* 19(3), 601–614.
- Gramann, J., and Vander Stoep, G. (1987). Prosocial behavior theory and natural resource protection: A conceptual synthesis. *Journal of Environmental Management*, 24, 247-257.
- Henning, D.H. 1970. Comments on an interdisciplinary social science approach for conservation administration. *BioScience* 20(1), 11–16.
- Linenthal, E.T. 2008. The national park service and civic engagement. *The George Wright Forum* 25(1), 5–11.
- Lubchenco, J. 1998. Entering the century of the environment: A new social contract for science. *Science* 279, 491–497.
- Luloff, A.E., D.R. Field, and R.S. Krannich. 2005. A social landscape perspective on people and places in amenity-rich rural regions. Paper presented at the George Wright Society Conference, Philadelphia, Pa.
- Manning, R. 1999. *Studies in Outdoor Recreation: Search and Research for Satisfaction*. Corvallis: Oregon State University Press.
- McNeely, J.A. 1994. Protected areas for the 21st century: Working to provide benefits to society. *Biodiversity and Conservation* 3, 390–405.
- Noe, F., W. Hammitt, and R. Bixler. 1997. Park user perceptions of resource and use impacts under varied situations in three national parks. *Journal of Environ-*

- mental Management 49, 323-336.
- NPS. N.d. Why civic engagement. On-line at www.nps.gov/archive/civic/about. (Accessed April 17, 2008.)
- Putnam, R.D. 1993. The prosperous community. *The American Prospect* 4(13), 35–42. Reed, M., and K. McIlveen. 2006. Towards a pluralistic civic science? Assessing community forestry. Society and Natural Resources 19, 591–607.
- Reed, P., and G. Brown. 2003. Values suitability analysis: A methodology for identifying and integrating public perceptions of ecosystem values in forest planning. *Journal of Environmental Planning and Management* 46(5), 643–658.
- Sellars, R.W. 1997. Preserving Nature in the National Parks: A History. New Haven, Conn.: Yale University Press.
- Sick, D. 2008. Social context and consequences of institutional change in commonpool resource management. Society and Natural Resources 21(2), 94-105.
- Venter, F.J., R.J. Naiman, H.C. Biggs, and D. J. Pienaar. 2008. The evolution of conservation management philosophy: Science, environmental change and social adjustments in Kruger National Park. Ecosystems 11, 173-192.
- Wagenet, L.P., and M.J. Pfeffer. 2007. Organizing citizen engagement for democratic environmental planning. Society and Natural Resources 20(9), 801–813.
- Wondolleck, J.M., and C.M. Ryan. 1999. What hat do I wear now? An examination of agency roles in collaborative processes. *Negotiation Journal* 15(2), 117–134.