Place Meanings among Resource and Recreation Managers of the Great Barrier Reef Marine Park, Australia

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Introduction

"PLACE MEANINGS" AND RELATED CONCEPTS THAT REFERENCE HUMAN ATTACHMENT TO PARKS, protected areas, and cultural sites have received considerable attention (Farnum et al. 2005). This line of research offers a promising approach to better understand the meanings that visitors ascribe to places and, therefore, what is or is not important (Kyle et al. 2004). This information offers a guide for managers to oversee resource and recreation conditions in ways consistent with those meanings. A variety of techniques have been employed to capture in-depth understandings of place meanings (Davenport and Anderson 2005), generalize to larger populations using survey scale items (Williams and Vaske 2003), and map areas of significance using geographic information system (GIS) applications (Brown 2005). These approaches have helped managers address on-going challenges to incorporate subjective interpretations of place into decision-making (Cheng, Kruger, and Daniels 2003), identify effective strategies for engaging and collaborating with stakeholders (Brandenburg and Carroll 1995), clarify conflicts in the meaning of resources (Yung, Freimund, and Belsky 2003), and address human responses to changing environmental conditions (Kyle et al. 2004).

Previous investigations have explored how visitors and residents feel connected to spatial settings; however, the perspectives of managers have generally been absent from these investigations (Hutson, Montgomery, and Caneday 2010). This is problematic, because managers are entrust-

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ed through public consent to protect environmental conditions while providing opportunities for use and enjoyment of natural resources. It is also important to clarify how managers' views align with an agency's mission. We build on this gap in the literature with insight on the meanings that Australian managers associate with places at the Great Barrier Reef Marine Park (GBRMP). Our discussion is organized in terms of four dimensions—functional, natural, experiential, and interpersonal—to illustrate the diversity in attachment that forms between managers and places under their jurisdiction. We hope this information will help managers draw on their personal relationships with places to more effectively negotiate meanings that their public constituents associate with protected area landscapes.

Methods

Study context. The GBMRP encompasses approximately 345,000 square miles, and extends 1,500 miles along the northeastern coast of Australia in the state of Queensland. This area hosts one of the most biologically diverse ecosystems in the world, including an expansive network of coral reefs, continental islands, coral cays, and an abundance of marine life (GBRMPA 2009). Interconnected within these habitats are other communities, such as mangroves, seagrass beds, and sponge gardens that contribute to an extraordinarily productive ecosystem. The GBRMP is an iconic destination that fosters a range of values and meanings among user groups (Wynveen, Kyle, and Sutton 2010), and serves as a driving force for the economy of Queensland (e.g., tourism industry, fishing) and, in part, for all of Australia (Day 2002). Federal, state, and local organizations cooperate to address key environmental threats (e.g., climate change, coastal development, water quality), engage local communities, and accommodate multiple interests such as shipping, commercial charters, scientific research, and recreational activities such as fishing and diving, and indigenous hunting (GBRMPA 2009).

Research approach. We drew on grounded theory to examine the meanings that managers, from three agencies charged to oversee the GBRMP, ascribed to places (Glasser and Strauss 1976). Semi-structured interviews were conducted both in-person and by telephone from June through September, 2010 (n = 35; Table 1). Informants were selected using a purposive "snow-ball" sampling frame, which involved identifying key figures in the management network, and building a sample based on recommendations from study informants. The interview guide consisted of 25 questions designed to query place meanings and management decision-making. Following Schroeder (1996), we elicited responses by asking informants to describe a place of importance and explain why it was of value. Over 33 hours of formal interview time were tape recorded, transcribed verbatim, and analyzed using open coding in ATLAS.ti version 4.2.

Study findings

Results illustrated strong attachment formed between managers and places within the GBRMP. To organize our informants' narratives, we drew on four place dimensions that have been previously supported in past research (e.g., Davenport and Anderson 2005; Williams & Vaske 2003) (Figure 1). Excerpts from the interviews are presented below to illustrate how these four dimensions converged around the idea of place meaning. Our discussion offers a perspective on how managers' personal connections can influence decision-making.

Natural. Our first place dimension, titled "natural," illustrated managers' appreciation for biological and physical forces that existed independent of human presence. Ecosystem function and resilience were of concern, as well as the pristine nature of environmental conditions: "There's a very strong sense of place, which I have constructed for, you know, Magnetic Island. And that sense of place is built around its natural values, its landscape, it still has some sense of the island as a national park. Even more than that, it's still understood natural bushland." Biodiversity, in terms of marine life and vegetation, characterized values that were ascribed to set-

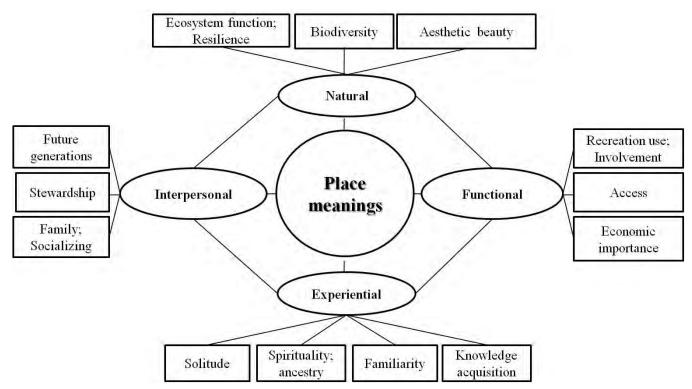


Figure 1. Four dimensions of managers' place meanings.

Variable		Frequency
Gender (n=35)	Male	23
	Female	12
Age (n=35)	Average	44
Ethnicity (n=32)	Aboriginal or Torres Strait Islander	1
	Not Aboriginal or Torres Strait Islander	31
Race (n=33)	Primary school	0
Education (n=35)	Secondary school	1
	Tertiary degree	3
	C.A.E. degree	1
	Graduate degree	30
Annual Household Income (n=31)	\$50,000-\$99,999	3
	\$100,000-\$149,999	9
	\$150,000-\$199,999	14
	\$200,000-\$249,999	3
	\$250,000-\$299,999	2
Years in Management	Ranges from 1.5 to 31 years	
Years in Agency	Ranges from 2.5 to 31 years	
Years in Current Position	Ranges from 4 weeks to 12 years	

Table 1. Socio-demographic characteristics among managers of the Great Barrier Reef Marine Park.

tings. One informant referred to aesthetic experiences, explaining that geographic locales became meaningful when linked to species conservation: "One thing that's important I think, too, is that when we talk about place, is probably a lot of us are concerned with species more than locations. And good examples of that would be things like turtle and dugongs ... the location becomes important if you've got an island, like this place called Raine Island in the north, which is the most important green turtle nesting site in the world.... It's not a very pretty place. It's all been churned over by green turtles all the time when they're nesting. But it's a vital place for the turtle." This passage also pointed the functional meaning of places.

Functional. We labeled the second dimension of managers' place meanings "functional," and it represented utilitarian-oriented values, the importance of economic support stemming from the fisheries industry and other consumptive practices that drew on natural properties of the park, and indigenous use. Fishing, snorkeling, diving, and swimming were activities often referenced. When asked why places were important, one informant referenced Hinchinbrook Island National Park: "It's where I, uhm, prefer to do some of those recreational activities." Others derived benefits from places through outdoor activities: "catching a really good fish and eating it," "trail running on the weekend," and "recreational activities and fishing values." One informant explained that these benefits were motivational on personal and professional levels: "I only became a fisheries scientist, fisheries manager, because I love fishing." The functional dimension of place was reflected in a multiple use philosophy that resonated with many informants: "I'm very pleased that some areas are protected. I'm very pleased that some areas you can use.... I don't believe in locking things up.... I actually believe that the more people that see something and appreciate it, the more support you will have.... Places become special because you can use them."

Experiential. The third dimension of managers' place meanings was "experiential" and it referenced individually-oriented experiences that facilitated connections between managers and their environments. Familiarity was central to meaning creation: "Isles is also a very special place to me 'cause I've. I'm very familiar with it." Another informant explained, "people that are particularly familiar with the local environment have strong sense of place about it." Spirituality and ancestry were also linked to the experiential dimension, in that Aboriginal populations or "traditional owners" were understood to have "quite strong linkages to sites and place... they still have a strong sense of place, of belonging back to here through their ancestral roots." Places were intrinsically valued for the purposes of intellectual stimulation and curiosity to understand what objectively existed at the GBRMP: "A big part of it is knowledge. Just seeing what's out there and the beauty of it." Another informant noted, "The most important place for me in the Marine Park is Lizard Island ... and I think one of the things that makes it so valuable to me is... the research station there." Others spoke of places becoming meaningful through rejuvenation, a sense of humility and the importance of solitary experiences: "the remoteness or the feelings of being, of moving away from civilization and not being part of, you know, the sort of ant hills of human population."

Interpersonal. We titled the fourth dimension "interpersonal" and it was rooted in social aspects of place meaning. Managers, as custodians of the GBRMP, expressed a strong desire to provide for future generations, and maintain professional responsibility and stewardship: "I mean that's why I came onboard to this position. I felt I could contribute to the, you know, conservation of the Great Barrier Reef. But at the same time, I was also very linked with all the users, the fishermen out there as well." When asked whether recreation activities were pursued with other people, one informant responded, "Yeah, and that's the purpose. They definitely have a social component." One individual reiterated the importance of shared experiences: "Queensland is my home state and while I've lived for many years away from Queensland, it has a, you know, a powerful sense for me because of family and history and all those things that bind people to an area."

Discussion

Our discussion of managers' place meanings extended to the interrelationship between personal views of the environment and decision-making processes. Managers may find it useful to consider how their perspectives shape interpretations of place and allow them to better understand the sentiments of their public constituents. Human-place bonds were beneficial for managers to understand local issues: "When it comes time to review the management plan for a place like Hinchinbrook Island, having that personal experience there, understanding the way in which that place can move people will give me, I think, greater insight into how we can structure a management plan to protect those very values." However, this informant went on to caution, "There is a risk and an opportunity there that those personal experiences will bias that decision, but ultimately we have to make a call about how these lands and waters are used... I guess that connection to place for me is a valuable addition into that decision-making process." Managers exercised their understanding of places to construct management plans and more effectively engage their public constituents.

In some cases, attachment to places provided common ground shared by managers and members of the local community. One informant explained, "Most of the people in [the agency] are from North Queensland ... most of us were into things like recreational fishing and that sort of thing, and I think that the people felt a lot better.... I think the fear people have is that decisions will be made about their lives by someone who doesn't understand." Practical and personal experiences helped alleviate the fear that management decisions were made in ignorance without considering or understanding public viewpoints. Others referenced "street credit" and "trust capital" when asked how place meanings contributed to decision-making. This point is illustrated well by the boat ramp test: "If you're trying to talk to people about an issue. If the guys out at the boat ramp on Saturday morning don't understand it, you've got no chance." In this sense, decision-making partially relied on managers' personal connections to places and depended on clearly articulating management issues of interest.

Conclusions

This study examined place meanings among managers of the Great Barrier Reef Marine Park. Our study informants reported multifaceted and diverse attachment manifested in the meanings they ascribed to the GBRMP. We organized their expressed meanings into four dimensions: natural, functional, experiential, and interpersonal. First, naturalistic values were reflected in elements such as ecosystem function and resilience, biodiversity, and aesthetic beauty (Davenport and Anderson 2005; Manning, Valliere, and Minteer 1999). Second, recreation use and involvement in outdoor activities, access to resources and economic benefits were central tenets to the functional dimension of place. Third, the experiential dimension referenced managers' desires for solitude, spirituality and ancestry, familiarity, and knowledge acquisition. Finally, providing for future generations, environmental stewardship, and socializing contributed to interpersonal relations that made places meaningful for resource and recreation managers.

Our investigation is aimed at helping incorporate a range of values and meanings within planning and management of parks and protected areas (Cheng, Kruger, and Daniels 2003; Farnum, Hall, and Kruger 2005; Wynveen, Kyle, and Sutton 2010). We examined managers' perspectives to shift focus from individuals and groups to those that are empowered by the will of the people to oversee conditions in ways consistent with public expectations (Hutson, Montgomery, and Caneday 2010). Understanding personal connections to place enables managers to better respond to their public constituents and participate in a process of negotiating meaning and use of natural resources. We anticipate that this information will guide management decisions to consider diverse value systems and initiate discourse of how place meanings materialize in decision-making processes.

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