Sense of Place In Natural Resource Recreation and Tourism: An Evaluation and Assessment of Research Findings

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Abstract

Understanding sense of place and related concepts often presents challenges for both managers and researchers. Inconsistent application of terms, questions regarding their origin, and a lack of awareness of research findings contribute to the ambiguity of these concepts. This integrative review of research provides relevant, current information on the role of sense of place in natural-resource-based recreation and tourism. Special focus is given to the foundations of place attachment, how place attachment may differ among user types, and the relation of place attachment to other psychological phenomena such as attitudes. The role of theory in place attachment also is addressed, and gaps in theoretical and empirical work are identified. This review provides specific recommendations for managers and others wanting to better understand the dynamics of sense of place.

Keywords: Sense of place, place attachment, synthesis, recreation, tourism, review.

Contents

Introduction

Since Tuan's seminal work on sense of place (1974, 1976), the construct has undergone numerous extensions, revisions, and re-evaluations. Various fields such as architecture, landscape and urban design, environmental psychology, environmental philosophy, sociology, and geography have contributed to the development of the notion; as a result, definitions and interpretations of sense of place have varied and been adapted according to the practical applications and subject matter of each field. Attention to place-related values appears to be at a high point in many areas of study (Williams and Stewart 1998), and the ways in which sense of place is being applied in natural resource management in general (including recreation and tourism) have grown correspondingly.

Until recently, the importance individuals attach to places was not considered directly relevant to management of public lands (Cheng et al. 2003, Smaldone 2002, Stokowski 2002, Williams and Vaske 2003). Implicit in such a judgment was the idea that places were essentially commodities; places were viewed primarily as the sum of their functional attributes, and public attitudes toward management were presumed to hinge upon the objective features and utilitarian values of the land. This view is in contrast to what now seems to be the prevailing view (at least among social scientists) that places are composed of individualized and unique qualities that, when evaluated holistically—including the relationships people have in and with places—hold potentially deep meanings and value for their users (Moore and Scott 2003, Williams et al. 1992, Williams and Stewart 1998). Today, resource managers, planners, and researchers are beginning to view sense of place as a critical concept both in understanding how to provide optimal recreation experiences and in understanding the public's reaction to and proper role in management decisions.

Perhaps because of the broad nature of the concept and its dynamic history, few attempts have been made to examine the current state of knowledge regarding sense of place as it specifically applies to outdoor recreation and tourism. Our concentration in this paper is on natural-resource-based recreation and tourism, and as a result we have opted to focus on natural environments as the places of concern. Our use of the terms "recreation" and "tourism" is intended to refer to those activities in natural environments. This paper, then, is an attempt to integrate research and theory on sense of place as it applies, or could apply, to such lands. The intent is not to trace the development of concepts and terminology in depth or to fully delineate the theoretical contributions of various fields, but rather to tie together a body of work and determine how place-related concepts are being or might be specifically applied to recreation and tourism. Therefore, although

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we performed an extensive literature review in preparation for the current work, we decided to include only those sources that appear to have the most relevance for recreation and tourism. Some are studies directly in outdoor recreation, whereas many are works that have implications for recreation and tourism, even if their subject matter is otherwise.

We begin with a brief review of place-related concepts, tracing their genealogy and definitions. We then proceed to review perspectives on how place meanings arise, breaking this into three main subsections dealing with biological/evolutionary perspectives, the origins of place meanings in individual experience, and the socio-cultural formation of sense of place. We argue that these different orientations lead to different views about the nature, specificity, and sharedness of senses of place. From this point, we turn to discussions that have direct relevance for recreation and tourism management, for example differences among groups (e.g., local versus nonlocal residents), the relationship between sense of place and people's views on management, and the relationship between sense of place and visitation. Our goal throughout this section is to provide a comprehensive examination of the scope and depth of issues surrounding place-based processes and conflicts. A general synthesis of recreation and tourism management implications and a discussion of needed research are also included in our final analysis.

What Is Sense of Place?

At least in natural resources, sense of place once seemed an entirely vague concept; today there is considerably more consensus regarding the constituent elements of sense of place and how the term is applied across disciplines. Nevertheless, there is still a fair amount of ambiguity regarding the term, ambiguity exacerbated by the fact that definitions of sense of place and related constructs are often dependent upon whether they are approached from a quantitative or qualitative paradigm (cf. Jorgensen and Stedman 2001 and Manzo 2003 for concern about inconsistent usage). Noting these concerns, we set forth our vision of the conceptual landscape.

First and foremost, place should be distinguished from the general environment. As Tuan (1977) observed, places involve meanings and values that facilitate intimate connections with particular geographical areas. On the other hand, environment refers to the biophysical components of landscapes, components that exist regardless of the types of human connections to them. Many terms have been used to refer to these human connections to place, and most would probably agree that **sense of place** is the most encompassing term, referring to the entire group of cognitions and affective sentiments held regarding a particular geographic locale (Altman and Low 1992, Jorgensen and Stedman 2001) and the meanings one attributes to such

areas (Fishwick and Vining 1992, Kaltenborn 1998, Relph 1976, Stedman 2003a). Authors generally intend that the term be used broadly, and they acknowledge the difficulty in encapsulating it in simple terms.

Place attachment is one of the most commonly employed terms within the realm of sense of place studies. According to Williams and Vaske (2003), when used broadly, **place attachment** is the environmental psychologist's equivalent of the geographer's sense of place (see also Kyle et al. 2004c). As such, it sometimes is used to encompass a whole spectrum of place-related phenomena, including place dependence, place identity, rootedness, and satisfaction (Kaltenborn 1998). However, this term appears to be used in a narrower common way in much recreation and tourism literature. Kyle et al. (2003b) captured the essence of this usage: "the extent to which an individual values or identifies with a particular environmental setting" (p. 250). The authors concur that place attachment specifically entails an emotional component and, as Stokowski (2002) and Manzo (2003) have noted, it is typically presumed that these emotions are positive.

Whereas place attachment necessarily involves emotion, Stedman (2002, 2003b) pointed out that there are dimensions of sense of place that are more cognitive than emotion-based. He uses the term **place meanings** for these (e.g., "my lake is a place mostly for vacationers"), separating them from **place attachment** (e.g., "my lake is my favorite place to be"). In the past, many authors, although using the terms interchangeably, have failed to define what "meaning" means. For example: "Sense of place taps into the broad realm of environmental meaning…Sense of place can be thought of as a collection of place meanings which express attachment to a place in a very broad sense" (Kaltenborn 1998: 172–3). From our readings of these papers, meanings appear to encompass both symbolic and evaluative beliefs (Stedman 2002), and "ideas, values and beliefs that order the world" (Cheng et al. 2003: 91). Stedman (2003a) argued that place meanings can differ and change over time independently of place attachment: "even if overall levels of attachment do not change as a result of changes to the physical landscape, the basis of attachment (the meanings that people are attached to) may change dramatically" (p. 680). Although some would probably argue that the sentiments that compose place attachment are themselves place meanings, it may be useful to keep the two concepts analytically (and empirically) separate for the reasons Stedman articulated.

Place attachment itself has received considerable scholarly attention (e.g., Altman and Low 1992, Kruger and Jakes 2003). All agree that it is a complex, multifaceted concept. In fact, some have emphasized that place attachment may be only one of many types of attachment people experience, such as to caregivers or physical objects. Therefore, it may be appropriate to first conceptualize place

attachment within the larger context of human attachments, and recognize that attachment to place is part of a larger schema involving human bonding (Schroeder 2005).

Following this line of reasoning is the observation that attachment to place may be based on social relationships or processes more than particular physical landscape characteristics, so that even if the landscape changes, the sentiments do not change (Beckley 2003). Alternatively, attachment may depend on the physical characteristics of the land or the way the place has always been, and the idea of any change may challenge one's attachment. Whichever the case, place attachment is generally recognized as having two components: "place identity" and "place dependence." **Place identity** is a component of the self-system and refers to how one views oneself in relation to the environment (Proshansky et al. 1983, Smaldone 2002). The use of the term in recreation and tourism is most often traced to Proshansky (Proshansky 1978, Proshansky et al. 1983). It captures humans' use of places in constructing and maintaining self-identity (Manzo 2003, Williams 2002). Interestingly, place identity is used in recreation and tourism literature exclusively as an individual-level phenomenon. When people talk of common group identities, they tend to speak of "community identity" (e.g., Stewart et al. 2003), not place identity. **Place dependence**, in contrast to place identity, refers to connections based specifically on activities that take place in an outdoor, recreational setting. It develops out of the fit between one's intended use of an area and the area's ability to adequately provide that use, especially relative to alternative sites. Place dependence is recognizable in the concept of **resource specificity** common in the recreation literature and articulated by Jacob and Schreyer (1980; see Gibbons and Ruddell 1995).

In recreation and tourism, place identity and place dependence are very commonly used concepts, and various scholars have debated the nature of the relationships between place identity, place dependence, and place attachment. Some view place identity and place dependence as the two fundamental but distinct dimensions of place attachment (e.g., Bricker and Kerstetter 2002, Kyle et al. 2005). This is probably encouraged by the fact that the most common standardized measures used to assess place attachment in recreation and tourism consist of place dependence and place identity scales (Williams and Roggenbuck 1989, Williams et al. 1992). Research by Kyle and his colleagues (Kyle et al. 2003a; Kyle et al. 2004b, 2004c, 2004d; Kyle et al. 2005), Bricker and Kerstetter (2000), and Moore and Graefe (1994), for instance, all employ these measures. Recent tests of their construct validity (e.g., Williams and Vaske 2003, Kyle et al. 2005) demonstrate adequate validity and reliability of these measures.

Others describe a different relationship between place identity, place dependence, and place attachment, one in which place dependence is seen as a precursor to place identity (Gibbons and Ruddell 1995, Moore and Graefe 1994, Pretty et al. 2003, Vaske and Kobrin 2001) and wherein place identity and place dependence each may or may not lead independently to place attachment (Jorgensen and Stedman 2001, Stedman 2003b). That is, people may become attached because a place "meets their needs better than any alternative" (Clark and Stein 2003: 869) or because it comes to embody their self-concept, and subsequently the emotional bonds of place attachment develop.

Some studies have shown that measures of place identity and place dependence correlate very highly (see Johnson 1998, Jorgensen and Stedman 2001, Moore and Scott 2003), suggesting a unidimensional construct. However, there appears to be sufficient evidence—both qualitative (e.g., Mitchell et al. 1993) and quantitative (e.g., Hammitt et al. 2004; Kyle et al. 2003a, 2003b, 2004d; Williams and Vaske 2003)—to retain them as separate constructs. Indeed, when Williams et al. (1992) first developed the measure of place attachment commonly used today, they hypothesized that these two interrelated yet distinct components to place attachment exist both in wilderness-specific attachment and attachment to wilderness in general.

Although various other concepts such as "rootedness" or "belongingness" (Hammitt et al. 2004, Jones et al. 2000) have been introduced in the sense-of-place literature, the final concept most relevant to recreation and tourism is **place satisfaction**. Stedman (2002, 2003b) introduced this concept to capture attitude-like dimensions of place cognitions that he felt were not adequately encompassed by existing constructs. As an attitude, place satisfaction represents a general judgment of the quality of settings. Stedman makes a convincing case that place attachment and place satisfaction can diverge. In his study, those with strong, positive place attachment but low place satisfaction were most likely to say they would act to protect a place. High satisfaction accompanied by high attachment did not predict intention to act. This finding indicates the necessity of integrating place satisfaction into our repertoire of place-related concepts despite the fact that it is a relatively new idea.

In summary, we will use "sense of place" as the most general term, referring to both affective and cognitive components of place. Although we acknowledge that physical attributes present in a location may play a role in the construction of sense of place, sense of place itself refers more to the interpretations and representations of those attributes as well as the social dynamics of the landscape (Gieryn 2000). We use **place attachment** to connote the affective bonds people have with places, and this is typically operationalized in studies as a combination of place identity and

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place dependence or through items specifically addressing emotional ties and feelings of connectedness. Similarly, we use **place identity** and **place dependence** as commonly defined in the recreation and tourism literature. When it is possible to use **place meanings** to refer to cognitive (as opposed to affective) components without distorting the original intent of authors, we do so. **Place satisfaction** is used narrowly, following Stedman (2002).

Origins of Sense of Place

Understanding how sense of place or place attachment forms has occupied scholars for years. Many have launched theories regarding the underlying processes, and some have attempted to research its development empirically. Generally, the consensus seems to be that such understanding will help recreation and tourism managers anticipate and address the unique resource concerns of various constituencies.

Different authors structure their explanations of sense of place differently. For example, many address it based on its origin in one or more of four systems— biological propensities, environmental features, psychological developments, and sociocultural processes. From this standpoint, sense of place is created through one's interaction with the environment and the interconnectedness of these four systems (Altman and Low 1992). Others suggest that sense of place is usefully seen as comprising personal memory, community history, physical and landscape appearance, and emotional attachment (Galliano and Loeffler 1999, Ryden 1993). Still others identify four different organizing dimensions of sense of place: scenic/aesthetic, activity/goal, cultural/symbolic, and individual/expressive (Williams and Patterson 1999). Despite subtle differences, all highlight the multifaceted nature of sense of place, its multiple and evolving origins, and its emphasis on both internal and external factors. In the discussion that follows, we adopt a framework that recognizes separate (although intertwined) biological, individual, and sociocultural processes as leading to sense of place development.

Does Sense of Place Have a Biological, Evolutionary Foundation?

Altman and Low (1992) hypothesized that there is a biological component operating in the attachment of people to places. Although measuring such an assertion directly is difficult, several studies provide inferential evidence that people may be "hardwired" to appreciate certain types of scenery, therefore predisposing us to develop place attachments. For example, Kaltenborn and Bjerke (2002), in a study examining the connections between landscape preferences and place attachment, found that natural landscapes (versus sites with greater human impact) were clearly those most

preferred among participants. Asked to judge attachment to a variety of landscapes in their local vicinities, participants were most likely to feel emotionally connected to those in which human presence was minimal (Kaltenborn and Bjerke 2002). These findings of visual preference have been replicated many times, and some authors have developed extensive programs of research into human visual preferences for different landscapes (e.g., Brown et al. 1999, Daniel and Meitner 2001, Hagerhall 2000, 2001).

Preferences for types of landscapes may be at least somewhat innate.

A host of cross-cultural studies suggest that preferences for types of landscapes may be at least somewhat innate. For instance, a study by Newell (1997) found that across three different cultures (Senegalese, Irish, American), types of places to which people were attached as well as reasons for attachment were surprisingly alike. Hull and Revell (1989) also found that differences in landscape preferences between Bali natives and tourists were negligible. Similarly, comparison of Australians of various cultures and American college students revealed far more similarities than differences (Herzog et al. 2000). Although these studies do not provide concrete evidence of biological influence, they nonetheless give compelling support for such a belief. In lieu of testing for biological factors, cross-cultural studies such as these may be the best way to ascertain the existence of innate predispositions.

Psychoevolutionary theories help explain human affinity for certain types of environments (Kaplan and Kaplan 1989). The two most relevant and well-tested theories are attention restoration theory and prospect refuge theory. According to attention restoration theory, natural environments are particularly likely to provide affordances permitting psychological rejuvenation (Herzog et al. 2003, Ulrich et al. 1991). Environments with these qualities promote beneficial experiences, which accounts in part for the positive sentiments associated with them. The experience of restoration that occurs in such environments generates positive affect, which in turn can account for the development of positive attachments to natural places. This theory would predict that place attachment would be higher for natural environments in general (and specific types of natural environments especially) than other types of environments (i.e., human-produced environments). This may occur independently of place identity per se; in other words, one might or might not consider a particular natural setting to be part of a self-concept, but one would be likely to express positive emotion toward it. It might also predict that natural environments would be likely to generate high levels of place dependence, at least among people with certain recreation motivations, such as solitude, relaxation, or spiritual development. That is, people seeking the types of experiences associated with restoration might be likely to rate their dependence on natural environments as high.

Prospect refuge theory explains human preferences for environmental types on a different basis than attention restoration theory, although its theoretical rationale is equally grounded in human evolutionary biology (Appleton 1996). Simply put, prospect refuge theory hypothesizes that human preferences were shaped by natural selection during the evolution of our species. Preferences for environments that conveyed safety were adaptive, and therefore selected. Savanna-like settings, providing optimal views of potential danger (prospect) while at the same time providing "cover" (refuge), epitomize the type of setting described by prospect refuge theory. Although this theory is consistent with various studies of preferences for certain types of natural environments, empirical findings provide mixed support (Herzog and Kutzli 2002).

There is debate about whether the types of sentiments engendered by natural environments in general should rightfully be included as a form of sense of place, or, similarly, whether there are differences between the experience of an environment and experience of a place. Some argue there should be a distinction between the types of associations spawned by natural places in general versus specific place attachments (Jones et al. 2000, Kaltenborn 1998). According to such authors, visual preferences for natural environments should be considered separately, reserving sense of place for specific locales and the meanings/emotions that develop through personal or collective experience of them. Of course, some of these meanings and emotions may be partially engendered by visual preferences, but some assert that fundamental differences between attraction to landscapes and place attachment exist. However, others argue that there are attachment-like or emotional components to visual preference judgments, and that, therefore, these should be considered part of a sense of place. For example, Jones et al. (2000) found that measures of visual preference correlated with measures of sense of belonging among subjects shown pictures of a forested park scene. Moreover, a biological affinity can lead to a social focus on specific types of features and hence conferring meaning over time on specific locales that have those types of features. Regardless of which view one adopts, there is considerable evidence (as discussed below) that socioevolutionary or biological explanations of place preferences may contribute only slightly to the full set of meanings and emotions encompassed by sense of place. Therefore, the degree to which such processes determine sense of place is a contentious topic without a clear answer. Indeed, visual preferences themselves may be the culmination of different biological, individual, and sociocultural factors.

Our impression is that recreation and tourism research has not generally considered biologically, evolutionary-based preferences in studies of sense of place. Rather, the focus has been on specific places. We raise the issue here

because, depending on one's orientation, one might be more or less likely to focus on locale-specific environmental characteristics versus generic features as predictive of place attachment. As we will demonstrate, though, sense of place is a much more complex concept than innate responses to specific or generic environmental features.

Individual Experiential Components of Sense of Place

Regardless of one's position on whether biological, innate, or evolutionary factors should be included in place attachment, it is clear that they provide only one part of the picture (Herzog and Kutzli 2002). Other research establishes a more complex interaction among causes, an interaction arising from personal and sociocultural factors. That is, sense of place can arise from uniquely individual as well as shared social processes. The relative emphasis placed on personal versus sociocultural processes appears to relate to the researcher's discipline (Gustafson 2001). As Stokowski (2002) and Williams (2002) pointed out, in natural resources generally, and recreation specifically, the primary emphasis has been on the individual as the unit of analysis, and little work has been done on how meanings come to be shared within groups. Thus, sense of place studies in recreation and tourism tend to look at individual cognition, affect, and behavior. This is probably indicative of the preponderance of psychologically trained researchers in the field as well as the ease of studying individuals as opposed to groups.

A focus on the individual is justified insofar as one assumes or accepts that personal experience molds the specificity of place meanings. Tuan (1977) and Relph (1976) argued this compellingly—over the life course, repeated experience leads to a strengthening of attachment (Stedman 2003b). This includes a tendency to define oneself in terms of a place, as well as developing emotional ties as a result of this process. Gustafson's (2001) interviews revealed that personally important places were those that respondents had responsibility in shaping, that provided opportunities for desired activities or experiences, or that fit into one's "life path."

Sense of place research that focuses on individual factors demonstrates that place meanings and attachments are much more than just innate preferences. As one example, in a study attempting to scrutinize the process through which place attachment occurs (Fishwick and Vining 1992), participants were asked to judge their inclination to visit particular sites and to "talk through" the process of reaching that decision. Although many participants preferred sites that were more natural, other participants—especially those with less outdoor experience—indicated a dislike of more remote natural areas and some trepidation about visiting

them. Thus, this work suggests that, although there may be an underlying biological preference for certain natural environments, this preference may be moderated by individual factors.

Those who emphasize individual factors point out that sense of place develops as one interacts with a place over time, accumulating and deepening personal meanings, memories, and feelings. As a result, much of past research, particularly in the psychological tradition, has assessed place attachment in relation to other demographic variables. For example, Moore and Scott (2003) asserted that place attachment to sites is generally higher among those who live close to the sites, presumably because of their greater level of direct onsite experience. Empirical evidence (e.g., Williams and Vaske 2003) supports the contention that people's place attachments become stronger as their visitations accumulate. Among visitors to Cumberland Gap, for instance, those rated as more experienced felt a greater sense of belonging to that environment than first-time visitors or novices (Jones et al. 2000). Among Trout Unlimited members who fished on the Chattooga River, locals had significantly higher levels of place dependence than beginners or visitors, and veteran anglers and locals both had higher levels of place identity than beginners or visitors (Hammitt et al. 2004). The authors noted that these findings are consistent with the notion that higher levels of direct experience lead to higher levels of place attachment.

Despite the close focus on individual characteristics and personal experience in sense of place, the social influences on place attachment are not completely neglected. For example, place attachment is often assumed to develop specifically as a function of social relationships that occur in places (Jones et al. 2000, Kyle 2001). Nevertheless, greater emphasis is placed on how the individual processes and stores place meanings, as opposed to how groups might develop a collective sense of place and how sociological dynamics affect attachments. In the next section, we turn to look at some work that has taken a more sociocultural perspective to exploring place.

Some studies place emphasis on social processes by which meanings come to be shared or even imposed.

Sociocultural Components of Sense of Place

Some studies, particularly those in the sociological tradition, place emphasis on the shared nature of place meanings and sense of place, including social processes by which meanings come to be shared or even imposed (Gieryn 2000). These overlook (or take for granted) any biological foundations of sense of place, and they downplay the unique contribution of individual experience. Unlike the social psychological explanation of shared meanings as arising from similar but independent individual experiences, sociological perspectives define place "in terms of

shared meanings and symbols that are common to different people in a particular cultural group" (Yung et al. 2003: 857). This perspective is especially characteristic of those influenced by symbolic interactionism (Greider and Garkovich 1994). As Stokowski (2002: 372) pointed out, "the 'social place' known and understood across sets of people is created and reproduced through interpersonal interaction, formalized in social behavior, and ultimately persists in collective memory…Much of what a person knows about places, or feels about places, or does in places, is initially mediated by others." The emphasis, thus, is on the shared aspects of sense of place, as opposed to the individualized meanings that develop out of personal experience. These shared (intersubjective) meanings exist prior to the entry of any individual into the social scene, and in that sense are assumed to constrain the potential range of meanings or attachments one would form.

A recent example of this more cultural perspective is found in Campbell (2003: 69). This historical/literary analysis questioned why cultural values become associated with certain landscapes, how differences develop between regions, and how the natural landscape becomes "invested with national meaning." Her study identifies various responsible processes—for instance, a concerted effort at identity creation by a school of well-known Romanticist artists and writers; specific survival challenges posed by living in the north woods area that provided grounds for differentiation from other social groups; and a resonance between the developing local place identity and core Canadian cultural values of self-reliance and political independence. Consistent with a more sociological, shared perspective of place, the goal of the study was to articulate the central, shared themes of sense of place rather than to discover unique dimensions among specific individuals.

Studies of the sociocultural origins of sense of place are rare in the applied recreation and tourism literature, and we encountered no examples that attempted to trace the processes whereby meanings developed and disseminated throughout a group or culture. However, it is important to note that such treatments are widespread in the field of environmental history, and we do not mean to imply that they are generally absent from scholarly literature. Studies of sense of place in natural resources often assume or acknowledge the shared nature of sense of place—based on social role or cultural affiliation—without studying those processes directly. For instance, one study posited differences among four communities in Utah (Eisenhauer et al. 2000). As expected, participants expressed different place meanings for public lands as a function of the community from which they hailed. Whereas one community placed more value on the land because of its social component (i.e., enabling time spent with family and friends), another nearby community rated economic reasons as being primary to special place development. However, the social

processes underlying such differences were not explicated, and the study was based on surveying individuals, with individuals—not groups—as the unit of analysis.

Another study that may have some indirect bearing on recreation and tourism and addressed the shared nature of place was conducted in the Midwest. Stewart et al. (2003) found that community members emphasized the role of places in allowing the community to negotiate visions for the future as well as reaffirm common values. An interesting insight from that study is that different types of places served different functions in community identity.

Race/ethnicity—

Racial and ethnic issues related to place is one domain within the sociocultural tradition receiving some attention. For example, work by Johnson (1998) reveals that racial identity may play a significant role in the development—or lack thereof—of place attachment. Observing that Blacks seem disinclined toward wildlands—and empirically verifying that in her study—Johnson provided a strong theoretical explanation for this finding. She argued that it is possible that a dislike for natural environments arose because natural environments have come to represent violence and subjugation (p. 8). Further, Black women in particular may be disinclined toward wildlands because their bodies have been portrayed in "animalistic and less feminine" terms, and, according to Johnson, "they have sought to debunk this image by distancing themselves from anything relating to the environment and nature" (p. 8). Considered together, these observations point to the notion that cultural factors may greatly influence the degree to which natural (or other) environments are preferred and, therefore, give rise to individual or group place attachment.

In another study focusing on sense of place and ethnicity, place significance was found to be highly related to ethnic association (Low et al. 2002). In a massive effort to renovate Independence Historic Park in Philadelphia, Pennsylvania, managers wanted to gauge stakeholders' attachments to the park; to do so, they underwent an extensive interview process identifying five local ethnic groups—Asian-Americans, African-Americans, Hispanic-Americans, Jewish-Americans, and Italian-Americans. Using a variety of data sources, researchers concluded that there were major differences between groups in terms of visitor use, meanings and symbols of the park, and cultural representations. These differences seemed to play a role in how attached residents were to the park. For instance, African-Americans mainly reported finding little personal or cultural meaning in the park, in part because they believed park signage did not incorporate the historical role of African-Americans in the founding of our country. Italian-Americans, on the other hand, believed that they were moderately well represented in the park, especially in terms

of the emphasis placed on immigration and community building. Overall, then, bondedness to the park was reflective of the values and histories of cultural groups and how well the park encapsulated those qualities.

In his assessment of the relationship of ethnicity and culture to place attachment, McAvoy (2002) suggested evaluating place preferences in terms of cultural priorities. Native Americans in particular may have considerably different values and priorities than those of other minorities arising from ancestral, religious, and community-based customs; McAvoy believes they operate primarily from a cultural/symbolic view of resource management. This cultural/symbolic view—a delineation set forth by Williams and Patterson (1999) embodies the collective experiences a group encounters in a particular setting, encounters that may reach back generations and define characteristics of group identity. According to McAvoy, the least important view of resource meaning to Native Americans is individual/expressive, whereas individual/expressive has generally been the most important view for Euro-Americans. Moreover, he views disagreements such as the notorious Devil's Tower climber-versus-religious-use controversy as being rooted in discrepancies in meaning hierarchies. That is, dominant White cultural emphasis and priority is placed on how meaningful an area is to a person and what right an individual may have to use land, whereas other cultures may view resources as being culturally significant and contributing to their group identity—a component more important than the "rights" of an individual.

Politics of place—
McAvoy's (2002) study, dealing with values and meanings within a sociocultural context, can also be thought of as belonging to another category involving what we call the "politics of place," works that highlight the struggle to authorize specific meanings and privilege for certain groups (Gieryn 2000).

This approach is relatively recent in natural resource studies on sense of place. Manzo (2003: 54) noted that "the literature on place attachment typically does not locate emotional relations to places in a larger socio-political context." People who focus on the politics of place espouse tenets developed from postmodernism, globalization, and critical discourse analysis that situate place meanings within relationships of power and contestation over authority to decide how resources will be used (Stokowski 2002, Yung et al. 2003). These authors theorized that place meanings, as a result of their social construction, are necessarily reflections of political agendas (Cheng et al. 2003, Gieryn 2000, Stokowski 2002). Even meanings that appear to be highly individualized are seen in fact to be formed or constrained by larger social forces (Manzo 2003). According to Manzo (2003), studies of the politics of place,

by virtue of moving beyond the narrow focus on individuals to explore how groups actively use place meanings to achieve desired goals, offer more complete insight into the power of place to inform understanding of action and process.

As one example, Preston-Whyte (2001) explored a century of evolving place meanings for the seaside in Durban, South Africa. From 1900 to 1947, seaside resort spaces reflected the tastes of the dominant British culture, physically constructed according to Victorian architectural styles. Elitist meanings became institutionalized through legislation enforcing segregation. After World War II, resorts came to be dominated by Afrikaners, resulting in changes in both the physical appearance and cultural meaning of the resorts. Today, different leisure spaces at the seaside have a noticeable shared ethnic identity (ethnic spaces), shared skills (surfer areas), or utility for subsistence (fishermen sharing five areas). The value of this study lies in tracing how dominant cultural ideologies play out in local spaces and how uses of those places and accompanying physical alterations serve to reinforce and reify (make concrete) meanings that privilege certain groups. It also demonstrates how people struggle to create and impose their own sense of place on others at the microlevel.

In sum, these works suggest that, although innate factors may have some influence on the development of place attachment, qualities of the individual as well as social and cultural factors moderate that relationship. Those looking at sense of place in recreation and tourism may need to focus on all three processes if they hope to develop a full understanding of places.

> **Although innate factors may have some influence on the development of place attachment, qualities of the individual as well as social and cultural factors moderate that relationship.**

Can People Be Attached to Areas They Have Never Visited?

There is disagreement in the recreation and tourism literature about the need for direct experience with a place to occur for sense of place to form. One's focus on the biological, individual, or sociocultural underpinnings of sense of place will affect one's answer to this question. Those with a geography background tend to believe that direct experience is very important or even required (e.g., Clark and Stein 2003). Kaltenborn (1998) argued this case, asserting that "sense of place is created through the interaction of people and places, and the experience of place cannot be separated from the specific situation and the behavior occurring in the place" (p. 186). Similarly, Stedman (2003b) said that personal experience is the very element that turns "space into place" (p. 823). Meanings or sentiments that are associated with sites that have not been visited are not considered sense of place, in this view. Authors in this camp would consider generalized landscape preferences, for example, to be something other than sense of place, and they

would presumably be concerned with shared sociocultural meanings only insofar as those are experienced and expressed by individuals as they visit a place or process the meanings of visits at a later time.

Proponents of the sociocultural perspective contend that direct contact with a place is not necessary for attachment to develop. Blake (2002) argued that places can have symbolic, cultural meanings shared by groups, meanings that lend themselves to sense of place/place attachment that arises regardless of whether people have visited the area. Blake illustrated this position via the Colorado Four-teeners, which represent the spirit and ruggedness of the West, and hold special meaning for many Americans—even those who have never visited the peaks. The view that place attachment can develop independent of direct experience is also shared by such researchers as Galliano and Loeffler (1999). Similarly, in Schroeder's (2004) work with special places, he found that people exhibited attachments to places that were not necessarily "real" representations of the actual landscape. Rather, they were attached to imagined places, ideal, future versions of the area, or past recollections of how an area once was. These findings, too, support the notion that "contact" with a place may be more of a psychological process than a physical exploration.

Empirical evidence supports this broader view of sense of place, a view that incorporates direct experience as well as social and cultural components. For instance, a recent study by Stedman (2002) revealed that direct experience with an area accounted for only a small amount (5 to 10 percent) of the variance in place meanings. Similarly, although Hammitt et al. (2004) found statistically significant differences in place attachment among anglers with different levels of onsite experience, these differences were generally not large. Findings by Brown et al. (2002) that certain values (i.e., intrinsic, life sustaining) were mapped widely, almost randomly, across forest landscapes in Alaska are consistent with the contention that certain meanings can be assigned to places one only knows about indirectly. Whether this equates to sense of place is the source of some debate.

Even the authors of the current work differ in their opinions about whether direct experience is a necessary precursor to attachment. In reaction to those who take an experience-only stance on attachment development, we recognize efforts to draw attention to the importance of specific places, and we recognize that direct experience does lead to different (and differentiated) place meanings. However, some of us believe the evidence shows that strong bonds can and do form toward symbolic landscapes one has never visited, and these are usefully considered part of sense of place. For instance, national parks are symbolic

landscapes with which people may have had only indirect experience, yet feel a strong attachment. To ignore such meanings is to ignore potentially powerful sentiments that may influence behavior. Another member of our team, though, while agreeing that people can hold shared meanings and attachments to those meanings is not entirely willing to label those sentiments "sense of place." Whether the distinction matters at all depends on what conceptual work one wants to do with sense of place. If the goal is primarily to describe and understand individuals' sense of place, it seems acceptable to focus on knowing a place through personal experience exclusively. However, if one hopes to relate sentiments and attachments people have for places and meanings they hold about places to other things, such as public reaction to proposed policies, it may be dangerous to ignore the emotional attachments and reactions of nonvisitors. This may also mean considering other relations in addition to sense of place.

Jones et al. (2000) offered a possible way to distinguish between site-specific and generalized attachments. The authors contend that **sense of place** and **place attachment** should be used to refer to those specific locations to which a person has a bond, whereas the term **belonging** should be used to describe the connection a person feels with a type of place. "For example, while one may feel place attachment or rootedness within a specific town in which one grew up, one may feel a sense of belonging to any town that looks and feels like home many miles away" (p. 386). This allows for a distinction between firsthand and indirect experience; both can be strong. Despite the value of this distinction, however, the widespread use of belonging and attachment as analogous terms may prove a barrier in implementing this delineation.

Teasing out the nature of meanings and strength of attachments that stem from individual experience versus shared enculturation is an area for future research. Clearly both are important. And although it seems obvious that certain place meanings are independent of visitation, or even physical proximity, clearly others are not. How these place meanings relate to or contribute to sense of place is still open to debate. Moreover, there may be no singular answer to the question of whether personal visitation is necessary for place attachment to occur, but rather it may differ as a function of individual, place, and context. Nevertheless, researchers should be clear about whether "place attachment" is used to connote personal interactions with place, as it may have different ramifications for the way in which place attachment is construed or conveyed.

Does Attachment Form to Specific Places or Types of Places?

"Sense of place belongs to specific places…It clearly cannot be ascribed to generalized places existing nowhere in particular such as 'American cities, European mountains or tropical tourist resorts'" (Kaltenborn 1998: 185).

The biological, individual, and sociocultural perspectives outlined previously make different predictions about, or at least place different emphasis on, whether place attachment is related to a specific site or more general characteristics that multiple sites might share (i.e., types of places). The biological orientation would predict that attachments form, at least initially, to types of places sharing features that humans find attractive, calming, or safe. In contrast, the individualistic perspective is most likely to assume that place attachment forms for specific locations, owing to firsthand experiences of those locations. Sociocultural perspectives would lie in between these two extremes, predicting that shared affinity for types of places occurs via cultural ideologies while also recognizing that sociocultural processes occurring at specific sites contribute to place attachment.

Twigger-Ross and Uzzell (1996) argued that sense of place simultaneously exists both at specific locations and location types. In their model of place identity, they distinguish between **place-referent continuity**, which "refers to the maintenance of continuity via specific places that have emotional significance for a person," and **place-congruent continuity**, which "refers to the maintenance of continuity via characteristics of places which are generic and transferable from one place to another" (Twigger-Ross and Uzzell 1996: 208). In other words, people work to maintain self-identity both through the meanings and emotions they associate with specific places as well as through identifying and seeking out "types" of places that are congruent with their desired identity. This is reminiscent of the Jones et al. (2000) distinction between place attachment (site specific) and belonging (common across types of places). This point is borne out in Fishwick and Vining's (1992) findings that people develop a "sense of belonging" to types of recreation places, based on their past experiences with such places. Therefore, it seems as though there may be some value in attempting to empirically distinguish these types of attachment, using separate types to further that goal.

Williams et al. (1992) recognized that there is a component of place attachment that can transcend individual sites and locations, as evidenced by the inclusion of a "wilderness attachment" scale in their place-attachment measures. Instead of measuring connections to an individual site or area, the wilderness-attachment scale measures a broader, inclusive notion of sentiments toward wild areas in general. In effect, this suggests, at least conceptually, that place attachment is

Place attachment may be both generalized and specific.

manifested (or can be manifested) in terms of both sites and the broader types of places those sites represent.

The culmination of this research implies that place attachment may be both generalized and specific; it varies as a function of context, individual factors, and cultural determinants. In other words, what we still need to understand is whether place attachment occurring at site-specific levels has the same antecedents, elements, and implications as place attachment to generic location types.

Does Place Attachment Form at a Specific Scale?

The preceding discussion leads us to consider another question in place research: at what scale does place attachment form? For instance, is a person attached to a campsite, the campground, the forest within which the campground is located, or all forests within the region? Although place attachment is generally thought of as a localized, site-specific phenomenon, it may be that place attachment can occur on a larger scale (Beckley 2003, Clark and Stein 2003).

Most work on the differences in sense of place or place attachment associated with scale has been done in studies of residential or community attachment (e.g., Cuba and Hummon 1993, Gustafson 2001). Two studies, reviewed below, have examined this issue in natural resource contexts. The first of these studies is from resource management, and the other is the singular one we could find from recreation and tourism, in addition to the original study that first developed the wilderness scale (Williams et al. 1992).

Cheng and Daniels (2003) offered intriguing insight into the issue of scale in their study of how stakeholder groups (watershed councils) know about two "places," one a small subbasin, the other a larger watershed that encompasses the subbasin. The authors found that, at the finer scale, people were highly attached and tended to "rely on diverse personal experiences and specific place features" (p. 841), whereas at the larger watershed scale, people were less attached, were less certain about the condition of the watershed, and derived their knowledge largely from more global considerations about the environment or scientific assessments. Cheng and Daniels employed a comparative case study of two groups, so it is not possible to know whether the differences are due to the scale differences (as they assert) or any of a number of other factors that differed between the two groups (history, composition, group dynamics, availability of technical information, and so on). Despite this limitation, their conclusions are consistent with Gustafson's (2001) investigation of meanings associated with five scales (community, city, county, country, and continent): "Small places were often given meanings situated at the

self pole of the model… On the other hand, larger places seemed to be more often associated with *others* or with various aspects of the *environment*" (p. 12).

The second related study attempted to address the issue of scale directly in a recreation context. Moore and Scott (2003) contrasted recreational visitors' attachment to a specific rail-trail within a local park (the North Chagrin Reservation near Cleveland) to their attachment to the park as a whole. Respondents were slightly more attached to the park (3.62 on a 5-point scale) than to the trail (3.55), although this varied somewhat by activity. Residential proximity to the site and activity commitment predicted both trail and park attachment, whereas involvement in the activity for social reasons was related to lower levels of place attachment. In neither case (the trail or the park) was more than 25 percent of the variance in attachment explained by measured variables, and few differences emerged from comparing the two settings.

Given the limited amount of information regarding the scale of place attachment, it is difficult to definitively state any conclusions about scale. Although it seems logical to assume that scale would have a role in the strength of place attachment (i.e., smaller scale places would lend themselves to greater intimacy and, thus, greater place attachment), there is not enough scientific evidence to make this claim. Theoretically, it seems possible that one could be more attached to (for instance) a wilderness area that embodies American ideals even if direct experiences occurring at a site were negative and did not promote the formation of site-specific place attachment. Further exploration of this issue is necessary in order to understand how place attachment operates at finer versus larger scales.

How Does Sense of Place Differ Among User Types?

One reason sense of place has become so important in resource management, including recreation and tourism, is the contention that different user (or nonuser) groups will differ in their place meanings and levels of place attachment, and that knowing about such differences will help managers do a better job of anticipating and avoiding conflicts (Cheng et al. 2003, Kaltenborn 1998). In keeping with this, several studies have compared different types of users in terms of their sense of place. Of particular interest has been local versus nonlocal attachment to public lands.

Local Versus Nonlocal Attachment to Public Lands

Implicit within the idea of "local" is that people live within or near a specific place, are often economically dependent on the surrounding land, and develop social identities as well as group cohesiveness around these areas (Bonaiuto et al. 2002).

Therefore, any land use changes or alterations to access may create impacts that are particularly salient for them; nearly all domains of lifestyle (e.g., livelihood, social relations, recreational patterns) stand to be affected. As such, vested interest in the future of protected/public places may be greater among those directly dependent on them. Locals may have greater place attachment to public areas than those who live farther away and whose livelihoods and social institutions are not as dependent on the area (Beckley 2003). Moreover, even if visitors share symbolic or emotional feelings toward landscapes, locals, it is argued, have more complex understandings and attachments, based on their direct, and presumably longer or more frequent experiences (Jones et al. 2000). Evidence for this is found in interviews conducted by Yung et al. (2003), in which nonresidents tended to focus on the whole land-scape whereas residents referred more to specific places within larger landscapes, a finding supporting the idea that locals may have a more intimate and detailed understanding of their "backyards." This can be a very delicate situation, as local knowledge and attachment—although often more intense—does not guarantee optimal decisions for all constituencies.

Two major case studies conducted in Italy lend support to the notion that place attachment to public land is, indeed, more intense for locals than nonlocals (Bonaiuto et al. 2002). In both case studies (published in a single paper), the local economies were based on farming or tourism, and disputes between government and locals had been delaying the designation of areas as protected. After assessing place attachment, regional identity, and attitudes toward the protected area, results showed that people living in a community that had recently been designated as a protected area had a higher degree of place attachment than tourists, identified more with traditions and culture of the community, and exhibited more negative attitudes toward the new designated area. In another similar community, research-ers examined the same variables as the original study, but also assessed how these varied as a function of economic interest. Consistent with previous findings, locals exhibited higher place attachment, stronger negative attitudes about the park, and higher regional associations. Those who had more to lose financially also displayed stronger place attachment. Considering these findings, the authors suggested that the role of group development and group processes be examined within the context of place attachment. Specifically, examining the development of group attitudes within the community and the interplay between those attitudes and their effect on the land, local economics, visitors, and locals may provide unique perspectives on place phenomena.

Other research in the field seems to confirm that place attachment to public lands may be greater for locals than nonlocals, with "detached outsiders" caring

more about visual aesthetics and less strongly about emotional or symbolic aspects of place (Bourassa 1991, cited in Jones et al. 2000; see also Beckley 2003). Kaltenborn and Williams (2002), in a study conducted in Norway, found that residents of a local community were more place attached to public lands than were visitors. Interestingly, it seems that differences also existed among resident "types"; those who had **only** lived in the local community (i.e., had not lived anywhere else) valued aspects of the region more strongly than those who had lived elsewhere at some time. Specifically, those who had not lived anywhere else more strongly valued social networks, local cultural history, and mining history than their counterparts who had lived in other places. Despite the variation in place attachment as a function of their residency, locals as a group were more attached to the natural areas surrounding their communities than were tourists.

One thing that seems clear, but is rarely emphasized, is that local residents often feel that they have a unique, special, privileged sense of place (e.g., Hawkins and Backman 1998). In the Stewart et al. (2003) study, one of the three primary themes emerging from local residents' photo elicitations was a desire to educate others about local landscape meanings and values. It is evident that these respondents felt that others did not know, and needed to become aware of, important local meanings. This sense of proprietorship can be a source of conflict in decision-making processes, especially when outsiders and managers think that it is the locals who "need education."

Although we recognize and appreciate the value of local attachment, we also believe that it should not devalue the importance of visitor attachment to places. As stated by Williams and Stewart (1998), "although we emphasize the importance of recognizing 'local' meanings, these should not be limited to residents' sense of place. Many tourists and regular visitors have strong attachments to places" (p. 19). Local attachments, although they may merit special consideration owing to their intensity or uniqueness, should be considered in conjunction with nonlocal/visitor attachment, examining the meanings of place held by these groups. Particularly with respect to public lands, managers have a mandate to consider all stakeholders.

Local residents often feel that they have a unique, special, privileged sense of place.

Does Level of Involvement or Specialization Relate to Place Attachment?

Personal involvement with an activity, sometimes considered part of recreation specialization, has been an important area of study in recreation and tourism. Recently, some have investigated its relationship to sense of place. Whether level of recreation specialization has any necessary bearing on place attachment is

unclear. On one hand, it makes intuitive sense that specialization would be associated with attachment because activities must take place someplace, and, as stated earlier, repeated interaction with a place may lead to more intense place attachment (Kyle 2004c, 2004d). Increased specialization entails repeated visitation, greater appreciation for the subtleties of the environment, and devotion above and beyond that of the "average" user (Hammitt et al. 2004). On the other hand, the four studies that have most directly and exhaustively looked at recreation specialization (or use history) and place attachment do not provide overwhelming support of an obvious, immediate, or direct relationship.

Bricker and Kerstetter (2000) used a multidomain questionnaire to capture all hypothesized domains of specialization, specifically whitewater recreationists' reported level of experience, skill level and ability, centrality to lifestyle, enduring involvement, and equipment and economic investment. Analysis of the place attachment measure revealed three domains: identity, dependence, and lifestyle (referring to the river's integration into one's overall lifestyle). Supporting the original contention, kayakers and rafters with higher levels of specialization reported greater place **identity**. Similarly, those with lower levels of specialization reported less place **lifestyle**, although mean scores for lifestyle were, in general, very low, indicating that this construct, although related empirically, may not have much ecological applicability. Place **dependence** was unrelated to place specialization. In sum, only one component of attachment—place identity—seemed to matter to specialization.

In another study looking to determine how level of specialization relates to place attachment, Kyle et al. (2003b) hypothesized that activity involvement would be related to place attachment (p. 256). Two of the three "involvement" measures (attraction and self-expression) were related to place identity—one component of place attachment—for all day hikers, overnight hikers, and section hikers of the Appalachian Trail. However, only self-expression was related to place dependence. Those relationships that did exist—fewer than the authors suspected—were fairly weak.

Moore and Scott (2003) found that proximity of residence, frequency of trail use, and personal commitment (a measure of activity involvement) were positively related to place attachment toward a specific trail, and proximity of residence and personal commitment also predicted place attachment toward the entire park. In both cases, personal commitment (involvement) was the strongest predictor, although the predictive value of the model was not especially strong.

Finally, Hammitt et al. (2004) classified Trout Unlimited members in terms of their past experience fishing at the Chattooga River and other nearby streams. Anglers were beginners (new to angling overall), visitors (fished other rivers, but rarely

the Chattooga), locals (fished almost exclusively on the Chattooga), and veterans (extensive history on many rivers). Authors compared these four groups across six dimensions of place bonding, place bonding in this case seeming analogous to place attachment. Statistically significant differences emerged in all cases, with more experienced users exhibiting higher scores. The largest difference appeared for "overall bonding," with visitors scoring 4.32 and locals scoring 5.86 (on a 7-point scale). In this case, then, a modest relationship appeared between past experience and place attachment. However, as the authors note, past experience is only one aspect of specialization, and their goal was not to explore specialization in any depth.

Thus, there appears to be some relationship between dimensions of specialization and place attachment, but the magnitude and nature of connections are not clear. Identity, however, seems most linked to place attachment, and perhaps it is a mediated model in which identity, deriving as a function of specialization, best predicts attachment. Alternatively, though, it may be that identity could be the impetus for specialization. A more thorough explanation of proposed theoretical linkages might help clarify these suppositions.

Does Level of Place Attachment Relate to Activity Type?

An important type of study in recreation and tourism focuses on differences among activity groups. Activity participation is easy for managers to assess, and if activity groups differ in place attachment (or other factors), this is important for managers to realize. Various studies, however, show that the relationship between activity and place attachment may not be strong or straightforward.

Mowen et al. (1998) explored whether type of trail (rail-trail or not) or activity (hiking, biking, or horseback riding) best explained differences in user characteristics, visitation, and attitudes (including place attachment) among visitors to Mount Rogers National Recreation Area. Their measure of place attachment consisted of 25, 5-point items from Williams and Roggenbuck's (1989) scales. Place attachment differed by activity, with horseback riders the highest (3.8) and hikers the lowest (3.2). Activity was a better predictor of place attachment than type of trail. It is important to note that there were some limitations to this study, namely that the two typologies (trail type and activity) were confounded because rail-trail users tended to be bike-riding day users, whereas the users of other trails tended to be overnight hikers. Nevertheless, there is some evidence of differences between activity types, although the basis for these differences was not clearly explicated.

Like Mowen et al. (1998), Moore and Scott (2003) contrasted activity groups, but in their case they were examining users of one rail-trail. Few differences emerged between walkers, inline skaters, runners, or bicyclists, either for place

attachment to the trail itself or to the overall park. Although some differences were statistically significant, the largest difference among groups was only 7 percent (0.37 on a 5-point scale).

Kyle et al. (2003b) studied only hikers, but segmented them by trip length (day, overnight, section, or Appalachian Trail through hikers). Their goal was not to contrast these groups in terms of their place attachment; rather they were interested in whether trip length moderated the relationships between involvement in the activity and place attachment. Nevertheless, inspection of the data suggests that there were substantial differences in all eight measures of place identity and place dependence among the groups. Differences were especially pronounced for the place identity measures, with the group means differing by 11 to 23 percent. In this case, we might speculate that an icon like the Appalachian Trail would have different intensities of symbolism for different users. In fact, a later analysis of the same data for long-distance hikers' place attachment (Kyle et al. 2004b) found that 50 percent of the high place attachment group went simply "because it was the AT," compared to 27 percent of the medium attachment and 14 percent of the low attachment groups.

Gibbons and Ruddell (1995) investigated conflict between helicopter skiers and nonmotorized skiers on national forest land in Utah. Contrary to expectations, the two groups did not differ in place dependence. The authors suggest that place dependence can arise from unique attributes of the recreational experience rather than affective dependence on place. By this reasoning, these two groups found the area equally unique (although perhaps via different processes and reasoning), and, thus, their dependence was very similar.

In sum, these varied studies do not appear to indicate large-scale or consistent differences among activity groups in terms of place attachment. Such findings would seem to contradict many of the existing perceptions regarding the place attachment of different user types. On one hand, it seems logical that those with a high level of specialization in an activity might be more discriminating about site selection, and would therefore become more attached to sites that meet their selection specifications. Similarly, those involved in activities that require specific (ultimately, more scarce) types of places (e.g., surfing or rock climbing) might be expected to exhibit higher levels of place attachment than the casual visitor. However, it seems equally likely that specialization situations—whether that specialization is rooted in experience, type of activity, or both—are characterized by interest in the activity, and place becomes merely a vessel for accomplishing that activity. Thus, although there may be some level of place dependence in specialization, the affective component of place attachment would not seem to have inherent association with specialization.

How Does Sense of Place Relate to Environmental Concern and Views on Resource Management?

Amidst all the uncertainty and ambiguity that surrounds the relationship of place attachment to other factors, the link from place attachment to environmental concern is arguably one of the most straightforward. Most place attachment studies assessing environmental concern or stewardship show that people who are more place attached to areas also exhibit greater concern about the ecological well-being of the area. For instance, a study in Norway found that locals who reported high levels of attachment to the natural area surrounding their community were more likely to oppose the construction of a hydropower plant in the area, even though there was the potential for substantial economic gain as a result of plant construction (Vorkinn and Riese 2001). Demonstrating the importance of place attachment to understanding environmental attitudes, the authors noted that place attachment predicted attitudes toward hydropower plant construction slightly better than all demographic variables combined (age, gender, and income).

In another study in Norway, researchers found that residents' place attachment was positively related to attitudes toward managing and protecting a natural area near their community (Kaltenborn and Williams 2002). Management priorities measured included protection of cultural monuments, scenic landscapes, and genetic diversity; maintenance and protection of ecosystems in their natural states; and activities like hunting, fishing, and outdoor recreation. Although residents believed management priorities dealing with protecting the area were important—such as biodiversity and protecting scenic landscapes—tourists were not as apt to give the same support. Moreover, tourists did not as readily agree with management priorities that focused on environmental concerns; they only endorsed the importance of hunting, fishing, outdoor recreation, and protecting land use as issues that were pertinent.

Turning to the United States in the high-profile area of Jackson, Wyoming, another researcher found that people who reported having special places in the region were more attuned to environmental impacts and how these impacts were addressed in management (Smaldone 2002). Specifically, those who had special places were more likely to be aware of every critical management issue (as determined by the National Park Service) except for hunting (other issues included grazing, the local airport, elk hunting, private inholdings, water level and dam at Jackson Lake, and plans for a new visitor center). Those reporting a special place were also more likely to be in the group that was either negatively or positively affected by critical management issues. In general, people with special places were more inclined to

have negative overall views about those issues that cause deleterious environmental impacts, and they were especially concerned about grazing, hunting, and the dam.

In the pivotal 1992 study by Williams et al. researchers found that, across four sites in the United States, people who scored higher on place attachment also expressed greater concern for ecological impacts to wilderness areas. In addition, people who scored high on wilderness attachment—a more generalized, site non-specific measure of attachment—indicated more concern about ecological issues.

Another compelling piece of evidence that place attachment may be related to environmental concern comes from Mitchell et al. (1993). In this study, researchers found that visitors who had an attachment orientation—that is, they visited the area because of the way they felt about it rather than the exact activities it provided—were consistently more likely to report feelings of personal stewardship toward the site. As such, these visitors said they often undertook maintenance-type activities, cleaning up campsites or performing small repairs to sites.

Schroeder (2004), too, offered some evidence that affective ties toward place may be related to concern about environmental impacts. Although he did not measure sense of place or place attachment directly, he did inventory "special places" found in the Lake Calumet area near Lake Michigan. When inventorying special places, respondents generally discussed features of the natural environment—especially bodies of water—although over half of them also discussed the ways in which waste or pollution had, in some way, disturbed their experience of the place. As the nature of this work was qualitative, no behavioral intention measure (or direct behavioral observation) was made. However, implicit in respondents' comments was fairly strong malaise toward human impacts on the natural environment, which seems pivotal in determining whether action could be taken. Respondents mentioned such issues as the air quality, and in particular its smell, as well as the quality of the water as a result of, for instance, chemicals leaking from tanks or a sewer.

Lastly, a study by Stedman (2002) further solidified the notion that place attachment is related to environmental concern. Environmental concern was measured by willingness to be involved in actions to protect a lake in Wisconsin; participants were primarily residents of the lake region. Despite the fact that the correlation was not especially strong, the results nonetheless provided an interesting twist to the place attachment-environmental concern issue. Stedman found that it was the combination of high place attachment and low satisfaction with current conditions of the area that best predicted willingness to participate in a hypothetical environmental action plan. Logically, this finding makes sense; when people with a strong investment in a place feel the area is jeopardized or is endangered, these

feelings of dissatisfaction may catalyze people into action—to protect that which is important to them. This information also makes sense in light of work that has been done with emotions and environmental decisionmaking: those who support preservation actions are also more likely to report negative emotions (Vining 1987). Perhaps, then, understanding the role of satisfaction and negative affect is key in understanding how and why people voice concerns about issues, form organizations to address perceived needs, or are moved to pursue action for or against certain policies.

Attitudes Toward User Fees

Within the topic of attitudes toward management lies the narrower issue of user fees. Although the limited number of studies relating place attachment to views on fees precludes any definitive understanding, the evidence seems to suggest that place attachment may be related to attitudes toward fees. For example, Kyle et al. (2003a) found that place identity—although not place dependence—moderated support toward fees. That is, place identity determined the degree to which support for a fee program was associated with willingness to endorse specific changes and improvements to the area. In particular, participants were especially supportive of environmental protection initiatives that would be funded by the fee program.

Research by Martin (2000) also lends merit to the idea that those with higher levels of place attachment may be more accepting of paying site fees. Highly attached day users of the Desolation Wilderness in California were more apt to agree to a voluntary donation. Martin did not examine different components of place attachment, and it is therefore difficult to ascertain whether overall place attachment determined willingness to pay or whether specific components of the construct—i.e., place identity or place dependence—most influenced this attitude.

Although in some ways it seems intuitive that those with strong place attachments might be more inclined to support fees—to maintain the pristine nature of the area, for example, or to make sure it is "taken care of"—an equally viable hypothesis would predict the opposite: perhaps people more attached to a place are **less** likely to endorse user fees. As place becomes more integrated into the self-system—as the interconnection between place and person becomes greater—it could be that a sense of possessiveness about the area is created. Such a feeling of proprietorship is often suggested by those who hypothesize about the role of sense of place in conflict. People who feel a sense of ownership may be annoyed by having to pay a fee to access "their" land. At this point, not enough research exists to truly determine which—if either—explanation is more accurate and under what circumstances they may apply.

Understanding the role of satisfaction and negative affect is key in understanding how and why people are moved to pursue action for or against policies.

Perceptions of and Reactions to Impacts or Environmental Conditions

Part of the reason for a focus on sense of place in recreation is the suspicion that visitors' perceptions of site quality or reactions to changes in conditions may depend upon their place attachment (Vorkinn 1998). Specifically, as discussed above in relation to general environmental concern, many researchers speculate that individuals with high place attachment will be more perceptive, and critical, of recreational impacts. Kyle et al. (2004c) argued that this is because their stronger attitudes (i.e., strong place attachment) lead to larger latitudes of rejection, in line with tenets of social judgment theory. Another explanation could lie in the coincidence of specialization and place attachment—highly specialized visitors are said to be more attuned toward impacts, and, if specialization and place attachment are related, high place attachment might therefore correlate with more sensitivity. Few studies have looked at the relationship between place attachment and recreational impacts other than conflict (which is discussed in the next section). Moreover, the few studies that do exist have yielded mixed results.

In their study of Appalachian Trail hikers, Kyle et al. (2004c) found that "as place identity increased, respondents were more inclined to indicate that the social and environmental condition encountered along the trail was a problem" (p. 12). This was true for all types of impacts. However, the hypothesized relationship between place dependence and perception was refuted; in fact, as place dependence increased, perception of problems declined. In the various models tested, place identity and place dependence explained between 11 percent (user conflicts) and 22 percent (trail development) of the variance in perception of problems.

In Kaltenborn's (1998) study of residents of Norway's Svalbard archipelago, strength of sense of place was found to have a significant relationship to only 2 of 10 environmental conditions, and these differences were minor in a practical sense (the difference between high and low sense of place groups was only 0.4 [or 8 percent] on the 5-point scale for "clean water in the sea" and for "disturbance from snowmobiles"). It is important to note that all Kaltenborn's respondents expressed relatively high levels of sense of place, and, because of this, differences may not have emerged between groups.

These two studies suggest that there may be considerable independence between sense of place and judgments of environmental conditions. Indeed, there seems to be little theoretical basis to presume a necessary, strong, or direct linkage. Moreover, it might be equally plausible to hypothesize that it is perception of conditions that initially affects place attachment rather than the reverse.

Conflict and Place Attachment

Although place attachment is generally thought of as a trait to be encouraged and fostered—we noted how it may actually relate to more environmentally minded attitudes—some work suggests that place attachment may provide an impetus for increased conflict (Hawkins and Backman 1998). Indeed, much of the discussion of place in natural resources focuses on its contribution to conflict over resource management. For example, Yung et al. (2003) identified place-related value differences that correspond to fundamental and irreconcilable differences in worldview among stakeholders concerned about national forest management in Montana. There seems to be ample evidence of such conflicts, and their origins can be explained based on various theories. One established explanation lies in the nature of social groups, especially when threatened, to tend toward ingroup favoritism and polarized assessments of outgroups (Brown 2000). This may be based, in part, on a human need for distinctiveness (Twigger-Ross and Uzzell 1996). In recreation and tourism contexts, then, conflict can arise and become more extreme when stakeholders are highly place attached (Cheng et al. 2003, Yung et al. 2003).

In empirical studies of conflict in recreation and tourism, conflict often relates to the meanings that one attaches to place and perceptions of whether other groups share those meanings. Conflict is especially likely when groups differ in place attachment or when groups with similarly high levels of attachment have conflicting goals (Hammitt et al. 2004). Hawkins and Backman (1998), examining the distinction between longer term place users and newer users, found that sense of place played a large role in determining the course of user conflict. Using an indepth qualitative approach and interviewing over 90 participants, the authors uncovered some latent hostility toward whitewater recreationists on the Chattooga River. Horseback riders—many of whom were considered "native" either because they live close to the river area or who, despite distance from the study area, made an effort to consistently visit the area—displayed some annoyance with the "newer" whitewater recreationists. According to the authors, this animosity originated from two sources. First, the influx of whitewater recreationists had the potential to drastically change the traditional experiences of the horseback riders. Second, the horseback riders viewed themselves as being more committed, more appreciative, and having a more developed sense of place than the whitewater rafters (p. 99). At the time of the study, there had been no overt conflict between these groups, but respondents indicated that some type of group-to-group encounter seemed possible in the future.

The Hawkins and Backman (1998) finding mirrors that of other researchers who have evaluated the attitudes of locals toward the influx of newcomers (Wasserman et al. 1998). In general, Wasserman et al. (1998) observed tension between newcomers and long-term residents; long-term residents did not believe that newcomers were able to truly appreciate the value of "their" area, believed newcomers to be upsetting their way of life, and thought they were bringing new and unwanted values to the community. Although this research assessed resident attitudes in established communities (as opposed to visitor attitudes on public lands), the processes through which residents and long-term public land users perceive newcomers may be similar. Because visitors develop attachments to public lands (Eisenhauer et al. 2000) just as residents become attached to their communities, one could argue that highly attached visitors may have comparable attitudes toward newcomers, or at least a generalized sense of unease about the influx of newcomers into areas to which visitors are attached. This was found to be the case among the recreationists studied by Mitchell et al. (1993)—attachment-oriented visitors tended to be somewhat territorial.

In a study looking directly at conflict among recreational users, Gibbons and Ruddell (1995) compared place dependence, goal orientation, and interference with experiential goals and activity-related goals between helicopter skiers and nonmotorized backcountry skiers. As mentioned in a previous section, both groups scored equally on place dependence. For heli-skiers, place dependence did not relate to perceived interference with either type of goal. However, nonmotorized skiers who scored higher on place dependence evaluated interference caused by heli-skiers as higher for both goal types. (In this study, only place dependence, not place identity or overall place attachment, was measured. Thus, it was only the functional aspects of the environment that were evaluated rather than the affective bonds that people possess toward place.)

In another study looking at river recreationists on the Colorado and Green Rivers in Canyonlands National Park, Warzecha and Lime (2001) noted that those high in place attachment (defined as the top 20 percent of respondents) indicated less tolerance for encounters with others than people in the lowest quintile. Although "tolerance" is not measuring conflict per se, it does touch upon the basis of conflict—how much acceptance people have for other users. On the surface, then, this research implies a situation ripe for conflict—limited tolerance among individuals with high place attachment.

Based on some place attachment and conflict research, it is tempting to conclude that place attachment might be a catalyst for conflict. However, a closer look at all of the empirical findings suggests that sense of place or place attachment is

not necessarily directly related to conflict or conflict potential. For example, in Gibbons and Ruddell's (1995) study, place dependence was related to conflict for only one group, whereas goal orientation (recreation motivation) was a much stronger predictor of conflict overall. Additionally, Warzecha and Lime (2001) did uncover relationships between place attachment and conflict, but their study only compared the two extreme quintiles, increasing the likelihood that such differences would appear. In addition, inspection of the data shows that differences among boaters on the respective rivers were negligible; the differences were greater between users of the different rivers than between those high and low on place attachment within each river. Thus, although there do seem to be some examples where place attachment is intertwined with conflict (e.g., Devil's Tower, McAvoy 2002), bondedness does not inherently lead to conflict.

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How Does Sense of Place Affect Visitation?

Why do people select some places and not others to visit? Fairly obvious and predictable factors come to mind: distance, accessibility, type of activities provided, destination image, or social influence. Such variables, though, may fail to capture the totality of factors involved in destination choice. Sense of place may be related to visitation in complex ways. For instance, a strong place attachment may lead to repeatedly returning to a special place. If people who discover a site become attached to it, we might predict increasing visitation over time. Moreover, certain place meanings, if they are communicated through social networks or the media can also increase visitation. Most managers can probably think of an example where publicity of the "special" features of a place has created dramatic increases in visitation.

Although individuals' place meanings and attachments will influence their use patterns, sense of place at the community level also has complex interactions with whether visitation from "outsiders" is encouraged or discouraged. That is, communities may face decisions that center on maintaining versus compromising their own sense of place in the face of tourism opportunities. Consider, for example, the case of Estes Park, Colorado. Developers wanted to build a wildlife-viewing center in the mountain town, a center that promised to create considerable revenue. Ultimately, though, the town voted against the wildlife center, not because it didn't offer financial gains or because planning was inadequate, but rather for more philosophical, less tangible reasons. Among ethical debates about the appropriateness of allowing live animals to be caged for viewing and the nature of human-animal interactions, sense of place emerged as a key argument against the construction of

the site (Wondrak 2002). A "glorified zoo" was not the image townspeople wanted for themselves or in defining their niche within the tourism industry. Promises of tourism booms, in the end, were not argument enough to convince residents to alter their sense of place.

The struggle between maintaining local sense of place and maintaining tourism brings up a related issue—exactly what tourists are expecting and wanting from their vacation experience. Especially in high-profile places, such as Yellowstone or Rocky Mountain National Parks, visitors may come to areas with preconceived notions of what their experience "should" consist of, and what types of encounters are needed in order to have a "real" experience. Put another way, people may enter these areas with some predetermined conception encouraged by the area's destination image. The images are clearly defined for us in the media and popular culture: Yellowstone is wild and rugged, filled with bears. Estes Park—gateway to Rocky Mountain National Park—is nestled in the mountains, hosting quaint shops, restaurants, and the like (Wondrak 2002: 3). First-time and repeat visitors may very well expect to experience all the affective and cognitive responses associated with the excitement and trepidation of viewing a bear foraging for food or window shopping along charming streets with mountain towns. Thus, visitation, especially from an expectancy-value framework, stands to be seriously impacted by whether the anticipated conception and the actual experience of place attained are congruent. Research, though, has not yet fully explored sense of place within expectancy frameworks for visitation.

It seems clear that sense of place may change as a result of increased visitation and changing residential patterns. Places that may once have been particularly special because of the solitude and seclusion they provided are now becoming vacationing "hotspots." As Blake (2002) points out, changing senses of place may derive from two sources. On one hand, part of changing perceptions may be related to biological and physical impacts created by incoming visitors and residents. Other changes may be related to changing cultures and communities as a result of the rising population. Because surprisingly little work has been conducted on this issue, it is hard to assess the impacts that changed conditions may have on tourism. Are people more reluctant to visit once-special places if overcrowding has violated their sense of place? Or do people simply form new place meanings that incorporate the changing milieu while maintaining a strong level of attachment? Do changes in sense of place reflect real changes in the landscape's perceptual and social components? These questions, and others, are as yet unanswered. Until we have a better understanding of how sense of place is related to visitation—whether in terms of

increased visitor numbers, community reactions to sense of place infringement, or visitor expectations of sense of place—the integration of these two domains remains incomplete.

Management Implications

How Can an Understanding of Sense of Place Inform Management Decisions?

Sense of place is a multifaceted topic, a concept whose roots are derived from personal and interpersonal experiences, direct and indirect contact with an area, and cultural values and shared meanings. This complex foundation causes sense of place to be a factor in many different aspects of recreation, from conflict, to environmental and management attitudes, to differences among user groups. Spanning such a broad array of topics leads many to wonder whether and how sense of place can be incorporated into recreation and tourism management. Because of the wide diversity and multiple interpretations associated with sense of place, some authors have questioned its pragmatic value, suggesting that the construct, although clearly important in natural resource management, is difficult to directly and concretely incorporate into land use decisions (e.g., Kaltenborn and Bjerke 2002). More commonly, though, the suggestions that are made about incorporating sense of place into management are broad, vague, and lack meaningful guidance from which to develop processes or decisions. Although this intangibility is understandable to some extent—sense of place is indeed a rather ephemeral concept—the time has come to truly scrutinize through what avenues and to what end sense of place should be a part of recreation and tourism management. The first question to address, then, is just how important is sense of place for management to consider? How big—or small—of a role should it play relative to other considerations in management?

Most contemporary authors argue that sense of place should play a central role in resource management. Some hold great hope for its ability to offer solutions to many vexing problems: creating shared understandings and common ground through focusing on sense of place might lead to social and ecological sustainability, and so on (see Yung et al. 2003 for a discussion of these issues). Galliano and Loeffler (1999), for example, asserted that sense of place is critical to management, and that management needs to place more emphasis on community values and meanings surrounding land use. Williams and Stewart (1998: 18), too, have high hopes for the future of sense of place in management: "Sense of place is a concept with great potential for bridging the gap between the science of ecosystems and

their management." Kaltenborn and Williams (2002: 397), advocating for including sense of place, argued that in order to provide quality recreation experiences, managers need to understand place meanings as well as the attributes of the environments that attract people and create those quality experiences. Warzecha and Lime (2001) also believe that identifying levels of place attachment can be a useful indicator of other concerns such as visitor preferences, motivations, and attitudes.

Despite the advocacy that sense of place has received from many authors in relation to management potential, other studies seem to beg the question: Just how attached are people to recreational settings, and what difference does that make to things that are under managerial control or influence? For instance, Bricker and Kerstetter (2000), although they advocated integration of sense of place into management, did not find that whitewater recreationists were especially attached to the river they used. Moore and Graefe (1994) in their study of Appalachian Trail users did not find overwhelmingly high attachment to the trail. If visitors in these areas are not highly place attached, should managers devote resources to understanding place attachment in the first place?

In a recent study of Appalachian Trail hikers, Kyle et al. (2004b) segmented visitors into high, medium, and low place attachment groups. These groups did not differ in a practical sense on sociodemographic characteristics (gender, education, income, residence type), although they did differ in their hiking motivations. The groups also differed in their judgments about the extent of problems encountered on the trail—11 of 16 problems differed statistically between groups. The largest difference in the percentage of the group identifying a problem was for human waste (52 percent of the high-attachment group versus 34 percent of the low-attachment group). Ten of the 16 conditions, however, differed by 10 or fewer percentage points, possibly a negligible amount in terms of "real world" impact. For views on 25 management actions, statistically significant differences appeared for 10 items, but the average difference between groups was only 0.37 on a 5-point scale, or 7 percent—hardly a staggering difference. The greatest difference occurred in regard to support for banning horses (3.84 for high attachment, 3.62 for low attachment). Again, whether such differences have any practical value is uncertain.

Other studies also call into question whether place attachment necessarily exerts an important influence on people's behavior in a management context. Stedman (2002) found that high place attachment combined with low place satisfaction predicted stated willingness to act, but only accounted for 21 percent of the variance in this behavioral propensity. Kaltenborn (1998) found that sense of place did not relate strongly to residents' values (existence, use, testament, or option) toward the natural environment.

Further compounding the issue is Fishwick and Vining's (1992) finding that it is the activity, not the site itself, that study participants are often most interested in. Although the initial purpose of their study was to try to assess how sense of place is created, researchers found that the setting seemed more of a facilitative ingredient than a primary consideration. In other words, the area was only viewed as a space for activities or other goals rather than a primary draw itself. Although there are some possible methodological explanations for this finding (e.g., discomfort with the rating task; judging pictures that were not "real" places), such findings nonetheless give pause for thought. Similarly, Kyle et al. (2004a) found that for three very different activities in different parts of the country, participants exhibited higher scores on activity involvement (4.0 to 4.2, on a 5-point scale) than on place identity (3.6 to 3.8) or place dependence (2.8 to 3.3). Hammitt et al. (2004) noted that 95 percent of the anglers in their study would choose to fish at another river if their opportunities to fish on the Chattooga River were curtailed; they would not opt to remain at the Chattooga River for different activities. Thus, it was the activity rather than the place that was of consequence to these users. These findings would seem to have implications for whether managers should replace the Recreation Opportunity Spectrum (ROS) with a place-based approach, as some have suggested. Recent discussions of ROS-style approaches to planning have criticized their focus on activities at the expense of sense of place. However, as just reviewed, some empirical evidence suggests that often activities themselves are quite important, possibly more important than place attachment.

Considering these studies together, place attachment may not always be the highest or most important factor in understanding visitor behavior. Nevertheless, there are of course situations or groups for whom place attachment is very intense. Recognizing these areas in which place attachment and place meanings are intense and receiving public feedback in order to understand the richness and diversity of an area is critical. In an early attempt to do this, Schroeder (1996), recognizing that the Black River area in Michigan's Upper Peninsula evoked much public passion, distributed surveys to stakeholders in an effort to tap into this richness and diversity. Thus, when the planning team was called upon to generate desired future conditions for the area, they were able to identify areas with special meanings, the reasons why those places were special, and gauge the potential impact—positive or negative—of any proposed changes in the area.

Especially in places that seem to evoke strong emotional responses, managers should be aware of how place attachment will influence visitor behavior and response to management decisions, as well as how their managerial actions may impact visitors' experiences and lives. For instance, if visitors have high place

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attachment, actions intended to indirectly discourage use (e.g., raising fees) may not achieve their aim. In wilderness areas, there is evidence that visitors more often deal with crowded conditions by choosing to visit favorite places at different times than to go to other places altogether (Hall and Cole 2004). If people connect their self-identity deeply to places, management actions that prohibit interaction with those places can have far-reaching, detrimental effects. Managers need to be aware that their decisions may entail more than just inconvenience for visitors. On the other hand, policies taken to increase tourism to rural or recreational destination areas may pose significant challenges to locals' as well as visitors' sense of place.

So, how important is sense of place? The fact is we cannot be completely sure. One way or the other, though, there is enough evidence to suggest it should be of at least moderate importance to recreation and tourism managers and planners. How integral it is may depend on such variables as cultural symbolism of the site, type and magnitude of perceived threats to positive attributes of the area, and the investment local communities have developed in linking their identity to their environment. Overall, these ambiguities—compounded by the potential for locally-based place meanings—make instituting policies or processes based on the construct difficult. There are, however, some beginnings of processes and frameworks, as addressed in the following section.

What Is the Role of Sense of Place in Achieving Optimal Land Management?

At the core of sense-of-place management concerns lies the query: Just what is "good" land management? What are the best policies and practices and how does incorporating sense of place accommodate, alter, or buttress existing practices? Does honoring sense of place require practices that may be different from current management?

Perhaps one of the first areas to explore is the compatibility of current management models with sense-of-place concerns. Meyer (1996) argued that the present-day ideal of managing areas through a broad, holistic, ecosystem-based approach may not always be compatible with approaches that incorporate sense of place; focusing on sense of place, ecological variables, or sustainable tourism may often lead down contradictory paths in management decisions. As a case example, Meyer examined the history of Yellowstone, a park that, at first blush, seems to have overcome many of the problems encountered in sustainable tourism. Even within Yellowstone, though, there are several examples of how tourism, ecosystem management, and sense of place come into conflict. For instance, in an attempt to

pursue a fire standard that seemed more natural and ecologically sound, Yellowstone adopted a "let burn" policy. When fires did burn, however, local and national constituent groups were in an uproar—what originally sounded like a valid and desirable plan did not hold up in actual implementation (p. 95). Sense of place—as well as a perceived economic impact—led to an uproar about this management approach. Snowmobile use, bear policies, and bans on hot springs use are other issues that highlight conflict between sense of place and other management priorities. People continue to come to Yellowstone expecting to see bears (a rare occurrence these days), bathe in the hot springs (now prohibited), and, in the winter, expect to experience solitude and quiet (now broken by snowmobiles). The place meanings that tourists bring to Yellowstone Park, then, may conflict with their actual Yellowstone experience.

Although Yellowstone is used as a case example, this phenomenon is not unique to that park. To minimize conflict between ecosystem-based management and sense of place and to create sustainable tourism, managers must be aware of tourists' sense of place, and take an active role in creating or maintaining qualities reflective of sense of place for the area.

Cortner and her colleagues (1996) also called for changes in natural resource management, changes that presumably would permit enough flexibility to include sense of place as a consideration. Within the broader domain of ecosystem management, these authors argue for the reorganization and alteration of planning structures. Large-scale reassessment, they say, would be facilitated by broader collaboration among disciplines and agencies. Although this suggestion is well advised, it still does not provide a clear framework for understanding which parts of present-day management work, which could be improved, and how place-based values would enter into existing frameworks.

Other authors seem more hopeful that current management systems can easily absorb sense-of-place concerns. Rather than drastically altering current practices, they believe sense of place can fit into existing structures with some accommodation. For instance Mitchell et al. (1993) believe that ROS can accommodate place-based concerns if setting dependence plays a more prominent role. Limits of acceptable change (LAC) similarly demonstrates promise in terms of integrating place through its flexibility in identifying concerns associated with particular places and its recommendations to include the public throughout the planning process. However, other than a generalized statement that planners would be prudent to "develop processes and skills that are sensitive to people's feelings for and attachment to places," there is little specific discussion of what such integration would look like (Mitchell et al. 1993: 37).

Williams and Carr (1993) discussed this same issue of integrating place in management while emphasizing the role of cultural diversity within planning frameworks. Specifically, they believe that managers need to realize that public lands may have very different meanings and interpretations according to one's ethnic and social background. Similarly, lands cannot be viewed merely in terms of economic and behavioral goals, a point championed by Stokols (1990). Therefore, when working with diverse populations on public lands, managers must be attuned to the different collective meanings that groups ascribe to places.

Perhaps the most concrete and pragmatic set of guidelines for integrating place-based values into everyday management comes from Williams and Stewart (1998). They outlined four sets of goals for public land management:

- Know and use the variety of local place names.
- Communicate management plans in locally recognized, place-specific terms. (See also Yung et al. 2003 for examples of the importance of labels and names in understanding local sentiment about places.)
- Understand the politics of place. This includes recognizing the diversity of place meanings and place attachments within communities (Yung et al. 2003).
- Pay close attention to places that have special but different meanings to different groups. (See also Gobster 2001 for a case study of an urban park.)

Put succinctly, their conclusion is that "it is not sufficient to continue to rely solely upon demographic variables like race and income to provide information about people's reaction to the natural world" (p. 12). Galliano and Loeffler (1999) echoed these sentiments, encouraging managers to push past simply analyzing demographic information and the like to understanding the richness and complexity of visitor and recreation experience. Responsible land managers, then, acknowledge that simple descriptive statistics are not sufficient in understanding the complexity and totality of sense of place and place attachment. To achieve these ends, managers will be required to enter into direct dialog with the public.

Various practical and promising examples of addressing sense of place, although not necessarily recreation-specific, can be found in the recent literature and in current forest planning efforts. One such effort has been to display meanings spatially, through mapping techniques. Several people have advocated or employed spatial techniques, but one of the more ambitious and unusual was carried out by Brown et al. (2002). Randomly selected residents of Alaska were sent national forest maps and asked to place colored dots, representing different values, at places that embodied each value. The findings provide large-scale, representative

information on Alaskans' values, and they can provide a variety of useful insights for forest planners.

For more than 10 years, there have been calls to integrate place into resource management (e.g., Mitchell et al. 1993). So why, given the extraordinary attention to measurement and theory, has this been so difficult to achieve? There are certainly many reasons. Undoubtedly, it is due in part to the natural lag between promotion of an idea in research and its adoption in practice. But it is also due to the complex, usually site-specific nature of sense of place. Furthermore, as Yung et al. (2003) noted, we may have set unrealistic expectations for ourselves. Often "sense of place" really amounts to the politics of place, situations in which it is impossible to reach a decision satisfactory to all. In such cases, what can actually be accomplished in terms of equitable, acceptable, and effective management may fall short of the best ideals. Although this is certainly muddied terrain, there exist several examples of efforts to elicit place meanings from stakeholders (e.g., Kruger and Shannon 2000). These provide intricate insights into the multifaceted nature of stakeholders' sense of place. In addition, Kruger and Cheng[1] detail several case studies from across the Western United States that have taken a place-based approach to forest planning.

Assessing all aspects of sense of place—

Multiple conceptualizations, interpretations, and implications of sense of place in natural resource management are evident throughout the writings and projects we have reviewed here. Authors have emphasized different dimensions and antecedents of place and have highlighted different consequences of exploring place. Drawing these various threads together seems daunting, but we remain convinced that attention to sense of place should acknowledge its holistic nature. Therefore, in an effort to continue to promote the integration of sense of place into day-to-day practices, the following section provides recommendations on obtaining a rounded, representative sense of place meanings. The classification of sense of place attributes that makes the most sense pragmatically and logistically to us is that of Williams and Patterson (1999) who suggested four main branches of place attachment: scenic/ aesthetic, activity/goal, cultural/symbolic, and individual/expressive. Although these categories are fairly intuitive, a bit more explanation will help cement the ideas.

The **scenic/aesthetic** dimension refers primarily to the sensory appeal a place holds, such as visual, auditory, and olfactory aspects. What types of landscape

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[1] Kruger, L.E.; Cheng, A. [N.d.]. Place-based planning: tools and processes for managers and communities. Manuscript in preparation. On file with: L. Kruger, Pacific Northwest Research Station, 2770 Sherwood Lane, Suite 2A, Juneau, AK 99801.

features are on site? Are they unusual, unexpected, rare, or distinguished in some way? Are there features of the landscape that hold "universal" appeal such as water bodies and greenery? Determining the aesthetic value of place, though perhaps difficult to quantify, is probably the least difficult aspect to assess. Short surveys could easily assess those features of an environment that make it special, as well as the corresponding reactions that people have to sites based on aesthetics. Existing frameworks such as the Forest Service's Scenery Management System may adequately capture many of the aesthetic values across landscapes, at least at the broad scale.

Activity/goal dimensions, another main facet of place attachment, may also be fairly easy to assess. What types of recreational, educational, or physical tasks are being performed on site? How integral is the specific setting to the performance of these tasks? Is the site conducive to these activities, and, if so, what specific aspects are most important? This line of investigation helps in understanding the more functional aspects of the setting and the level of place dependence for recreation. This information can then be used to understand the advantages and disadvantages of the area in its own right as well as assess the relative value of the site compared to others.

Turning to the **cultural/symbolic** aspect of place, assessment becomes less tangible and perhaps more affectively defined. Although aesthetic and goal-related site aspects are certainly considerations in sense of place, cultural/symbolic dimensions delve deeper into place meanings, meanings that may have more differentiated and intimate associations. Attention should be paid to the nature and degree of shared meanings within and across groups.

As some researchers have observed, merely identifying the various types of groups frequenting a site lends little insight into the meanings that such groups ascribe to places. Nevertheless, in order to ascertain meanings, what first needs to be identified are those groups in existence. Whereas activity and employment groups tend to be organized, visible, and vocal, groups whose sense of place is based on other factors may be more difficult to identify in public outreach (Mitchell et al. 1993). Cultural and ethnic groups are one category, but there are other group types that arguably have developed their own "culture" and whose members have internalized various meanings that place has for the group as a whole. For example, different user types may have different meanings of place (e.g., Mowen et al. 1998); such differences are evident in areas like Yellowstone in the culture of snowmobiling versus nonmotorized winter users. Individuals who identify with preservation or conservation groups may attach special meaning to public lands. People from

different age groups, too, may have unique meanings for a place as society changes over time. Of course, each of these aforementioned groups may be nested within the larger categories of local or visitor—or they may have never been to the area at all!

Determining different cultural meanings, then, requires not only identification of relevant groups, but considerable interaction with people from these groups, interaction geared toward understanding the multiplicity of values associated with an area. Understanding may be facilitated through interviews, surveys, special meetings, academic research, and archival data, as cultural/symbolic meanings may be multifaceted and diverse. Although assessing all of these may be difficult in many scenarios, attaining as thorough a picture as possible is necessary to grasp the complexity and importance of place meanings.

Finally, **individual/expressive** attachments are those that stem from the phenomenological experience of the individual with the land. Like cultural/symbolic aspects of place, individual/expressive components may not be immediately obvious and can take some effort to uncover. Several studies have found that much of the variation in place attachment is not explained by readily observable features such as activity (Kyle et al. 2003b, Moore and Scott 2003) or residential pattern (Stedman 2002). Although the unique nature of personal experience makes generalizations difficult, this category is especially important, as it is here where other components of place are amalgamated, blended into an individual's particular cognitive and affective experience, and portrayed as a part of the self. Discovering how place relates to the self-concept—perhaps through such techniques as interviews, cognitive mapping activities, and focus groups—can allow for a more cohesive, detailed understanding of how place is integrated into individual identities.

Taking inventory of all these aspects when evaluating changes or modifications in land use, designation, policy, and the like serves a variety of purposes. First, managers are able to gauge general perceptions and trends in surrounding communities and with other users and stakeholders. Access to such information aids in forming a collaborative alliance between communities and agencies, and may help avoid possible tension between stakeholders. In addition, understanding the spectrum of place meanings allows managers to work together with the community to identify and protect unique place attachments (Galliano and Loeffler 1999). In this way, a common basis of interaction and understanding can be achieved, and managers may experience an increased sense of trust and acceptance from both local communities and larger social organizations.

What Do We Still Need to Know?

Our review of the sense of place literature related to recreation and tourism has highlighted many areas of common research and understanding. However, it has at the same time revealed many domains in which our understanding is speculative or not fully developed and other areas of disagreement or lack of consensus. This section focuses on what we believe to be some of the most important limitations of existing studies and most promising avenues for further research. Our discussion centers around four main topics: the theory of place as applied in recreation and tourism, the focal topics related to sense of place research in recreation and tourism, the methods used to assess sense of place, and the application of place in recreation and tourism management.

Theorizing Sense of Place

In our view, conceptual coherence is occasionally lost in the attempt to assess sense of place in recreation and tourism studies (see Stedman 2003b for a similar discussion). Some research has relied on questionable logic when examining the relationships between place measures and other variables. For example, various studies explore the relationship between place attachment and support for management actions without clearly articulating why such a relationship would be expected. Before moving to look for correlations, we should ask ourselves, "Why should a high level of place attachment necessarily entail a **specific** position on resource management?" Why, for example, should being attached to a recreation site relate to, say, opposition toward grazing? The answer, presumably, is that the action (e.g., grazing) is seen to adversely affect some positively valued aspect of the place or interfere with a person's ability to use or identify with the place. However, we usually do not make measurements that enable testing of this presupposition (e.g., Smaldone 2002, Vorkinn and Reise 2001). We need to resist the temptation to merely "see what relates to what" without an adequate theoretical basis. Otherwise, the logic becomes sometimes opaque and we may fail to measure critical mediating variables. For example, among Green River boaters, those high in symbolic and functional place attachment were more supportive of banning motors on the river, but among Colorado River boaters, those high in symbolic place attachment were less supportive of assigned travel itineraries (Warzecha and Lime 2001). What explains these findings? There should be no **necessary** directional relationship between place attachment and position on motors or travel itineraries. Indeed, in one study, high levels of sense of place corresponded with **less** of a perception of problems from motorized offroad travel Kaltenborn (1998). In some cases, failure to lay out the

logic leads to questionable operational measures of constructs. As a result, findings are difficult to interpret with confidence or to generalize.

As another example of work in which the theoretical discussion is somewhat disconnected from the empirical investigation, consider work by Kaltenborn (1998). He provided an excellent review of the concepts contained within sense of place, but then presented research questions with little grounding in the literature. Sense of place (as measured by using Shamai's formulation) was found to be positively related to residents' reactions to environmental changes. In this case, however, a likely explanation for the observed relationship is conceptual fuzziness in distinguishing the dependent and independent variables. A clearer articulation of the theoretical logic would have drawn attention to the conceptual overlap between the measures. Stedman (2003b) believes that there is lack of construct clarity in many studies, which he attributes in part to the legacy and preponderance of phenomenological research.

As others have pointed out before us, another issue in need of attention is an understanding of how sense of place forms not only within individuals (Williams and Vaske 2003), but also within groups (Manzo 2003, Stewart et al. 2003). What actually occurs over time and among people? One possibility is that, prior to any actual visit to, say, a wilderness, an individual has a propensity to feel positive feelings about that type of site, or even that site in particular, because of evolutionary attraction or shared cultural factors. Upon actually visiting, these sentiments may change and develop in unknown ways. Still later, the meanings and attachments may evolve as the person recalls memorable experiences and interacts with other people about the place. Correlational studies like those by Hammitt et al. (2004) offer evidence consistent with an evolutionary perspective of place, but do not permit definite conclusions. We have found no recreation and tourism studies that longitudinally explore the ways place meanings and attachments change over an individual's life course of visitation and social interaction. There are, however, retrospective studies in other domains asking people to reflect on their own pasts, for example Gustafson (2001) and Stewart et al. (2003), and these might serve as useful examples of techniques or approaches.

At the group level, Stokowski (2002) said we need "new types of research about the ways in which people make lives together, and about how they create and use recreation places as extensions of individual and community identity and ideology" (p. 379). We support Beckley's (2003) suggestion to select areas undergoing or likely to undergo change and conduct longitudinal studies. Alternatively, longitudinal studies may also come in the form of focusing on new residents or first-time

visitors and tracking how their sense of place develops over time. Certainly, studying processes as they unfold will be more challenging than "simple" correlational studies or cross-sectional studies that take a "snapshot" approach to community dynamics. However, the wealth of understanding to be gained from longitudinal work over time seems well worth the difficulty.

Understanding the process of sense of place development might help explain anomalous findings in correlational studies. For example, Kyle et al. (2004d) found that people with high levels of place identity were critical of all environmental and social conditions encountered, but—counter to expectations—highly place-dependent individuals rated conditions systematically more favorably. The authors provide various plausible explanations of these findings, but in the face of their correlational data, determining which, if any, is accurate is not possible.

A final comment regarding theory in recreation and tourism studies of sense of place relates to the rather narrow fashion in which theory has been treated. The pendulum has swung from interest-based analysis in which vestedness is evaluated as a direct antecedent to management opinions, to place-based analysis where a multitude of values, meanings, and investments are considered. Having recognized the limitations of a narrow focus on how employment or ideology relates to public attitudes toward land management, scholars have recently focused in depth on the role of place attachment. Yet sense of place studies are similarly narrow in attending to place attachment without recognizing the full spectrum of identities individuals occupy. For example, as Stets and Biga (2003) pointed out, people have multiple identities and some are more salient than others. We need to understand how place identity operates within the suite of identities individuals have. It is probably time to step back and integrate the lessons from different perspectives. That is, we need to understand how vested interests, place identities, and other identities together combine to influence people's views on management (e.g., Vorkinn and Riese 2001). Interestingly, in several studies we reviewed, we noted that both vested interests (often economically based) and place attachment contributed to conflict (Bonaiuto et al. 2002, Meyer 1996, Smaldone 2002). In some cases, it appeared that economic interests outweighed other factors in accounting for management preferences, at least among local residents. Further work in this area is welcomed.

> **We need to understand how vested interests, place identities, and other identities together combine to influence people's views on management.**

Expanding Our Research Focus

Careful evaluation of the overall research vein of sense of place in recreation and tourism naturally leads us to make several specific recommendations for additional work in the field. The following is a synopsis of the areas we believe to be most pressing.

Positive and negative place associations—

In addition to understanding meanings and levels of attachment among different constituencies, more work is needed on how the context and interrelationships among places relate to meanings. As Gustafson (2001: 14) noted, "places acquire meaning through their relationships with other places," a notion echoed by Manzo (2003: 32): "meaning develops through a dialectical process of interacting with an array of places." Thus, it may be important to understand individuals' or groups' place attachment in the context of other landscapes and places. Few studies have taken such a comparative or holistic approach.

Many sense-of-place studies in recreation and tourism have tended to focus primarily on places people like and ask them to evaluate either a favorite place (e.g., Bricker and Kerstetter 2002) or a place that we know from their behavior that they enjoy (e.g., Stedman 2002). Although this provides valuable insight into places to which people are positively attached, it doesn't give much insight into how most people feel about any given landscape or setting. An exception is Williams and Vaske (2003), who asked students about their place attachment for four nearby areas and contrasted the levels of place identity and place dependence between those who said each area was special to them and those who said it was not. These authors found significant differences between the two groups on both dimensions of place attachment for all four sites. Knowing the feelings of strongly attached people is important, but managers also need to know who and how many are attached to which sites, and what these attachments are based on.

Stewart et al. (2003) indirectly highlighted some limitations of the emphasis in recreation and tourism sense-of-place studies on the wildland end of the environmental spectrum. They noted that stakeholders in Midewin, Indiana, outside Chicago, spoke at length about the restoration of local environments as important to community identity (also a theme in Schroeder's 1996 special places work). For these respondents, the ability to act upon the environment was important in solidifying sense of place (see also Gustafson 2001). Most recreation and tourism studies deal with places in which it is a management goal to limit human influence and where visitors are not invited to act upon the landscape. Thus, there is some amount of discrepancy here. Although the ability to act on—change, modify, manipulate—an environment seems to be a component of place attachment, public lands often have a strict mandate against acting upon the environment. This leads us to wonder if there is an aspect to place attachment processes that have not been directly addressed and whether processes might be different for private versus public land.

Recognizing the array of places draws attention to cases where the meanings are not necessarily positive. For example, Manzo (2003) described the contribution of feminist literature to recognizing the darker side of home environments, a needed correction to the dominant view of home as haven. In a similar vein, recreation and tourism researchers should attend to the potential negative feelings afforded to natural environments. As only two possible examples, one might consider feelings associated with wildfire risk at wildland urban interface sites or the perceived dangers and risk of solitary travel in remote recreation areas. Our research methods in recreation and tourism often do not elicit such meanings or sentiments. For example, even though Stewart et al. (2003) specifically instructed respondents to consider places that might be important for negative reasons, it appears most did not. Instead they discussed places they liked. Learning about negative place meanings may therefore take concerted effort.

Conflict—

Recreation conflict is an important area of study and a significant concern for many recreation managers. A start has been made to understand how conflict relates to sense of place, but there is room for additional work, and existing studies have some methodological limitations that should be addressed. For example, Gibbons and Ruddell (1995) looked at place dependence only. Additionally, they did not measure whether people actually encountered members of the outgroup, which would be important information when interpreting their conclusions about the relationship of intergroup conflict to place dependence. Warzecha and Lime (2001) employed trip diaries to understand place attachment on different rivers. Although the proportion of respondents returning diaries was quite high (over 60 percent), it is unknown (and unreported) how many people refused to take them in the first place. Nonresponse bias may seriously threaten the external validity of sense-of-place studies, and can be expected to intensify as the burden put on visitors increases.

Relationship of place attachment to behavior—

Work on conflict begins to address Stedman's (2003b) call for more research on the relationship between sense of place and behavior. Our review highlighted many instances where place attachment had a weak or modest relationship to other attitudes or cognitions, and therefore we wonder just how strong or widespread is the effect of sense of place on behavior. In general, perception of threat is required to spurn behavior, although there are certainly a whole host of other variables that may also incite action. It is probably most helpful for managers to know how the public will react to policies—how they will behave—as a function of place attachment. To date, though, this remains unclear.

Environmental features and place attachment—
Turning to another arena, we agree with Stedman (2003b) and Beckley (2003) that more attention should be paid to the link between the physical features of environments and the meanings or attachments associated with them. We recognize that many sense-of-place studies are reactions against earlier work that emphasized the physical features of the environment at the expense of localized meanings, but to ignore such features would be faulty as well. Sense-of-place studies may also have sought to differentiate themselves from studies of landscape preference, and therefore do not focus on generic environmental features. Nevertheless, exploring some middle ground would be helpful. For example, Bricker and Kerstetter (2002), although they provide very thorough descriptions of the meanings assigned to places, do not provide any information about the places themselves. Stedman has recognized this issue and begun to address it, although his primary study (2003a) necessarily used a rather limited set of physical features (e.g., chlorophyll levels in lakes), owing to his reliance on available secondary data, data that may not have captured the most salient or important features of the environment from an attachment perspective.

Refining Methods

There is often room for methodological improvement in research, and sense-of-place studies are no exception. We applaud efforts to use a range of techniques to study sense of place in recreation and tourism and generally believe that multiplicity in measures generates a more holistic assessment of any situation. One question that arises, however, is whether a single strategy (qualitative or quantitative) is more suitable to this particular topic. Some (e.g., Cheng et al. 2003) believe that the nature of sense of place requires qualitative investigation, whereas others (e.g., Stedman 2003b) believe otherwise. Kaltenborn (1998: 187) argued for the pragmatic middle ground:

> …constructing an empirical scale measuring sense of place using quantitative methods may appear to violate the nature of the concept. The problem may be more philosophical than methodological, however. Like any human phenomena in time and space, sense of place has a phenomenological content which is highly subjective, but almost any collection of individual experiences can be said to have certain common traits or structures across individuals or groups.

We, too, tend to take this moderate view recognizing that both research types have pros and cons.

One specific methodological concern we noted relates to how place questions are asked, particularly in written questionnaires, and whether people feel comfortable and able to answer them. Bricker and Kerstetter (2002) adopted a question (developed from Eisenhauer et al. 2000) that elicited lengthy descriptions of places in a written questionnaire. This appears to capture the advantages of both quantitative research (e.g., large sample, susceptibility to numeric content analysis) and qualitative research (e.g., rich descriptions). However, the low response rate to their survey (including onsite refusals, the response rate appeared to be 21 percent) raises concerns. Is the task too difficult? Do those who do not have special places fail to respond, leading us to erroneously conclude that places are special to everyone? A similar concern arises for Kaltenborn's (1998) study of Norwegian residents in Longyearbyen, which generated a response rate of 30 percent. We simply do not know if those low in place attachment did not respond. The overall high scores on sense of place suggest this possibility.

Various authors have experimented with different data collection methods, as is appropriate for a concept as broad and subjective as sense of place. One promising area that warrants additional attention is the use of photographic techniques. Stewart et al. (2003) found having people shoot and discuss photographs of important places led to deeper insights about the meanings associated with those places. To date, relatively few such studies of this nature have been conducted, and it is unknown how findings might differ from or enhance those gained through other techniques. For example, Jones et al. (2000) obtained different responses about sense of belonging when they showed people pictures versus when they spoke to people in the actual setting. Ratings of visual preference and belonging to scenes depicted in photos were correlated, but visual preference ratings for photos were unrelated to a verbal measure of sense of belonging asked at the specific location from which the photos were taken.

Clearly there is room for methodological innovation in study of sense of place in recreation and tourism. In particular, we see a need for studies that explicitly compare multiple methods in a single study and encourage researchers to attempt this task in the future.

Social, Activity, or Place Orientation

Promising efforts have been made to understand how different segments of society view places (Mowen et al. 1998), and this can be extremely helpful to recreation and tourism managers in understanding their constituencies and predicting public sentiment. One interesting suggestion arising based on the literature is that individuals may differ in their innate propensity to form place attachments for natural

areas. For example, Mitchell et al. (1993) found that visitors seemed to divide into two groups, one activity-oriented and one emotionally attached to sites. However, this study—like most such studies—does not tell us how many people (or who) exhibited which type of relationship or level of attachment. Findings by Moore and Scott (2003) offer the intriguing possibility that those who are involved in activities for social reasons display less place attachment than others. Similarly, Clark and Stein (2003) classified their respondents, who were people expressing interest in natural area management in two communities in Florida, as oriented toward the natural landscape (54 percent) or toward the social community (41 percent). Not surprisingly, landscape-oriented people rated the importance of living near public natural areas as more important and they visited such areas more frequently. However, orientation did not relate to either length of residence in the community or strength of community attachment.

Beckley (2003) hypothesized that it is possible to identify the relative contribution of sociocultural attributes of a place and biophysical attributes to overall attachment. For example, Kyle (2001) argued that long-time fairgoers' attachments to their camp spots are initially and primarily based on social ties. Beckley pointed out that people's overall attachment levels could be the same, but depending on how those attachments were formed, management implications could differ. Those who have attachments founded on sociocultural factors might not react negatively to landscape changes, in contrast to those whose attachment is based on biophysical landscape features. At this point, though, the distinction between these groups (if, in fact, such a distinction does have ecological value) and how that relates to expectations and behaviors remains purely speculative.

Conclusion

Sense of place, place attachment, and other place-related concepts are factors related to recreation and tourism. There is no single accepted definition of sense of place. As with many other concepts in social science, it has traditionally fallen to the author to be clear how she applies the concept. This review brings together these different approaches and definitions and can be used by future researchers as a foundation for determining their own theoretical and empirical approaches, better outfitting managers with tools suited to their needs. Thus, research in place attachment can be helpful as managers face and often struggle with resource allocation issues that affect recreation and tourism resources and opportunities. Managers are clamoring for frameworks, tools, processes, and protocols to help them understand and better incorporate public values into land management. Although there seems

to be this general desire to include place-based values with planning and management, the lack of precedent as well as the threat of litigation often prevents interested parties from attempting to directly incorporate place-related ideas into practice. The current review demonstrates that there is substantial interest in ascertaining the dynamics of place. When taken in conjunction with upcoming discussions of managerial applications (Kruger and Cheng, see footnote 1), there is much hope that managers will be more confident in making decisions that directly account for place attachments and values.

This review sheds light on the origins of sense of place, the variety of related concepts, and the sociocultural and biological components of place attachment. We explored what researchers have found related to questions of scale and whether attachment occurs at the scale of a campsite or a drainage, or an entire wilderness area and whether it occurs for particular places (e.g., the Bob Marshall Wilderness Area) or generic locations that share qualities (all wilderness). We discussed the ongoing debate around whether someone can hold a sense of place for a location she has never visited. Regardless of whether affinities toward places are dubbed "place attachment" per se, there seems little doubt that people do, perhaps without visitation and at fairly large scales, develop such affinities. However, this type of affinity toward the land may be of a different nature than those that underlie experience-based interactions occurring at smaller scales. Understanding the types of attachment, how these develop, and how they may differ among users as well as the general public may be of great import for resource managers.

We also reviewed research on place meanings and the politics of place. The politics of place, especially related to public land management has driven much of the research in this area. Still needing attention are questions about how the attitudes of various groups within the community develop and how to weigh these in relation to attitudes of groups outside the community. Who are locals, how does their place attachment differ from nonlocals, and how should the differences be weighed, if at all?

Research has explored place attachment related to environmental concern, attitudes toward fees, perception of environmental conditions, conflict, and visitation. Many studies have included management implications of the findings, and we have made an effort to present an overview of implications that will inform managers and stimulate additional discussion and investigation.

As managers begin to experiment with place-based approaches, they are concerned with how to access and incorporate place attachment and sense-of-place

information into planning and management and how the outcome might accommodate, alter, or buttress existing practices. How would management be different if approached from a perspective that honors sense of place values? There is no clear framework or approach for incorporating place-based values into existing management strategies. Given the social and political climate in which management decisions often exist, we understand the hesitation to employ novel concepts in decisionmaking processes. However, we also recognize the strides that research has made in this domain and hope that this research aids in justifying incorporation of place-based concepts in planning.

Clearly, managers face a challenge in that there will be multiple senses of place and a variety of possibly conflicting meanings and attachments depending on ethnic, social, and cultural backgrounds, personal experience, proximity to the location, group membership, and other characteristics. Thus, the complexity and holistic nature of sense of place and place attachment do not lend themselves to simple descriptive statistics.

Several researchers represented here have suggested that sense of place is intimately tied to the politics of place, sometimes resulting in situations where a decision that satisfies all interested parties is impossible to achieve. A better grasp of how place attachments are transformed into politics of place, and how vested interests, place identities, and other identities combine to influence people's views and actions toward management might help us understand these situations and design processes to help achieve more equitable and acceptable outcomes. Regardless, it is worth the extra effort to work with the community to identify and protect places having unique and special meanings. Although the outcome may fall short of achieving an equitable decision that is fully acceptable to all parties, managers may experience increased acceptance and trust from the community.

Research on and application of sense of place and place attachment are still in their infancy. We need to develop a strong theoretical base and clearly lay out the logic underlying research in this area as we move forward. There is hope, though, that sense of place can greatly contribute to providing optimal recreation experiences, and in general, to informing land management practices. Meanings and attachments tend to cluster in certain areas, and it may be that place-based planning need only occur at specific areas. Thus, it may be that place-based approaches are appropriate for areas that are especially contentious, but applying the approach to other types of areas may not be the most efficient or direct method. Hopefully, this review can serve as a guideline for those interested in integrating place-based attachments and meanings into everyday management.

It may be that place-based approaches are appropriate for areas that are especially contentious.

Acknowledgments

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