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Conflict in Natural Resource Recreation

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Rapid growth in outdoor recreation following the Second World War led to competition over land and water resources, and subsequently conflict ensued between participants engaged in various recreation activities (Owens, 1985). Early research conceptualized recreation conflict as simply competition over the same resources by several competing activity groups (Devall & Harry, 1981), and/or incompatibilities between activities, groups or their respective goals (Bury, Holland & McEwen, 1983; Noe, Wellman & Buhyoff, 1982). Common findings in this research were that conflict seemed likely between users and non-users of mechanized recreation, and that conflict was often one-way, or asymmetrical. For example, cross-country skiers disliked their encounters with snowmobilers, but snowmobilers did not mind cross-country skiers (Jackson & Wong, 1982). Likewise, motorboaters held positive attitudes towards paddling canoeists, but paddling canoeists disliked the motorboaters (Adelman, Heberlein & Bonnicksen, 1982).

More recent research has also documented examples of conflict between participants of non-motorized activities. For example, an asymmetric antipathy existed between hikers and stock users whereby hikers disliked stock users and reported that encounters with stock users were undesirable (Watson, Niccolucci & Williams, 1994). To date, recreation conflict research has examined numerous combinations of activities that include cross-country skiers and snowmobilers (Jackson & Wong, 1982; Jackson, Haider & Elliot, 2002); motorized versus non-motorized rafters (Nielsen & Shelby, 1977; Shelby, 1980); water skiers and fishermen (Gramann & Burdge, 1981); off-road vehicles (ORV) users and bathers (Noe et al., 1982); hikers and mountain bike riders (Carothers, Vaske & Donnelly, 2001; Ramthun, 1995; Watson, Williams & Daigle, 1991); canoeists and motorboaters (Adelman et al., 1982); skiers and snowboarders (Baird, 1993; Thapa, 1996; Thapa & Graefe, 1999, 2003, in press; Vaske,

Carothers, Donnelly & Baird, 2000; Vaske, Dyar & Timmons, in press; Williams, Dossa & Fulton, 1994); hikers and stock users (Watson et al., 1994); helicopter skiers and backcountry users (Gibbons & Rudell, 1995); hikers, stock users and llama packers (Blahna, Smith & Anderson, 1995); hunters and non-hunters (Vaske, Donnelly, Wittman & Laidlaw, 1995); walkers, runners, in-line skaters, and bicyclists (Moore, Scott & Graefe, 1998); and walkers and mountain bikers (Cessford, 2002).

In spite of the extensive body of research on recreation conflict, accumulation of knowledge has been limited by inconsistent measurement and other methodological issues. For example, conflict has been operationalized based on whether participants found their encounters with others to be desirable or undesirable (Jackson & Wong, 1982; Watson et al., 1994), or whether encounters with other participants interfered with or affected one's goals or enjoyment (Moore et al., 1998; Thapa, 1996; Watson et al., 1991). Conflict has also been viewed from a normative perspective rather than based on goal interference theory (Carothers et al., 2001; Vaske et al., 1995). In light of these methodological issues, the purpose of this chapter is three-fold: first, to describe the dominant goal interference model as well as alternative approaches to studying recreation conflict; second, to provide a critical review of the various ways conflict has been measured; and third, to dispel several myths about recreation conflict.

Models of Recreation Conflict

Goal Interference Model

Jacob and Schreyer (1980) defined recreation conflict as "goal interference attributed to another's behavior" (p. 369). This definition has been widely accepted and has received some support in empirical research. According to this model, for conflict to occur, there must be social contact, direct or indirect. Direct contact refers to face-to-face encounters with another group, such as a cross-country skier encountering a snowmobiler. Indirect contact refers to the presence or evidence of certain behaviors, as in a cross-country skier seeing a snowmobiler's tracks. While research based on this model typically focuses on conflicts between different activities, certain non-activity based behaviors such as littering, drunkenness, noise, and rowdiness have also been reported as sources of serious conflict, and fall under the purview of the goal interference model (Jackson & Wong, 1982; Jackson, et. al., 2002; Rudell & Gramann, 1994; Todd, 1987). Gibbons and Ruddell (1995) further point out that goal interference does not necessarily imply goal incompatibility, as various groups may share the same goals but pursue incompatible ways of achieving those goals.

Jacob and Schreyer (1980) identified four major factors that contribute to conflict. A single factor alone may be sufficient to cause conflict but, in most circumstances, a combination of factors will occur. The first factor, *activity style*, denotes that individuals who are intensely involved in an activity have specific objectives, expectations, well-defined goals, high experience and skill levels, and are consequently more likely to experience conflict. The second factor, *resource specificity*, relates to attachment to a recreation resource. Recreationists who are possessive and consider the qualities of the recreation site to be exceptional when compared to other sites are more likely to experience conflict than those recreationists who lack

attachment to the specific resource. The third factor, *mode of experience*, refers to ways of perceiving and experiencing the environment. Participants may be engaged in the “focused” or “unfocused” mode. Focused mode participants are very sensitive toward the particular details of the environment and are more likely to experience conflict when encountered with unfocused participants, as their recreational goals are different. The final factor, *tolerance for lifestyle diversity*, refers to the “tendency to accept or reject lifestyles different from one’s own” (p. 370). Participants who are unwilling to share resources and are intolerant towards different lifestyles are more likely to experience conflict. Also, individuals are more likely to be tolerant of others who they perceive as similar to themselves.

Subsequent researchers have added support to the effects of Jacob and Schreyer’s (1980) factors affecting conflict. In support of the resource specificity factor, Gibbons and Ruddell (1995) found a positive relationship between place attachment and conflicts among backcountry winter recreationists. Thapa (1996) elaborated on the role of tolerance in conflict perceptions. Other authors have suggested additional factors that might influence conflict perceptions. Among demographic variables, Thapa and Graefe (1999) found that perceptions of conflict and tolerance among skiers and snowboarders were related to age and gender. In this case, much of the effect was indirect in the sense that age and gender influenced the choice of activity, which in turn affected the participants’ tolerance and perceived conflict. Gibbons and Ruddell (1995) also found a positive association between goal orientation and conflict; goal interference was greater for goals that were more important.

Social Values Conflict

Vaske et al. (1995) introduced the theoretical distinction between interpersonal and social values conflict. They noted that interpersonal conflicts between hunters and non-hunters on Mt. Evans, Colorado have been minimized by natural visual barriers and agency regulations that reduce encounters between the two activity groups. They suggest that conflicts that do exist between these groups stem from differences in social values held by hunters and non-hunters. Such conflicts can occur independently of actual contact between the two groups. Identification of interpersonal conflict and social value conflict was accomplished through a series of questions about potential conflicting behaviors. The behaviors included both hunting (e.g., seeing hunters, hearing shots, seeing an animal being shot) and non-hunting (e.g., seeing people feed wildlife, people harassing wildlife, dogs chasing wildlife) behaviors. Respondents were asked how often they had seen each of these behaviors during their visits to Mt. Evans and the extent to which they perceived each behavior to be a problem.

Combining these variables produced a conflict typology. Individuals who did not consider the behavior to be a problem were classified in the *no conflict* group, regardless of whether they had seen the behavior or not. Those who had seen a behavior and considered it a problem were assigned to the *interpersonal conflict* group. Those who had never observed the behavior but still considered it to be a problem were interpreted to be reporting a conflict in *social values*. Not surprisingly, the likelihood of observing the conflicting events increased with increasing rates of

visitation. Both hunters and non-hunters judged the non-hunting behaviors as more problematic than the hunting events, largely reflecting the fact that these behaviors were more commonly seen.

In a subsequent study, Carothers et al. (2001) examined social values versus interpersonal conflict among hikers and mountain bikers. This study built on earlier social values research by comparing conflict perceptions of not only hikers and mountain bikers, but also of those who participate in both activities (the majority of respondents). In this case, conflict was expected to result from interpersonal behavior more than from differing social values because of the overlapping participation and similarity of the activities. Conflict was measured in the same way as in the Vaske et al. (1995) study. Respondents reported the incidence and acceptability of four hiking-related and six mountain biking-related behaviors selected from the most commonly reported complaints in the area. As expected, all three groups reported more interpersonal conflict than social values conflict. For all three groups, less conflict was reported for hiking than for mountain biking. Generally, the perceptions of dual-sport participants fell in between those of the two exclusive activity groups. Overall, results differed from those of the Mt. Evans hunter/non-hunter study, in which social values conflict was more evident. Further research is needed to explain when and where social values conflicts are more likely to occur.

Other Approaches to Conflict

Some researchers have suggested thinking about recreation conflict in terms of a process. Ramthun (1995), for example, attempted to build on the goal interference model by incorporating sensitivity to interference as a new element in the conflict perception process. Rather than tolerance leading to perceptions of conflict, however, he suggested it is more realistic to assume a reciprocal relationship between sensitivity to interference and attributions of conflict.

Schneider and Hammitt (1995) viewed conflict more as a process than an event, and focused on both the perceptions of and responses to conflict situations. They used the psychological concept of stress to define conflict, and theorized that conflict can result from stress induced by any type of obstruction between recreationists and their goals. In understanding how people respond to conflict situations, Schneider and Hammitt (1995) suggested various appraisal and coping mechanisms. Schuster (2000) followed with further research on the coping processes individuals use to respond to situations that are appraised as stressful. Two basic types of coping strategies are recognized: 1) emotion-focused coping and 2) problem-solving coping (Lazarus & Folkman, 1984).

In the crowding literature, emotion-focused coping behaviors (Hammitt & Patterson, 1991) such as product shift, rationalization, and displacement have been empirically documented, with displacement being the most common coping mechanism investigated (Shelby & Heberlein, 1986; Shelby, Bregenzer & Johnson, 1988). In a study of visitor response to stress in Glacier National Park, Miller (1997) found that visitors who encountered levels of interaction that exceeded their expectations perceived higher levels of stress than those who encountered what they had expected. Higher levels of stress are believed to lead to behavioral coping mechanisms like displacement, while lower stress levels are more likely dealt with through cognitive coping strategies. In a recent study, Schneider (2000) found that

visitors to two urban-proximate recreation areas in the southwestern U.S. most often used emotion-focused coping responses (e.g., distancing themselves) to conflict. However, nearly 20 percent of the visitors that did experience conflict were displaced from the areas.

Measuring Recreation Conflict

A limiting factor in the literature on recreation conflict is the lack of consensus about its operationalization. Unlike related research areas such as recreational crowding, where measurement instruments have been replicated in many areas, almost every study of conflict has used its own measurement tools.

In reviewing previous research, it is immediately apparent that there is little consistency across studies. One notable finding is that virtually none of the measures have actually used the term *conflict*. Rather, they focus on respondents' likes and dislikes, problems encountered, reactions to various types of encounters, or other attitudinal ratings. Numerous researchers have tried to operationalize Jacob and Schreyer's (1980) definition of conflict by focusing on goal interference. However, few have measured conflict in agreement with that definition (Watson, 1995). Some have assumed that goal interference had occurred or considered only certain aspects or causes of goal interference. For example, Devall and Harry (1981) asked recreationists about activities that might interfere with their enjoyment of recreation, but did not ascertain whether the interference resulted from lack of attainment of goals, or whether it was due to behavior of other recreationists. Watson et al. (1991) asked a more specific question about behavior of others interfering with enjoyment, and then assumed any interference with enjoyment was a result of goal interference. Only Todd (1987) fully implemented Jacob and Schreyer's (1980) definition of goal interference due to the behavior of others. He asked river users a series of questions beginning with identification of the importance of a list of goals, interference with any goals that had any importance, and reasons for the goal interference. Todd's approach was cumbersome, but allowed for separation of goal interference that could be considered conflict (i.e., caused by others' behavior) versus goal interference due to other reasons. The open-ended reasons for interference also allowed examination of conflict resulting from within one's own activity, as well as the more typical conflict between different activities.

Given the complexity of measuring conflict, it is no surprise that many researchers have used multiple approaches within a single conflict study. Some have developed a conflict index based on ratings of various problems encountered, along with a more direct question about the extent to which other visitors' presence or behavior affected one's enjoyment (Moore et al., 1998; Thapa, 1996). Others have used as many as three different approaches to assess potential conflict situations (Adelman et al., 1982; Watson et al., 1991; Watson et al., 1994). While alternative measures offer validation and further insight into conflict, divergent results for different measures raise questions about whether the sources of conflict are real or merely an artifact of measurement.

Studies of conflict resulting from differing social values are not immune to measurement problems either. As in the goal interference model, measures of social values conflict require a complex sequence of questions. First, it is necessary to

Table 1. Summary Of Conflict Measures

Conflict Approach	Activities Examined	Conflict Measure	Citation(s)
Goal Interference	Multiple activities	"One of the problems in many recreation areas is activities which interfere with a person's own enjoyment. Below you will find a list of activities which might interfere with your enjoyment of recreation. Please indicate how you feel about each activity by marking an 'X' for degree of interference."	Devall & Harry (1981)
Goal Interference	Water skiers and fisherman	Based on recreational goals and behavior. Perceived conflict was a result of incompatible goals and behavior.	Gramann & Burdge (1981)
Goal Interference	Off-road vehicle users (ORV), non ORV users (pedestrians)	Attitudinal ratings toward the operation of vehicles and their effects, non ORV users' effects, and control of use. Considered a more general attitude toward the potential conflict group.	Noe, Wellman & Buhyoff (1982)
Like/Dislike	Cross-country skiers and snowmobilers	Three complementary sets of indicators of perceived conflict were used. These were views about encountering the other group, likes and dislikes of the other group using the same area, and statements about understanding the other group.	Jackson & Wong (1982)
Like/Dislike	Canoeists and motorcraft users	Three measures based on 1. competition for resources 2. expressed reactions to other user visitors 3. Actual encounters (disliked, neutral, enjoyed).	Adelman, Heberlein & Bonnicksen (1982)
Goal Interference	Canoeists, kayakers, rafters, anglers	Series of questions focusing on goal interference: 1. Rate importance of a series of goals (5-point scale), 2. Rate degree of interference with goals 3. Obtain reasons for goal interference	Todd (1987)

Goal Interference, Like/Dislike	Mountain bikers and hikers	Three conflict measures: 1. Feelings of enjoyment, dislike, or neutrality toward encounters with various types of groups on trails (“dislike” responses were considered conflict). 2. Has the behavior of any individual or group interfered with enjoyment of visits to the area. “Yes” responses (interpreted as goal interference) were followed with questions to identify the type of group that interfered. 3. Respondents were asked to rate the extent of potential problems encountered during their visit/s to the site (5-point scale, <i>small problem</i> to <i>big problem</i>).	Watson, Williams & Daigle (1991)
Goal Interference	Canoeists and motorboaters	Multiple-item scale (5-point Likert scale format): Encounters with motorboats decreased the enjoyment of my trip; My contact with people in motorboats interfered with the quality of my experience; Encounters with canoes decreased the enjoyment of my trip; My contact with people in canoes interfered with the quality of my experience.	Ivy, Stewart & Lue (1992)
Goal Interference	Winter visitors to Padre Island National Scashore (windsurfers, anglers, tent campers, RV campers, waders, picnickers, snorkelers, motorboaters)	Noise-induced conflict measured by visitor ratings of amount of interference with their recreation activity that would be caused by (5-point scale, <i>never interfere</i> to <i>interfere very much</i>). Activity-based versus non-activity-based conflict measured by ratings of how much 19 different behaviors would interfere with experiences they identified in a series of goal-importance questions (5-point scale, <i>never interfere</i> to <i>interfere very much</i>).	Ruddell & Gramann, (1994)

Table 1. Summary Of Conflict Measures (continued)

Goal Interference, Like/Dislike, Desirable/Undesirable	Hikers and recreation stock users	Three conflict measures used: 1. Feelings of enjoyment, dislike, or neutrality toward encounters with various types of groups. 2. Ratings (<i>very desirable to very undesirable</i>) to encountering other groups. 3. Ratings of whether the behavior of any group interfered with enjoyment of past visits to the wilderness.	Watson, Niccolucci & Williams (1994)
Goal Interference, Like/Dislike	Llama packers and other backcountry visitors (hikers and horseback riders)	Three conflict measures used: 1. Evaluations of encounters. Response format included <i>enjoyed meeting them, did not mind meeting them, disliked meeting them, or did not meet any</i> . 2. Extent to which meeting different user groups interfered with enjoyment of the visit. Response format was a <i>little, somewhat, or a lot</i> . 3. Ratings of 18 problems in the study area, four dealing with impacts of llamas, four with impacts of horses, and the rest with other resource management problems like crowding, litter, etc. (5-point scale).	Blahna, Smith & Anderson (1995)
Goal Interference	Hikers and mountain bikers	Two conflict measures used: 1. Sensitivity to interfering behaviors: "If you encountered the following behaviors on the Big Water Trail, how much would they interfere with . . . important experiences" (response to 24 common trail behaviors, scale = never interfere to interfere very much). 2. Conflict attribution: "On your last visit to the Big Water Trail did any of the above behaviors actually cause you problems?" (Yes/No).	Ramthun (1995)
Goal Interference	Helicopter skiers and non-motorized backcountry users	Goal interference conflict was measured by asking respondents to rate a set of interferences they experienced and attributed to helicopter skiing and discourteous behavior. Interferences were rated on a 5-point scale.	Gibbons & Rudell (1995)

Social Values	Hunters and non-hunters	Perceived conflict was operationalized through combination of responses from two sets of questions: 1. Responses related to observation of the frequency of occurrence of six events during their visit to the site. 2. Based on the responses to the events, respondents reported whether certain events were a problem (slight, moderate, or extreme problem)	Vaske, Donnelly, Wittmann & Laidlaw (1995)
Goal Interference Interpersonal Behavior	Alpine skiers, and snowboarders	Two measures of conflict: 1. <i>"How did the presence or behavior of any [snowboarders/skiers] you might have seen affect your enjoyment of the trails?"</i> (7-point scale) 2. Index based on ratings of a list of potential problems representing forms of goal interference due to another's behavior (7-point scale)	Thapa (1996)
Goal Interference Interpersonal Behavior	Walkers, runners, in-line skaters and bicyclists	Two measures of conflict: 1. <i>"How did the presence or behavior of any (walkers, runners, in-line skaters and bicyclists) you might have seen affect the quality of your trail experience?"</i> (7-point scale) 2. Index based on ratings of a list of potential problems representing forms of goal interference due to another's behavior (7-point scale)	Moore, Scott & Graefe (1998)
Coping with Stress	Visitors at an urban-proximate wilderness and developed area	Conflict perception (dichotomous yes/no measure)	Schneider (2000)

Table 1. Summary Of Conflict Measures (continued)

Goal Interference Interpersonal Behavior	Alpine skiers and snowboarders	A multiple item index to measure observed unacceptable behaviors between skiers and snowboarders. Six specific items listed for both groups categorized in a 5-point Likert scale (rarely, sometimes, frequently and almost always).	Vaske, Carothers, Donnelly & Baird (2000)
Social Values Interpersonal Behavior	Hikers and mountain bikers	Perceived conflict was operationalized through a combination of responses from two sets of questions: 1. Responses related to the observation of ten events that were commonly reported complaints received from hikers and mountain bikers. 2. Based on the responses to the events, respondents reported whether certain events were unacceptable.	Carothers, Vaske & Donnelly (2001)
Goal Interference Interpersonal Behavior	Walkers and mountain bikers	Two conflict measures used: 1. Respondents were asked if seeing [walkers/bikers] had, or would have, affected their enjoyment of the track. 2. Items based on ratings of a list of potential problems representing forms of goal interference due to bikers' behavior (3-point scale).	Cessford (2002)
Goal Interference Interpersonal Behavior	Skiing, snowmobiling and other winter sports	Two conflict measures used: 1. Respondents were asked the relative importance of their motivations to participate using 26 items (REP motivation scales), and then to report if these motivational goals were achieved. 2. Visitor perception of potential problem items – those related to inter-group conflict included noise associated with motorized or non-motorized users, and activities of motorized or non-motorized users.”	Jackson, Haider & Elliot (2002)

identify how often certain problematic events occurred, and then how much they were considered a problem. Some difficulties of interpretation remain even with these two questions, as it is difficult to attribute the source of conflict for those who have both seen an event and considered it a problem (Vaske et al., 1995). Furthermore, the report of social values conflict may be a reflection of one's own values and philosophies rather than a level of conflict at the area in question. Their responses might be considered a measure of potential conflict, since they are speculating about behaviors that they believe exist even though they have not experienced them.

Inconsistent measurement of recreation conflict has limited theory development and accumulation of knowledge about its incidence, causes and consequences. Why have researchers failed to reach consensus on this issue, and why don't they just ask recreationists how much conflict they have experienced? To be sure, few recreationists have read Jacob and Schreyer's (1980) article, or any paper about conflict for that matter. But can't we still ask them about conflict even if we are not sure they understand the technical definition of conflict in the recreation literature? This is precisely what we have done in crowding studies, where we routinely ask visitors how crowded they feel in various situations. However, knowing how crowded people feel tells us little about how the quality of their experience was affected by the density of visitors. It is necessary, but not sufficient, to ask recreationists how much crowding or conflict they have experienced. We must follow this question with questions assessing how the quality of their experience was impacted (positively or negatively) by the conditions that they have experienced. In addition, from a managerial perspective, it is also important to understand visitors' responses and coping behaviors, as conflict intensity may be associated with aggressive behaviors and/or reduced frequency of visitation to the site (Schneider, 2000).

Myths About Recreation Conflict

Review of previous research on recreation conflict suggests that there are several myths or misconceptions that need further consideration. Some of these myths are based in truth but have become overgeneralizations, while others represent discrepancies between commonly held perceptions and research findings.

Myth 1: Conflict is high and growing. Based on the fact that participation in various outdoor recreation activities has increased significantly over the past decades, many papers begin with a statement to the effect that conflict between some particular activities is rampant and likely to grow in the future. Hence, with growth in participation, innovation in new activities, and increased accessibility, the potential for recreation conflict is considered to be high.

Empirical studies, however, have generally found low rates of conflict. Blahna et al. (1995) found few conflicts or problems related to the introduction of a non-traditional user group (e.g., llama users) in two wilderness areas. Both Vaske et al. (2000) and Thapa and Graefe (in press) found low levels of conflict between skiers and snowboarders. As noted above, the amount of conflict found depends on how the conflict was measured. Some of the conflicts reported could more accurately be called *general attitudes* or *predispositions* toward conflict. In addition, conflict is often lower than expected because recreationists use coping behaviors and similar

mechanisms to reduce or eliminate conflict (Schneider, 2000; Schneider & Hammitt, 1995; Schuster, 2000).

Myth 2: Conflict is caused by mechanized and motorized activities. While this notion was the impetus for much early conflict research, more recent studies show that conflict is more complicated than that. The underlying causes of conflict, both interpersonal and social values-related, cut across all types of recreation activities. Many recent studies have focused on different non-mechanized activities that share a common resource base, such as ski areas or hiking trails.

Myth 3: Conflict is between different activities. Conflict can be as great or greater within the same activity as it is between different activities. While earlier studies were generally limited to conflicts caused by other activities, some researchers have included both in-group and out-group comparisons in their assessments. Thapa (1996) found that skiers were as likely to attribute conflict to other skiers as they were to snowboarders. Todd (1987) found that conflict among Delaware River canoeists was more likely to be caused by other canoeists than other water-based recreationists like motorboaters, tubers or rafters. Additionally, the intra-activity conflicts among river users were more likely to result from other members of one's own group (intra-group conflict) than from other canoeists (inter-group conflict).

Some conflict is not activity-based, but rather, based on undesirable behaviors that may be exhibited by participants in any activity. Gibbons and Ruddell (1995) found more goal interference attributed to discourteous behavior than to encounters with helicopter skiers. Todd (1987) also found that some conflicts perceived by canoeists resulted from non-activity based behaviors such as littering, noise, and drunken/rowdy behavior.

Myth 4: Conflict is asymmetrical. While this has been true in some instances, it is not necessarily the case. An asymmetrical antipathy was found between hikers and stock users whereby hikers disliked the stock users and reported that encounters with stock users were undesirable (Watson et al., 1994). Asymmetrical conflicts have also been documented between hikers and trail bikers (Ramthun, 1995; Watson et al., 1991), and water skiers and fishermen (Gramann & Burdge, 1981). Such one-way conflict relationships may be due to stereotyping and may lead to managerial actions such as limiting use by the outgroups.

Several studies have found resentment and dislike in both directions, however (Thapa, 1996; Vaske et al., 2000). The symmetry of conflict relationships becomes more complicated when more than two activities occur in a given setting. For example, Blahna et al. (1995) found that hikers experienced more negative encounters with llama users than with horse users. The issue of symmetry should not be assumed, but should be examined in detail in every potential conflict situation.

Myth 5: More experienced recreationists are more sensitive to conflict. Level of experience with an activity is embedded in Jacob & Schreyer's (1980) activity style factor of recreation conflict. Experienced recreationists are expected to have better skills, be more focused and have more defined goals than less experienced recreationists. These characteristics should make experienced users less tolerant than beginners of goal interference due to others' behavior. While some research has supported this relationship, other studies have found different results. Ramthun (1995) found years of experience to be a significant predictor of sensitivity to

conflict among hikers and mountain bikers, but in the opposite direction of what was hypothesized. Instead of more experienced hikers and bikers being more sensitive to the behaviors of the other group, the more experienced users tended to be less sensitive. Ramthun theorized that the unexpected finding might have resulted from more clear expectations on the part of more experienced recreationists, or user displacement.

Conclusion

We have come a long way since the initial views of conflict as simply competition or incompatibility between different activities occurring in the same setting. Over time, various theoretical approaches to recreation conflict have been proposed and tested. Research applications have expanded beyond traditional backcountry settings and now include urban areas as well as the built environment. Yet, we still cannot answer the very basic question, "How much conflict is out there?" It seems like the answer depends on several variables, including the type of conflict and the particular types of recreationists who may be in conflict with each other. Recreation researchers should try to build on the existing database and develop more consistent measures of conflict in the future. Better and more consistent measurement will allow us to effectively answer questions such as, "How much conflict exists in a given situation?", "How do levels of conflict in different areas compare with each other?", and "How can resource managers best manage recreation areas to minimize user conflict and maximize the quality of the visitor experience?"

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