PLACE MEANINGS ASCRIBED TO MARINE RECREATION AREAS: THE CASE OF THE GREAT BARRIER REEF

Christopher J. Wynveen

Clemson University cwynvee@clemson.edu

Gerard T. Kyle Texas A&M University

Stephen G. SuttonJames Cook University

Abstract.—One way to understand the attitudes recreation visitors have toward the natural environment is to examine the place meanings they associate with different settings. Meanings provide insight into the value and significance of place to the individual. Previous place research has focused on the meanings ascribed to terrestrial environments, but little research has occurred in marine environments. Using 20 interviews with recreational visitors to Australia's Great Barrier Reef Marine Park, this research identified and described the place meanings ascribed to a large marine environment. Ten place-meaning themes emerged from the informants' statements. Although these meanings were similar to those identified in previous studies, some important and nuanced differences were identified. Based on these findings, researchers and recreation resource managers may be more easily able to identify the thoughts and feelings that visitors ascribe to a marine setting.

1.0 INTRODUCTION

As part of the democratization of the decision-making process in agencies that manage natural resources for recreation, managers of these agencies have started to involve stakeholders (e.g., recreational visitors and residents of surrounding communities) rather than relying upon traditional agency-driven decisions (Williams and Stewart 1998, Cortner and Moote 1999). One way to understand the attitudes stakeholders have toward the natural environment is to examine the meanings they associate with the setting. Stedman (2002) conceptualized place meanings as beliefs and/

or cognitions ascribed to a setting that reflect the value and significance of the setting to the individual. Place meanings manifest themselves in an individual's descriptive statements about 'what kind of place is this?' (Stedman 2008) Identifying the meanings that stakeholders ascribe to a place can aid managers in the decisionmaking process by ensuring that diverse meanings are considered. Taking into account various meanings is important because decisionmaking can inadvertently favor one stakeholder group's meanings over another (Cheng and Daniels 2003, Farnum et al. 2005). Hence, it is in managers' best interests to identify and understand the range of meanings that may be affected by their decisions.

Previous research on place meanings has included only limited discussion of the meanings recreational visitors ascribe to marine settings (Farnum et al. 2005). Most place research has been conducted in North American terrestrial settings. The studies dealing with marine settings have focused on coastal towns and beaches (Vanclay et al. 2008), not on the marine resource itself. Marine settings are unique because they often have a greater abundance and diversity of wildlife (especially near reefs) and greater view distances across the water's surface. In addition, weather generally changes marine surfaces much more dramatically than terrestrial surfaces. Furthermore, with the exception of coastal development, there is less evidence of the human-built environment in marine settings. Finally, the social interaction among people underwater is more limited than in land-based recreation.

The purpose of our investigation was to identify and describe the place meanings that recreational visitors ascribe to a marine recreation area. Identifying and describing these place meanings may help resource managers better understand stakeholders' attitudes toward protecting the resource and stakeholders' support (or lack thereof) for management decisions (Stedman 2003). The theoretical framework of symbolic interactionism was chosen to understand the inherent

social nature within sense of place. The symbolic interactionist approach suggests that the meanings people associate with a setting are the product of processes involving the individual, the setting, and their social worlds (Blumer 1998, Eisenhauer et al. 2000, Kyle and Chick 2007).

The marine environment for this investigation was Australia's Great Barrier Reef Marine Park (GBRMP). The GBRMP, a World Heritage Area, protects 132,800 sq. mi. of habitat for thousands of species of flora and fauna along the northeast coast of Australia (CRC Reef Research Centre Ltd. 2004). This biodiverse ecosystem provides food for many people and attracts millions of recreational visitors each year who contribute more than 1 billion (AUS) dollars annually to the Australian economy (Harriot 2002). Given the lack of information on the place meanings ascribed to marine environments and the importance of the GBRMP to many people, the GBRMP provided a suitable setting for this investigation.

2.0 LITERATURE REVIEW

2.1 Place Meaning

Studies concerning place meaning have often been situated in the literature along with place attachment (Farnum et al. 2005). Place meanings reflect the value of the physical setting, whereas place attachment concerns the intensity of the human-place bond. Kyle and Chick (2007) wrote that "the leisure literature has been primarily concerned with the intensity of recreationists' attachment and less so with the reasons for attachment... It does not represent an understanding of human-place bonding reflected in the broader literature" (p. 209). As a result, the leisure literature has provided only limited insight into the basis of the human-place bond—the meanings that are ascribed to a particular setting.

It is important not to neglect place meanings because, as Tuan (1977) suggested, an unknown physical setting is a "blank space" that only becomes a "place" as it is endowed with meanings through lived experiences. Meanings are a product of the interaction among the setting, the individuals, and their social worlds (Kyle and Chick 2007). Thus, the range of meanings ascribed

to a place is constrained by the attributes of the setting, the individual's cognitions and perceptions related to the setting, and the individual's interaction with others in relation to the setting.

2.2 Place Meaning Typologies

Beyond defining the place meaning concept, researchers have also sought to identify the types of meanings individuals ascribe to a setting. Nassauer (1995) posited that people ascribe meanings to attributes and then interact with the setting while considering the newly defined meanings. This interaction contributes to the repertoire of experiences that the individual has with the setting. In turn, these new experiences redefine the meanings ascribed to the setting. Manzo (2005) observed that people often ascribe meanings of privacy, introspection, and self-reflection to natural settings. Manzo also determined that the natural settings individuals identified as important were often near their home, thus convenient to visit, and that the places were different from work or home (e.g., open spaces with scenic views rather than confined spaces and office views). Finally, Manzo noted that favorite places often provide people with a different setting to explore.

In addition to the meanings that people ascribe to natural environments generally, some meanings are specific to protected natural resource areas. These meanings may be influenced by culturally defined labels such as "National Park," "National Forest," and "wilderness" (Kyle et al. 2004). Gunderson and Watson (2007) identified seven primary types of meanings that individuals ascribed to frequently visited natural areas in Montana's Bitterroot National Forest. Visitors mentioned the ease of access to wild places; the naturalness/roadlessness of the setting; the uniqueness of the places compared to settings in their daily lives; the historic or traditional importance of the setting to their family or social network; the scenic attractiveness or beauty; and physical features of significance (e.g., unique geologic formations). Bricker and Kerstetter (2002) reported on the meanings river rafters associated with the South Fork of the American River in California. Their respondents indicated that the river's beauty, their shared experiences with friends, and the joy of running the river were important meanings.

3.0 METHODS

To understand the meanings recreational visitors ascribed to the GBRMP, the first author collected data through 20 semi-structured key informant interviews. The initial informants were chosen because they were known to have an extensive association with the GBRMP and were recreational users of the waters surrounding the reef. Key informants were chosen to include at least one individual from each of the following groups: tourist industry representatives; managers from local, state, and federal agencies who work on or near the GBR; and recreational visitors, both local residents and tourists. To identify subsequent informants, initial informants were asked to suggest others who met the criteria above. This snowball sampling method recruited participants who were able to describe their attitudes and the place meanings they ascribed to the reef in rich detail (Merriam 1998). As suggested by Creswell and Plano Clark (2006), interviews were conducted until data saturation was reached; subsequent interviews did not reveal additional ideas and information.

Although the interviews were designed to be as conversational as possible, two prompts were adapted from Schroeder (1996) to ensure that the conversations addressed the place meanings that informants ascribed to the GBRMP. The first prompt asked informants to give a physical description of a place that stood out in their mind "as being important, memorable, meaningful, or special" to them personally. The second prompt asked them to "describe the thoughts, feelings, memories, and associations that come to mind when you think about this place..." With the participants' permission, each interview was recorded using a digital audio recorder. As suggested by Merriam (1998), a reflexive journal was also kept to record the interviewer's thoughts about the process. Thus, the interviewer could evaluate and update the interview process between interviews. As a result of this record- keeping, the interviewer fine-tuned the interview probes to encourage informants to give more detailed responses to the prompts.

Interviews were conducted between July and August 2008. All of the individuals contacted agreed to participate. Participants ranged in age from 24 to 70

years (M=46) and 13 (of 20) were male (see Table 1). The informants had spent from 3 years to their whole lives interacting with the reef; most respondents had been coming to the GBRMP for 20-25 years. Analysis of the data obtained through the key informant interviews began immediately after the first interview. Using transcriptions of the interviews and field notes, the first author and a colleague independently coded the key informants' statements and sorted them into discrete elements. Following the open coding of respondents' transcripts, we evaluated the list of ideas using constant comparison to identify similarities and distinctions (Merriam 1998). Specifically, we each grouped together the ideas identified in the open coding to form categories of similar ideas and assigned each category a title consistent with the theme of the ideas reflected therein. Once data were coded, Holsti's inter-rater reliability test was conducted. The inter-rater reliability between the two researchers for the themes identified from these data was 90.9 percent, indicating an acceptable level of reliability (Miles and Huberman 1994). In addition, as Merriam recommends, to ensure the validity of the themes identified, we sought feedback on the themes from colleagues who are knowledgeable about place meaning.

4.0 FINDINGS

During the interviews, the informants identified a favorite or special place within the GBRMP, described the physical characteristics of the setting, and explained the meanings they ascribed to these places. Coding of the transcripts of the their narratives revealed more than 30 unique ideas. Using constant comparison to identify similarities and distinctions, we identified the following 10 themes: aesthetic beauty; lack of built infrastructure/ pristine environment; the abundance and diversity of coral and other wildlife; a unique natural resource; facilitation of desired recreation activity; safety and accessibility; curiosity and exploration; a sense of connection to the natural world; escape from the everyday; and experiences with family and friends.

4.1 Aesthetic Beauty

The first several place meaning themes were defined, in part, by the informants' interaction with the physical attributes of the setting. One theme that arose in all

Table 1.—Descriptions of key informants

Informant	Description
1	About 40 years old. She is employed as a researcher for one of the governmental resource management agencies and enjoys recreational fishing in the GBRMP.
2	In his 50s. Has had a life-long interaction with the GBR. He works as a community representative for a management agency. He enjoys boating in the GBRMPA with his family.
3	55 years old. Enjoys sailing his yacht with his wife along the coast for about 6 months every year.
4	He and his wife (both in their 60s) live aboard their motor-yacht. They are originally Americans.
5	He has been working in the GBRMP area his entire adult life in commercial diving and shipping. He is about 60 and enjoys yachting (motor) in his free time.
6	A 45-year-old SCUBA diver who has been diving on the GBR for 20 years.
7	24 years old. Employed by an environmental NGO. Self-described as a "greenie," she enjoys snorkeling.
8	An avid snorkeler is in his early 30s. He has visited the reef since his early teens.
9	In his late 50s. He is an elected official who enjoys recreational fishing in the GBRMP.
10	In his late 30s. Employed by a management agency. Enjoys recreational fishing. He is of Torres Strait Islander descent and has interacted with the reef his entire life.
11	In her 30s. An avid SCUBA diver. She has been diving the GBR for >5 years.
12	About 40. A journalist who occasionally writes about the reef. He has enjoyed recreational fishing his entire life.
13	A manager in a government environmental agency. He has enjoyed snorkeling and island camping most of his 50 years.
14	An environmental activist who participates in SCUBA diving. She is about 30.
15	70 years old. Has been recreationally fishing the GBR for most of his adult life.
16	38 years old. Has gone to the reef for recreation his entire life. Has also worked in research and commercial fishing.
17	About 40. Operates a sailboat charter business.
18	A member of a GBR citizens advisory group. He is in his 60s and yachts (sail) in his free time.
19	About 45. Grew up in the Townsville area. She now lives in South Australia and was visiting the GBRMP as a tourist.
20	About 50. Manages a dive shop. He has been leading dive trips to the reef his entire adult life.

the interviews was the *aesthetic beauty* of the land and seascapes of the GBRMP. Many people cited the clarity and color of the water, the sandy beaches, the beauty of the coral reef structures, the openness of the views, and/ or the sounds of the waves and wildlife. The participants used several common descriptors to illustrate the visual appeal of the places they discussed, such as "amazing," "fabulous," and "spectacular."

4.2 Lack of Built Infrastructure/Pristine Environment

Many participants mentioned the lack of built features in the GBRMP and/or suggested that the setting was "undeveloped," "pristine," or "wilderness." Meanings that were included in this theme were constructed from

a combination of cognitive responses (e.g., categorizing similarities and differences among a specific setting in the marine park and other settings in the informants' lives) and emotional responses (e.g., the enjoyment of solitude) to interacting with the physical attributes of the setting. We also found evidence that socially constructed terms like "wilderness" had a shared definition among the informants.

4.3 Abundance and Diversity of Coral and Other Wildlife

Besides the inanimate objects that formed the setting, informants also indicated that interaction with wildlife contributed to the creation of meanings that they ascribed to the setting. Several people expressed their

excitement about the wildlife by listing all the species with which they had come into contact. All of them also specifically identified the quantity and diversity of coral as an important feature.

4.4 Unique Natural Resource

Many of the informants made it clear that they thought the Marine Park was a unique natural resource and contrasted it with other marine environments around the world. Referring to the abundance of wildlife, one respondent declared, "You don't get that anywhere else." Others emphasized the uniqueness of marine environments, and specifically the GBRMP reefs, as compared to terrestrial environments.

4.5 Facilitation of Desired Recreation Activity

In addition to the landscapes/seascapes and wildlife, the informants also discussed how the attributes of their favorite setting in the GBRMP facilitated the type of recreational activities in which they participated. Several people spoke about how the abundance and diversity of fish were good for angling. Similarly, sailors on yachts noted that the reef provided relatively smooth waters along the coast, which made sailing enjoyable. The recreational divers who participated in this study said that their favorite places within the GBRMP had several attributes that made SCUBA diving fun and exciting.

4.6 Safety and Accessibility

The first several place meaning themes that emerged from the participants' narratives involved the physical attributes of the setting. The next set of themes included less discussion of physical attributes and more description of the thoughts and feelings the individuals associated with their favorite places.

Although the *safety and accessibility* theme was manifested in different ways for each informant, most of the places visited by the informants lie between the coast and the outer reef, where they are protected from the open ocean. Several informants also mentioned that the proximity of infrastructure (e.g., marinas and the Australian Volunteer Coast Guard) contributed to their sense of safety. Ease of access to their favorite places in the GBRMP was closely

linked with safety in many participants' statements. Ease of access was generally based on proximity of the Great Barrier Reef to shore and the well developed infrastructure that makes places in the GBRMP easy to reach.

4.7 Curiosity and Exploration

Most of the key informants mentioned that they enjoyed observing and learning while visiting their favorite places in the GBRMP. Others spoke about exploring underwater reef structures and islands or identifying new routes to use while sailing. In general, the informants' narratives emphasized the importance of interacting with the environment through observation and discovery.

4.8 Connection to the Natural World

Almost all of the participants described a sense of connection with the natural environment during recreation in the GBRMP. Many said that being in the place they described gave them a sense of immersion in the natural world. Several indicated that recreation in certain places in the GBRMP gave them an understanding of the interconnectedness of ecosystems. Similarly, others said that exploring the GBRMP places helped them understand how people impact the reef system.

4.9 Escape from the Everyday

Many informants said that visiting their favorite places in the GBRMP allowed them to *escape from the everyday* of their lives. Every informant made this comment, usually more than once. For many, solitude was essential to the feeling of escape. In addition to 'escape,' they used words and phrases like "freedom," "isolation," "not having to answer the phone," "going to another space," "re-create," and "relaxed."

4.10 Family and Friends

The final theme that emerged from the key informant interviews concerned the participants' social interaction with *family and friends*. The informants used important places in the GBRMP as backdrops for memories of enjoyable experiences with family, coming-of-age stories, and the passing of family stories and knowledge to younger generations. Participants spoke about the joy of

sharing the place with others and about how interactions with others improved (or hindered) their experiences. Beyond demonstrating the importance of family and friends to the meanings these informants ascribed to their respective settings, the narratives also illustrated the relationship between place meanings and individual identity. When one informant told me that he brought his children to his favorite place "to partly understand why I do the job I do and why I was passionate about it," it was clear that he thought the place reflected his values and important parts of his personal and professional identity.

5.0 DISCUSSION

Generally speaking, the 10 themes identified in the data were similar to those described in previous literature. Any disparities were the result of nuanced differences in the setting, the individual, and the social worlds in which the individual operated.

The physical attributes of the marine setting contributed strongly to the informants' place meanings. As in previous research (Bricker and Kerstetter 2002, Schroeder 2002, Gunderson and Watson 2007), informants mentioned aesthetically beautiful features like sea/landscapes, open vistas, and the presence of verdant foliage. One distinction between the narratives in the present study and most previous research is the descriptive attributes of water. Participants described the beauty of the water in terms of color and clarity, in contrast with terrestrial settings, where the mere presence of a water feature is important (Farnum et al. 2005). In addition, past research has found that wildlife has meaning for recreationists as part of the physical attributes of the setting; in this research, wildlife is a stand-alone theme. Some participants mentioned that on land you see wildlife intermittently while in the GBRMP you encounter wildlife almost continuously. This repeated interaction with the flora, fauna, and geological structures that make up the physical attributes of the environment may provide the basis for the influence of setting on the creation of place meanings.

In this and previous studies, the lack of built infrastructure/pristine environment theme is associated with privacy (Manzo 2005), naturalness, and wilderness

values (Gunderson and Watson, 2007) and is contrasted with urban settings. Similarly, the escape from the everyday and the unique natural resource themes were similar to meanings identified by Manzo (2005) and Gunderson and Watson (2007). However, in the current investigation, almost all of the recreational visitors spontaneously spoke about the intrinsic value of nature. The similarity between the informant narratives suggests that there is a common understanding of what makes the GBRMP unique. Kyle et al. (2004) note that labels such as "Marine Park" and "World Heritage Area" often symbolize culturally defined images. This terminology exemplifies how the interaction among the setting, the individual, and the larger social world helps create place meanings for individuals.

In addition to the attributes of the setting, the individual's cognitive and emotional perceptions also contribute to the meanings he/she ascribes to important or special places. This finding was manifest in references to curiosity and exploration, safety and accessibility, and the importance of how (and the degree to which) a place facilitates desired recreational activities. All of the participants in this investigation mentioned that their favorite places in the GBRMP made such activities as SCUBA diving, snorkeling, angling, and cruising enjoyable. This response is comparable to the joy experienced by rafters while running the American River as described by Bricker and Kerstetter (2002). The physical layout of a setting both allows for and constrains opportunities to explore safely and engage in certain recreational activities.

However, the type of individual who engages in these activities is also significant. Exploration and many of the recreational activities cited by the informants are adventurous and individuals who participate in these activities often have a perception of self-efficacy and personal identity that make these activities and settings enjoyable (Paxton and McAvoy 2000). It may be that individuals' characteristics shape their thoughts and feelings about a place, which, in turn, influence the meanings they ascribe to the place. Furthermore, when ascribing meaning to places in the GBRMP, the informants were often influenced by other people through direct interactions (e.g., with other divers

during or after the dive) and/or mediated interaction (e.g., magazines, brochures, and videos). By interacting with others, the informants gained new information and experiences that could be incorporated into subsequent meanings ascribed to the GBRMP. Because recreational visitors to marine settings share many individual characteristics and social influences with recreational visitors to terrestrial settings, both groups form similar meanings related to their favorite places.

The influence of social factors on the formation of place meanings was most clear in narratives in the family and friends theme. Some of the meanings identified in this research dealt with the historic and traditional importance of the place to the informants' families. Likewise, many of the recreational visitors to the GBRMP enjoyed certain places because they had shared experiences there with friends.

6.0 CONCLUSION

This investigation was one of the first to describe place meanings ascribed to a marine environment. Future research in the GBRMP may seek to better understand the relationships among place meanings, recreational visitors' attitudes toward the reef, and management actions that affect the reef. Furthermore, additional research may lead to a better understanding of how place meanings are ascribed to a setting and maintained through shared symbols (e.g., language) and experiences (e.g., recreational activities).

7.0 CITATIONS

- Blumer, H. 1998. **Symbolic Interactionism: Perspective** and Method. Berkeley: University of California Press.
- Bricker, K.S.; Kerstetter, D.L. 2002. An interpretation of special place meanings with whitewater recreationists attach to the South Fork of the American River. Tourism Geographies. 4: 396-425.
- Cheng, A.S.; Daniels, S.E. 2003. Examining the interaction between geographic scale and ways of knowing in ecosystem management: A case study of place-based collaborative planning. Forest Science. 49: 841-854.

- Cortner, H.J.; Moote, M.A. 1999. **The politics of ecosystem management.** Washington, D. C.: Island Press.
- CRC Reef Research Centre Ltd. 2004. **REEF FACTS: Plants and Animals on the Great Barrier Reef.**Available http://www.reef.crc.org.au/discover/
 plantsanimals/facts_plantanimal.htm. Retrieved

 November, 20, 2007.
- Creswell, J.W.; Plano Clark, V. 2006. **Designing and conducting mixed methods research.** Thousand Oaks, CA: Sage.
- Eisenhauer, B.W.; Krannich, R.S.; Blahna, D.J. 2000. Attachments to special places on public lands: An analysis of activities, reason for attachments, and community connections. Society and Natural Resources. 13: 421-441.
- Farnum, J.; Hall, T.; Kruger, L.E. 2005. Sense of place in natural resource recreation and tourism: an evaluation and assessment of research findings.
 Gen. Tech. Rep. PNW-660. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 59 p.
- Gunderson, K; Watson, A. 2007. **Understanding** place meanings on the Bitterroot National Forest, Montana. Society and Natural Resources. 20: 705-721.
- Harriot, V.J. 2002. Marine tourism impacts and their management on the Great Barrier Reef. Townseville, QLD: CRC Reef Research Centre.
- Kyle, G.T.; Chick, G. 2007. The Social Construction of a Sense of Place. Leisure Sciences. 29: 209-225.
- Kyle, G.T.; Mowen, A.J.; Tarrant, M. 2004. Linking place preferences with place meaning: An examination of the relationship between place motivation and place attachment. Journal of Environmental Psychology. 24: 439-454.

- Manzo, L.C. 2005. For better or worse: Exploring multiple dimensions of place meaning. Journal of Environmental Psychology. 25: 67-86.
- Merriam, S.B. 1998. Qualitative research and case study applications in education. San Fransisco: Jossey-Bass.
- Miles, M.B.; Huberman, A.M. 1994. **Qualitative Data Analysis: An expanded sourcebook.** Thousand Oaks, CA: Sage.
- Nassauer, J.I. 1995. **Culture and changing landscape structure.** Landscape Ecology. 10: 229-237.
- Paxton, T.; McAvoy, L. 2000. Social psychological benefits of a wilderness adventure program.

 In: McCool, S.F.; Cole, D.N.; Borrie, W.T.;

 O'Loughlin, J., eds. Wilderness science in a time of change conference—Volume 3: Wilderness as a place for scientific inquiry. Gen. Tech. Rep. RMRS-P-15-VOL-3. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- Schroeder, H.W. 2002. Experiencing Nature in Special Places: Surveys in the North-Central Region.
 Journal of Forestry. 100: 8-14.
- Schroeder, H.W. 1996. Voices from Michigan's Black
 River: Obtaining information on 'special places' for natural resource planning. Gen. Tech. Rep. NC-184.
 St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 25 p.

- Stedman, R.C. 2008. What do we "mean" by place meanings? Implications of place meanings for managers and practitioners. In: Kruger, L.E.; Hall, T.E.; Stiefel, M.C., eds. Understanding concepts of place in recreation research and management. Gen.Tech. Rep. PNW-744. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 109-134.
- Stedman, R.C. 2003. Sense of place and forest science: Toward a program of quantitative research. Forest Science. 49: 822-829.
- Stedman, R.C. 2002. **Toward a social psychology of place- Predicting behavior from place-based cognitions, attitude, and identity.** Environment and Behavior. 34: 561-581.
- Tuan, Y.F. 1977. **Space and place: The perspective of experience.** St. Paul, MN: University of Minnesota Press.
- Vanclay, F.; Higgins, M.; Blackshaw, A., eds. 2008.
 Making sense of place: Exploring concepts and expressions of place through different senses and lenses. Canberra, Australia: National Museum of Australia.
- Williams, D.R.; Stewart, S.I. 1998. Sense of place: An elusive concept that is finding a home in ecosystem management. Journal of Forestry. 96: 18-23.

The content of this paper reflects the views of the authors(s), who are responsible for the facts and accuracy of the information presented herein.