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More Connection and Less Prediction Please: Applying a Relationship Focus in Protected Area Planning and Management

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EXECUTIVE SUMMARY: Integrating the concept of place meanings into protected area management has been difficult. Across a diverse body of social science literature, challenges in the conceptualization and application of place meanings continue to exist. However, focusing on relationships in the context of participatory planning and management allows protected area managers to bring place meanings into professional judgment and practice. This paper builds on work that has outlined objectives and recommendations for bringing place meanings, relationships, and lived experiences to the forefront of land-use planning and management. It proposes the next steps in accounting for people's relationships with protected areas and their relationships with protected area managers. Our goals are to 1) conceptualize this relationship framework; 2) present a structure for application of the framework; and 3) demonstrate the application in a specific protected area context, using an example from Alaska. We identify three key target areas of information and knowledge that managers will need to sustain quality relationship outcomes at protected areas. These targets are recording stories or narratives, monitoring public trust in management, and identifying and prioritizing threats to relationships. The structure needed to apply this relationship-focused approach requires documenting and following individual relationships with protected areas in multiple ways. The goal of this application is not to predict relationships, but instead to gain a deeper understanding of how and why relationships develop and change over time. By documenting narratives of individuals, managers can understand how relationships evolve over time and the role they play in individual's lives. By understanding public trust, the shared values and goals of individuals and managers can be observed. By identifying and prioritizing threats, managers can pursue efforts that steward relationships while allowing for the protection of experiences and meanings. The collection and interpretation of these three information targets can then be integrated and implemented within planning and management strategies to achieve outcomes that are beneficial for resource protection, visitor experiences, and stakeholder engagement. By investing in this approach, agencies will gain greater understanding and usable knowledge towards the achievement of quality relationships. It represents an investment in both place relationships and public relations. By integrating such an approach into planning and management, protected area managers can represent the greatest diversity of individual place meanings and connections.

KEYWORDS: Relationships, place meanings, trust, narratives, planning, protected areas

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"When we see land as a community to which we belong, we may begin to use it with love and respect." —Aldo Leopold (1949)

Are protected areas best thought of as communities or commodities? Do people meaningfully connect with these places or simply use them for their benefit? Answers to such questions make a difference in how planning and management are conceived and conducted for protected areas around the globe. Leopold's (1949) quote supports the importance of including place meanings and the notion of community within planning and management. In this paper, we make the case for reframing his quote to read: "When we see land as a *relationship* to which we belong, we may begin to *experience*, *understand*, and *steward* it with love and respect." We propose that place relationships are useful for managing protected areas and describe an approach that allows land managers to bring place meanings and subjective experiences into professional judgment and practice.

Integrating the concept of place meanings into management of protected areas has been difficult and by many accounts lacking. This is due to a number of challenges involved with conceptualizing and applying place concepts found across a diverse body of social science literature. Patterson and Williams (2005, p. 367) summarized a number of philosophical issues, disciplinary traditions, and contradictory perspectives related to how a science of place may progress from theory to practice. They explained that "place is a broad domain of research in which concepts have developed across multiple disciplines and research programs." Various researchers in a number of fields of study have used diverse terminology and definitions in their work on place. This has contributed to confusion and difficulties regarding management applications of the place concept.

Williams (2008) wrote, "Despite these difficulties, talk of place resonates surprisingly well with professionals and the public involved in the [planning and] management of wildlands …" (p. 8) and other protected areas. He described a number of approaches to place in natural resource management, including place as relationship and meaning, and place as a sociopolitical process. We believe that meanings, relationships, and social and political processes are highly applicable to protected area planning and management, especially in participatory planning (Hofelli, 2002; Manzo & Perkins, 2006) and collaborative management (Gray, 1985; Selin, 2004). This paper builds on the work of others who have outlined objectives and recommendations for bringing place meanings, place relationships, and lived experiences to the forefront of decisions about land-use planning, management, and policy (e.g., Brooks & Williams, 2012; Cantrill & Senecah, 2001; Cheng, Kruger, &

Daniels, 2003; Cheng & Mattor, 2010; Farnum & Kruger, 2008; Kruger & Shannon, 2000; Stewart, 2008, 2012; Stewart, Williams, & Kruger, 2013; Stokowski, 2002; Williams & Stewart, 1998).

The purpose of this paper is to propose the next step in accounting for, in practice, people's relationships with protected areas and protected area managers. Our goals are to 1) conceptualize this relationship framework, 2) present a structure for application of the framework, and 3) demonstrate its application in a specific protected area context, using a case example from Alaska. To achieve these goals, we describe a structure for this relationship-based approach that identifies three key target areas of information and knowledge that planners and managers will need to sustain quality relationship outcomes at protected areas. These targets include 1) recording stories, or narratives[1] of invested stakeholders (e.g., oral histories, interviews, public dialog); 2) monitoring public trust in management; and 3) identifying and prioritizing threats to relationships. By acquiring and maintaining information and knowledge in these areas, protected area planners and managers will have the opportunity to implement a relationship approach across a diverse set of contexts.

Theoretical Framework

Evolving Idea of a Relationship

The relationship approach originated in relatively early research that accounted for variation in recreation and leisure experiences over time (Brooks & Williams, 2012). Clawson and Knetsch (1966) suggested that experiences were not limited to the recreation site or setting, but involved other phases such as anticipation, travel to, travel home, and recollection. Thus, experiences are not one-time market transactions between the visitor and the setting (Borrie & Roggenbuck, 2001), but complex, dynamic engagements between people and the environment that fluctuate over the course of a recreation activity (Hull, Stewart, & Yi, 1992, Stewart, 1998). Brooks and Williams (2012) conceptualized recreation experiences as ongoing personal narratives defined by long-term relationships that develop between visitors and protected areas. The notion that experience is a process of developing meaningful relationships is rooted in early research that looked at recreation and leisure participation across the course of a person's life. Influential models of experience included: socialization (Burch & Wenger, 1967; Kelly, 1974; Meyersohn, 1969), specialization (Scott & Shafer, 2001; Virden & Schreyer, 1988; Wellman, Roggenbuck, & Smith, 1982; Williams, 1985), and experience use history (Schreyer, Lime, & Williams, 1984; Watson, Roggenbuck, & Williams, 1991; Williams, Schreyer, & Knopf, 1990). These models emphasize how participants learn and refine recreation behaviors and experiences and how, over time, such learning influences identities and attitudes (Brooks & Williams, 2012).

The concept of experience as a relationship that continues to develop over time follows a meaning-based approach (Fournier, 1998; Malm, 1993; McCracken, 1987; Mick & Buhl, 1992). In a meaning-based approach, human experience is understood as an emergent narrative rather than a predictable outcome of persons in situations. For example, Patterson, Watson, Williams, and Roggenbuck, (1998) found that "what people are actually seeking from their recreation experiences are stories which ultimately enrich their lives" (p. 449). The study demonstrated how the meaning of experience is more like interpreting texts, or narratives than like gaining knowledge of objects in nature.

We employ the metaphor of a relationship to help us think about, describe, and use the concept of place meanings for protected area management (Baxter, 2003; Lakoff & Johnson, 1980). Employing a relationship metaphor can help us better understand stakeholders' experiences at protected areas and their experiences with the agencies responsible for managing the land and people. We suggest that people's relationships with

[1]Following Glover (2003) and Sarbin (1986), we make no distinction between stories, storytelling, and narratives, and we use these terms interchangeably throughout the text.

protected areas and the respective management agencies can serve as a proxy for place meanings and visitor experiences in the context of management practice. That is because these relationships are solidly grounded in meanings and experiences of place and can serve as surrogates. In other words, relationship is the vehicle to apply these in practice.

A Multidimensional Framework

A central theme regarding relationships is their existence over time. They are not seen as fixed entities, but as dynamic processes that ebb and flow over an individual's lifetime. Interactions between individuals may be affected by preceding ones and influenced by expectations about the future (Hinde, 1995). Within personal relationships, individuals are interdependent (Berscheid & Peplau, 1983). How someone behaves within a relationship affects the subjective experiences of participants and can affect future behaviors (Hinde, 1995). Engaging in a relationship may also add significant meaning to the life of the individual choosing to be a partner in the relationship (Fournier, 1998). Their choices may come to represent their personal values, identity, and the social norms to which they ascribe.

Relationships also exist in a societal context. They are not independent from social, cultural, and temporal situations. Instead, they are embedded in a larger social network made of shifting individuals and groups (Laursen & Bukowski, 1997). Social forces influence the creation, maintenance, and negotiation of these relationships over time and space. They become dynamically linked in a continuous process of reciprocity between individuals and social contexts (Hinde, 1995).

We build on a self-others-place model (Brooks, Wallace, & Williams, 2007; Gustafson, 2001) by conceptualizing a person's relationship to a protected area in terms of a multidimensional framework. There are three key dimensions: a person's relationship to self, their relationship to other people, and a person's relationship to the place. An understanding of these dimensions allows for their application in a protected area context. They represent a potential structure for the application of place relationships within current and traditional planning and management frameworks.

The first dimension of this relationship framework is a person's *relationship to self.* Most people are aware that their relationships play a crucial role in shaping the character of their lives (Berscheid & Peplau, 1983). Relationships have been described as cultural expressions that define who we were, are, and hope to be (Greider & Garkovich, 1994). These relationships add meaning to our lives, change our self concept, and become central to the core of who we are as individuals or groups (Brooks & Williams, 2012; Fournier, 1998).

Research has established substantial evidence that our interactions with nature are tied to long-term attachments, meanings, and identities (e.g., Brooks, Wallace, & Williams, 2006; Greider & Garkovich, 1994; Williams, Patterson, Roggenbuck, & Watson, 1992). Our relationship to a place is more than just making use of the specific attributes and opportunities of the place, but also the ties, significances, and values we recognize and construct with the place. Seeking self-definition and self-understanding have a connection with how people create and maintain happiness in protected areas (Haggard & Williams, 1992; Scherl, 1989). Through involvement in places, "individuals actively construct and affirm a sense of self" (Williams & Patterson, 1999, p. 148). A self-dimension, thus, provides the emotional component that reflects the symbolic importance of a place (Williams & Vaske, 2003). It also represents "those dimensions of the self that define the individual's personal identity in relation to the physical environment" (Proshansky, 1978, p. 155). Knowing who we are relative to a place can also provide insight into how we will react and incorporate future changes to that particular place into our identity.

Other people and social interactions with them play substantial roles in shaping one's place identity and place relationship (Brooks et al., 2007; Eisenhauer, Krannich, & Blahna, 2000; Gustafson, 2001; Kyle & Chick, 2004). A relationship approach accounts for interactions between individuals and between groups. In a protected area context, this means interacting with managers, staff, visitors or recreationists, local residents, and other stakeholders. Interactions with these individuals, however brief or enduring they may be, can have an impact on our individual place relationships. Thus, a dimension within this relationship framework that addresses these exchanges is an important element. It acknowledges that the exchanges individuals have with protected area planners and managers become very important and the success of these exchanges can be defined by the development of an on-going relationship between the individual and the agency instead of short-term outcomes and satisfactions (Borrie et al., 2002).

Critical components within this dimension are stakeholders' trust and commitment towards those agencies and institutions responsible for managing protected areas. Specifically, trust is widely viewed as an essential component for successful relationships (Berry, 1995; Borrie et al., 2002; Moorman, Zaltman, & Deshpande, 1992). It exists when one party has confidence in the reliability and integrity of the partner in the relationship (Moorman et al., 1992; Morgan & Hunt, 1994). Commitment reflects the strength of the bond between two relational partners. It describes the durability of the relationship over time and the investment that each partner has made in the other. Together, trust and commitment play a central role in shaping motivation and behavior in ongoing relationships (Wieselquist, Rusbult, Foster, & Agnew, 1999). They show that individuals have confidence in one another and that the interactions of the relationship will result in the desired outcomes or experiences.

The third dimension of this relationship framework is an individual's *relationship to a protected area* or place therein. As humans, we live in a place-based world. Places are much more than the setting attributes of a landscape. They are symbolic environments created by humans conferring meaning to nature. These meanings are about the relationships between the person/culture and the place. Over time, these meanings are the symbols for the relationship that exists (Williams & Patterson, 2007). Place meanings are also emergent, socially constructed, and transactional in nature (Williams & Patterson, 1999). Through actively engaging with places and creating meaning, people can foster relationships with places (Brooks et al. 2006; Manzo, 2003). These relationships are life-long, transforming over time, and influenced by past experiences (Manzo, 2005).

Understanding the protected area is important because it provides for the development of individual relationships. It represents a context where a human connection is taking place. Without the place, the relationship could not be grounded in a reality, and it would be difficult to fully examine and investigate the relevant environmental and social forces operating within the place. Threats and cultural forces may also be examined to understand what changes might occur in the social construction of a given landscape.

Information Needs

To foster and protect these enduring relationships, planners and managers need a structure to apply this framework. It requires documenting and monitoring individual or group relationships with protected areas in multiple ways. Just as issue-based frameworks require data-driven assessments, so too does this relationship-focused approach. We identify three target areas of information and knowledge that will provide the structure necessary to document, steward, and sustain protected area relationships: 1) storied dialog in *narrative* form; 2) a "protected area approval rating" that tracks *trust and commitment* of visitors, area residents, and other invested stakeholders; and 3) identification and prioritization of *threats* to relationships and appropriate mitigation strategies. Each target area reflects a dimension of the framework. Narratives are closely connected to relationship to self or group; trust and commitment are linked to relationship with agency staff; and threats are connected to relationships with places. Once collected and interpreted, agency staff can integrate these data with existing planning and management strategies (e.g., permitting, monitoring, education, or public involvement). The objective is to achieve outcomes that are beneficial for resource protection (e.g., collective action), visitor experiences (e.g., agreement about desired future conditions), and stakeholder engagement (e.g., respect for different perspectives, common language, and shared values).

It is important to recognize that we are not suggesting that any specific method is required to collect or measure these target areas of information and knowledge. Various psychometric, qualitative interpretive, and/or participatory approaches, among others, may be appropriate given the context of the place and the problems facing planners and managers. While we provide several methodological options for obtaining data for each of the target areas, it is to the discretion of the planners, managers, and researchers involved to determine how to document and interpret this information in a manner that best fits the context and provides the most potential to steward and sustain relationships.

The Power of Narrative

To apply place relationships to protected area stewardship, researchers, planners, and managers require a way to collect and document primarily qualitative data about experiences and place meanings that are useful. Storytelling and narrative are the most fundamental ways that people construct, make sense of, and communicate the meanings of experiences derived from everyday life events (see Brooks, Titre, & Wallace, 2004; Fisher, 1985; Glover, 2003; Glover, Stewart, & Gladdys, 2008; Hummel, 1991; Mishler, 1986; Patterson, Williams, & Scherl, 1994). Stories of people's experiences and long-term connections with protected areas and agency employees are the vessels that hold place meanings. People tell stories to communicate place meanings and relationships. It is the responsibility of the resource manager to learn about these stories and recognize when different stakeholders have different and sometimes conflicting (or shared) stories (Williams, 2008).

A narrative is "a way of organizing episodes, actions, and accounts of actions; it is an achievement that brings together mundane facts and fantastic creations" (Sarbin, 1986, p. 9). Narratives incorporate time, place, experience, identity, motivations, and causes of events (Maines & Bidger, 1992). We believe that collecting narratives is the application that best accounts for relationship to self or group. Stakeholder narratives also hold insights for understanding their relationships with other stakeholders and the protected area and can be used to inform the agency about trust in management and threats to protected areas.

To truly hear the stories of visitors and other stakeholders, managers must "invite them into their work as collaborators, sharing control with them, so that together they try to understand what their stories are about" (Mishler, 1986, p. 249). Creating shared understandings through narrative dialog provides the foundation for participatory planning and collaborative management. By engaging stakeholders in this manner, planners and managers become more informed about visitors, communities, and other stakeholders and establish trust and relationships with them. Stakeholders also learn much about agency planners and managers and develop a sense of responsibility and commitment to stewardship.

Researchers and managers can track the existence and formation of place relationships and how meanings and relationships change through time by listening to and sharing experience narratives. Stewart (2012) suggested that in addition to telling and sharing stories, planners and managers need to "engage others in reacting to and providing commentary on the stories being told" (p. 207). Then, planners and managers should "build a credible set of narratives" linked across experiences and meanings and believable by all invested stakeholders. This set of narratives should represent, and perhaps expand upon the management foundation for a given protected area—an area's purpose, history, special values, and desired conditions. Stewart (2012) suggested that planners and managers need to engage others in the stories of protected areas. To do so, they must listen to and discuss with visitors and local residents the conversations that unfold at trailheads, campgrounds, visitor centers, and communities. This allows the invested stakeholders to learn more about how diverse experiences and place meanings relate to their broader life histories and stewardship goals for a protected area. Planners can ask people who have developed committed relationships to participate in public planning discussions and to share their stories with other stakeholders. It will be of utmost importance to demonstrate with transparency how management decisions are linked to the stories and public dialog

(Stewart, 2008). Planners must clearly document how narrative information was analyzed and built into proposed actions and decisions.

Multiple techniques and methods are available to collect and document narratives. As temporal processes, place relationships, and the stories which contain them, are best studied using longitudinal methods that payoff in comparative results over the long-term. This essentially means asking people to tell their story about a protected area and what it means in their lives for the past, present, and future (Brooks & Williams, 2012). To generate and capture these stories, researchers and practitioners can ask visitors and other stakeholders to keep journals and do other types of structured writing during a visit (e.g., Fredrickson & Anderson, 1999) or a planning process. Schroeder (1996) recruited visitors to write essays about the protected area and their visit. To initiate narratives, researchers have conducted interviews with recreationists during (e.g., Arnould & Price, 1993; Brooks et al., 2006) or immediately following their trips (Patterson et al., 1998).

Another promising approach is to elicit oral histories of long-time visitors and area residents. Steiner and Williams (2011) recently reported results from long-serving backcountry rangers and key stakeholders with long histories of participation. In their study, some participants reported on how their ideals about visiting and being in protected areas had evolved; others described how certain management practices shifted their visitation patterns, often producing unintended consequences. A more modern form of narrative initiated by visitors involves the trip reports and blogs being posted on Internet websites (Champ, Williams, & Lundy, 2013; Williams, Champ, Lundy, & Cole, 2010). Considerable promise exists in using the Internet as a means to solicit narratives about place relationships. This type of information can be immediately used by managers to monitor place relationships and identify potential conflicts, and researchers can use it as source material for studying longer-term relationships between stakeholders and protected areas. Protected area managers need research and planning aimed at developing innovative, cost-effective, and informative ways to extract and monitor information about relationships (Brooks & Williams, 2012).

Protected Area Approval Rating

As previously suggested, an important dimension of this relationship framework is an individual's relationship with other stakeholders such as visitors, local residents, and managers. For the purpose of management application, one useful way to represent this relationship is by the interactions and exchanges that individuals and groups have with protected area managers and other staff. One way to gain knowledge and information regarding the quality of exchanges between stakeholders and protected area managers is to document the levels of trust and commitment that exist in the relationship.

Documenting levels of trust and commitment is valuable because their magnitude can be demonstrated. Researchers have struggled to adequately represent the magnitude or degree of concepts such as place meanings, experiences, and relationships. While the absence, presence, or importance of these concepts can be documented, it can be challenging, and perhaps conceptually inappropriate, to attempt to demonstrate that place meanings have increased or decreased. This is not to say that place meanings cannot change or evolve, but that changes in their magnitude present conceptual challenges and confusion. Conversely, demonstrating changes in levels of trust makes sense and is achievable using established methodologies.

A "protected area approval rating" is a survey tool that can be used to assess and monitor stakeholder trust and commitment. Similar to its use in politics and public polling, an approval rating can demonstrate stakeholder support and reflect changes in that support over time. Trust can be defined in terms of the perception of shared values, direction, goals, views, actions, and thoughts (Cvetkovich & Winter, 2003; Winter, Palucki, & Burkhardt, 1999). A variety of psychometric measures for trust have been utilized in natural resource management (Borrie et al., 2002; Liljeblad, Borrie, & Watson, 2009; Winter et al., 1999). These attitudinal statements ask questions such as "I trust *agency X* in their efforts to manage *given protected area*." Other attitudinal measures examine integrity, responsiveness, and confidence (Liljeblad et al., 2009). Participatory and qualitative interpretive approaches can also be utilized to examine trust. Nominal group processes within focus groups, listening sessions, or stakeholder sharing circles could be used to examine trust and commitment. Managers could solicit public feedback through websites, social media, and blogs in which visitors may write stories about their experiences interacting with managers at protected areas.

Creating an approval rating score or set of qualitative indicators of trust for the responsible managing agency sets a starting point for the stewardship of relationships for invested stakeholders. Over the course of planning, management decisions, and policy changes, the approval rating can provide additional information and insight into how both internal and external changes to the protected area are impacting stakeholder relationships. Over time, it can be used as a mechanism to foster public involvement and engagement in participatory planning. The objective is to maintain the strongest approval rating across as many invested stakeholders as possible.

Threat Identification and Management

Protected areas around the globe are subject to multiple environmental and social forces. In a given context, any of these forces can manifest themselves as environmental, social, and political threats to environmental integrity, sustainability, and social or cultural significance. Threats such as global climate change, wildland fire, invasive species, and oil spills can dramatically influence both the landscape and the place meanings associated with its character. Such threats fundamentally alter the place in ways that conflict with personal histories, previous experiences, place relationships, and management objectives. Therefore, threat identification and management are key components of this relationship-focused approach because of the substantial impact that threats to the protected area can have on stakeholder relationships. Loss of place and displacement are extreme examples. How protected area planners and managers both plan for and react to these threats can be critical to fostering and stewarding relationships over time.

Multiple examples exist of how environmental, social, and political forces are threatening human relationships with protected areas. Mackey, Watson, Hope, and Gilmore (2008) have described the challenges of biodiversity conservation in Australia. They explain how habitat fragmentation and degradation have occurred due to commercial logging, agriculture, and pastoral practices. They further describe how invasive species threaten endemic populations and species richness in one of the most biologically diverse countries in the world. Finer et al. (2008) have examined oil and gas development in the Western Amazon. Historical extractive activities have led to deforestation and environmental contamination in some of the most species-rich areas of the Amazon Basin. New exploration and development continue to threaten wilderness areas and indigenous populations. In the United States, Proescholdtz and Nickas (2008) have challenged the emergence of special provisions and non-conforming activities in wilderness legislation. They note that provisions for grazing, commercial activities, and motorized access have continued to expand in legislation and represent ongoing threats to wilderness character and to the stewardship of protected areas.

As environmental and social changes occur, the place meanings and relationships of stakeholders also change. Degraded forests and waters represent degraded relationships where individuals must come to terms with the loss of what they once knew and understood. The purpose of a place changes as it might no longer represent a source of subsistence, spirituality, or solitude. As the endemic and iconic species disappear, so does the uniqueness of the place. Individuals have to come to terms with protected areas fundamentally altered by invasive species, extractive industries, commercial activities, or changes in global climate. Thus, the situation described by Mackey et al. (2008) exemplifies how the dramatic changes that result from these threats can have great effects on numerous stakeholders.

As part of this relationship-focused approach, protected area managers and planners need to identify relevant external and internal threats. Are wild fires and future fire regimes a concern? Does an escaped prescribed fire impact trust and confidence in the agency? How do melting glaciers and ice shelves affect tourism in Earth's Polar Regions? Do invasive species threaten environmental integrity and personal meanings? How does hiking through a large stand of beetle-killed trees affect visitors' experiences and place meanings? Will policy changes related to crowding and fees affect local and regional stakeholders? Identification of threats should be framed by how those threats impact current and future place relationships. Management actions that mitigate negative impacts to relationships should be prioritized to complement those actions that protect resource integrity. These efforts should be integrated within current planning frameworks and procedures that already include strong elements of landscape assessment, issue scoping, and public engagement.

Prioritizing management efforts that foster, steward, and sustain relationships allows agencies to protect a diversity of experiences and place meanings. It provides an opportunity to collaborate with various stakeholders and inform them about diverse goals and objectives for managing a protected area. In some instances, this collaboration may require discussing with invested stakeholders how to adapt to threats and changes that are outside of the control of managers (e.g., effects of global climate change, environmental disasters, economic turmoil, civil unrest, or wars). These efforts demonstrate that land managers are committed stewards who value all meanings across the landscape and try to account for them in practice.

A Case in Point: Community-based Conservation in Arctic National Wildlife Refuge

Context

The Arctic National Wildlife Refuge (Arctic Refuge) is a protected area in northeastern Alaska administered by the United States Fish and Wildlife Service (USFWS). It is bounded by the Arctic Ocean on the north and the Canadian border on the east. In 1980, the United States Congress expanded the boundaries of this protected area and designated one wilderness area and three wild rivers therein. The Arctic Refuge has emerged as a national symbol of wilderness and wildlife protection (e.g., Bengston, Fan, & Kaye, 2010). At the same time, the coastal plain of the Refuge has become the centerpiece of much discussion, contention, and political debate over energy exploration and the development of fossil fuel resources (e.g., Hinchman, 2003).

There are numerous stakeholders at all levels of society and government invested in and connected to this place in various ways; examples include commercial and public recreation, tourism, tribal homelands, rural subsistence, cultural heritage, research and management, wildlife conservation, oil and gas exploration, and wilderness protection. Planners, managers, and other stakeholders face a myriad of issues due to competing perspectives about meanings and values of the Arctic Refuge. However, their work certainly goes beyond identifying and addressing national, state, and local issues. Planning for and managing the Arctic Refuge requires that agency employees understand diverse place meanings and relationships, foster trust and partnerships, and mitigate threats to both natural resources and relationships. Arctic Refuge provides a number of examples that are well suited for illustrating how planners and managers can apply this relationship-focused approach.

Residents' Place Relationships

To narrow the scope, we examine a local, but relatively heterogeneous, group of stakeholders: Alaska Native peoples and other rural residents. The people who live in this part of Alaska have deep and long-term connections to the refuge that form the basis of their identities and relationships, including their relationships with the USFWS. Arctic Refuge encompasses much of the ancestral homelands of both the Iñupiat and Gwich'in peoples. Today, there are six Alaska Native communities in or immediately adjacent to the refuge boundary and five other rural communities (one in Canada) that have geographic or cultural ties to this refuge.

Residents of these communities practice subsistence activities in or near the refuge. Gwich'in communities tend to be dependant on caribou for hunting, and Iñupiaq communities tend to rely on marine mammals. It is important to clarify that Alaska Native subsistence involves more than hunting and fishing for food and nutrition; it is absolutely essential for the survival of Alaska Native cultures, societies, economies, and communities (see Jacobs & Brooks, 2011; Van Zee, Makarka, Clark, Reed, & Ziemann, 1994). Subsistence is a way of life tied to spirituality and cultural identity and forms the basis of place meanings and relationships to self, others, Arctic Refuge, and the resources of the land. This group of stakeholders has developed a variety of stories about living in and near Arctic Refuge that can be used to learn about their place relationships and their relationships with refuge managers. It is important to do so because these relationships are easily threatened by management decisions and other outside forces.

Changing Relationships in Kaktovik

We highlight specific aspects of an actual community-based conservation program to illustrate how the elements of this relationship approach can be applied. Employees of the USFWS are working closely with residents of Kaktovik, Alaska to conserve polar bears. Kaktovik is an Iñupiaq village located inside the northern boundary of Arctic Refuge on Barter Island on the Beaufort Sea coast. Retreating sea ice, cultural practices of subsistence whaling, more people on the land, and other factors have combined to increase the potential for conflicts between humans and bears (USFWS, 2010).

Relationships between people and bears are changing on Barter Island. Bear use of the area in proximity to the village is increasing, creating a situation where traditional Iñupiaq values and uses of polar bears are shifting. Decline of sea ice where polar bears usually hunt seals has contributed to a landward shift in polar bear distributions (USFWS, 2010). Since at least 2001, bears aggregate near the community to feed on unused portions of whale carcasses and bones that are deposited by subsistence hunters within a few kilometers of the village at a designated site called the "bone pile" (Miller, Schliebe, & Proffitt, 2006). This site holds significance for local subsistence hunters, as well as an increasing number of visitors drawn by the desire to view polar bears. As a result, small polar bear viewing operations are developing as visitor use increases.

Community residents and agency biologists grew concerned that increasing potential for human-bear conflicts could result in increased disturbance to bears, as well as potential increase in bear mortality, and human injury or death. Community residents want to prevent hungry bears from wandering into town where they pose a threat to people. The need for collaboration also exists because both the people of Kaktovik and agency managers have significant interest in and relationships with polar bears and their habitat. Polar bears hold great cultural significance for the Iñupiat people (Russell, 2005), and they are listed as threatened under the Endangered Species Act of 1973 (16 U.S.C §1531 et. seq.)

Narratives

What began as an issue-driven effort to reduce potential human-bear conflicts emerged as a relationship-focused approach for doing collaborative conservation. Early on, agency managers and community leaders realized the need for a collaborative approach to address human-bear conflicts. They started to meet in Kaktovik on a regular basis to talk about the situation and share information, observations, and stories. Several methods were used to create dialog and generate narratives including a regular presence of polar bear managers in the community that made daily exchanges with residents possible. Over time, this led to community leaders viewing the managers as part of the community. Managers also hosted "open houses" for residents to promote dialogue, attended tribal council meetings, issued public service announcements, and visited local schools. The stakeholders learned that the predominant narrative for residents of Kaktovik follows a simple conservation storyline: "We live among polar bears and understand them. Times are changing for polar bears. We need to help them remain a part of this landscape in a manner that does not threaten community safety." This parallels the conservation narrative of refuge managers and agency biologists of shared responsibility for polar bear conservation.

Trust

Trust, commitment, and ownership were established through long-term and open two-way dialog between the invested USFWS staff and local stakeholders. Continuity in the individuals who were involved and their ability to demonstrate respect for the various perspectives and cultural appreciation and awareness provided a strong foundation for relationship-building. Community leaders took on management and decision-making responsibilities, and agency biologists and managers served as technical and policy advisors rather than dictating "what needs to be done." There were meaningful roles for stakeholders, such as serving on a local committee (Kaktovik Polar Bear Committee) that made decisions on how to deal with visitor use issues. For example, state and federal agencies are working together to train potential bear-viewing guides by developing their skills and granting credentials. Local leaders in Kaktovik were awarded a three-year Tribal Wildlife Grant from the agency to develop a human-bear safety plan for the village. Local leaders and other residents actively worked to establish non-lethal bear hazing patrols in the village, manage food attractants, develop educational safety materials, develop guidelines for bear viewing operations, and participate in biological monitoring of bears. Meaningful involvement and these other basic components of collaboration are paramount for building trust between stakeholders (Jacobs & Brooks, 2011; Liljeblad et al., 2009). Although no approval rating was measured in this case, agency biologists continue to make face-to-face visits in Kaktovik and practice open dialog to monitor commitment to the polar bear-related conservation initiatives.

Threats. These stakeholders are faced with a number of threats to the relationships that they have established and the underlying place meanings and trust. Stakeholders must identify, prioritize, and mitigate emerging threats such as increased bear use as well as human use associated with tourism and its potential impacts to this small community and polar bears (USFWS, 2010). Non-local, commercial tourism operations, violations of bear-viewing guidelines, and lack of knowledge for local cultural practices can damage place relationships and need to be monitored and managed. On private lands, local ordinances and peer pressure can be used to promote compliance with bear-viewing guidelines, whereas on Refuge lands, operators who violate the guidelines can be found in violation of their commercial-use permits and have permits revoked. Another threat to the relationship between local stakeholders and federal managers is that many Iñupiat people are offended by the research practice of placing radio collars on bears, largely because of the potential injury that can result to the bears. As a result, managers have supported efforts to develop new research techniques that are less invasive to bears, such as use of glue-on radio tags to track bear movements. Researchers are also providing education about bear research for residents to increase their understanding of methods and why the information collection is important to polar bear conservation.

Outcomes

Stakeholders have gained several quality outcomes related to relationships, and relationships continue to evolve. The community receives economic benefits and a sense of self-determination from managing bear-viewing tourism. Visitors gain experiences with and appreciations for the Arctic region, the Iñupiat people, and polar bears and their conservation. The agency and community residents have co-created shared values and common ground regarding polar bear conservation and the reduction of bear-human conflicts. The Kaktovik Polar Bear Committee has worked with wildlife managers to develop community-based guidelines and protocols for safely viewing bears. These guidelines are also incorporated into special use permits that the refuge issues to commercial guides. The agency has established a firm foundation for long-term working relationships with the residents of Kaktovik, thereby contributing to the future of polar bear conservation and community relations in Arctic Refuge. This provides a clear example of how applying a relationship approach complements existing agency practice and policy.

Discussion

This case illustrates a clear but idealized application of this relationship approach. The actual situation in Kaktovik is highly complex and the application of this relationship-focused approach presents challenges. Just as meaning-based and place-based paradigms have proven difficult to implement within current planning and collaborative processes, this relationship-focused approach also has the burden of integrating multiple dimensions of relationships into an issue-based, outcome-driven community of practice. However, such challenges can be successfully addressed when we consider the importance of mutually beneficial outcomes from all protected area planning and management strategies.

The value in applying place meanings through this approach is in its ability to complement existing planning and management strategies and procedures. It provides supplemental ways to mitigate contentious issues and cut across interest group affiliations (Cheng & Mattor, 2010). This happens as stakeholders learn about and share their diverse perspectives, experiences, and meanings of place during participatory planning and long-term commitment to open and public dialog (Cameron and Grant-Smith, 2005; Stewart, 2012). This approach delivers protected area planners and managers an additional strategy to achieve the shared goals of protecting resource integrity, stakeholder values and place meanings, and personal experiences.

Similar to recent place-based planning processes (see Cheng & Mattor, 2010; Farnum & Kruger, 2008), a relationship approach should be used to complement and supplement contemporary planning processes and existing procedures. The contribution of this approach is a shift away from predicting stakeholder attitudes and interests and controlling behaviors towards understanding how experiences and place meanings contribute to the ongoing relationships that people develop with protected areas and public agencies (see also Borrie et al., 2002; Brooks & Williams, 2012; Brooks et al., 2006; Brooks et al., 2007; Dvorak & Borrie, 2007; Manzo & Perkins, 2006; Smaldone, Harris, & Sanyal , 2008; Stewart, 2012; Williams, 1989; Williams et al., 1992). The purpose of planning and stewardship becomes understanding and fostering relationships in their entirety, instead of predicting individual parts such as preferences, expectations, attitudes, and satisfactions. Protected area managers fully take upon themselves the mantle of "steward" by having responsibility for both the integrity of the natural resources and the relationships of invested stakeholders.

An important aspect of being a steward of these relationships is to create "public memory." Stewart (2012) suggests the development of public memory is the process of creating value for a given place through an evolving conversation or dialog about its significance. It is a process used to represent multiple and fluid ways in which place meanings are created. Creating a public memory for a protected area integrates well with applying this relationship approach. It emphasizes the important role that planners and managers have in documenting and sharing relationships and stories over time. Similar to being a steward of relationships, a steward of a place's public memory can collectively characterize and represent the social and cultural meanings of a protected area or place therein (Stewart, 2012). For example, the Kaktovik Polar Bear Committee, working with the agency, developed a two-page informational brochure for tourists and visitors that arrive in the village. In addition to biological facts about bears, this outreach tool provides published norms for safely and respectfully watching bears and guidelines instructing visitors how to be respectful of the community and culturally sensitive toward their traditional food-gathering activities.

Conclusion

Given the challenges of directly applying place meanings to management, we believe that researchers, planners, and managers at protected areas should redefine and refocus their goals by applying this relationship approach. While current strategies to regulate behaviors and activities or control and manipulate setting attributes and social conditions will continue to be useful (Brooks & Williams, 2012), they are tools that arguably will not completely ensure the quality of individuals' long-term relationships with protected areas.

Only by reframing current planning and management strategies to include relationship goals and outcomes can we represent the greatest diversity of individual place meanings and relationships. Applying this approach is an investment in both place relationships and public relations. By investing in these actions, managers will gain substantial amounts of applied understanding and usable knowledge and, in the process, achieve a number of quality relationship outcomes.

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