

recreation

Revealing Motivations for and Conflicts Associated with Recreational Horseback Trail Riding

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Despite a long history of recreational horseback trail riding on public lands, relatively little is known about riders or their recreational experiences outside of wilderness. Because horseback trail riding is projected to grow significantly in the next decade and is often experienced on multiple-use trails, information about horseback recreational rider experience is of interest. A mail questionnaire sent to recreational horseback trail riders in Minnesota revealed that motivations for riding were similar to those of other outdoor recreationists. Nearly one-half of riders experienced something that interfered with their recreation experience, and, of those, half indicated that it was stressful and responded by group discussions and following trail riding etiquette. However, nearly one-fifth left the area due to the interference. Opportunities exist to minimize these interfering occurrences identified as conflict and to continue to educate all trail users on appropriate etiquette toward safe and satisfying recreation experiences.

Keywords: equine, horse trail, recreation, conflict, motivation

Horseback trail riding is a growing part of forest recreational experiences. Of the nearly 124,000 miles of horse and pack stock trails in the United States, 85% are managed at the federal level and 78% in “natural settings” (American Horse Council 2005). As of 2012, more than 70 million activity days were spent riding horses on trails in natural forest areas annually, with slightly more than half of this riding occurring in the western United States (Cordell 2012). Horseback riding is expected to grow between 44 and 86% by 2060, with 9% of the US population aged 16 years and older participating (Cordell 2012). Further, the United States is

home to an estimated 9.2 million horses, and nearly half are kept for recreational purposes (American Horse Council 2005). Since 2008, much attention has been given to the horse industry after the closing of horse slaughter facilities and the resulting increase in unwanted horses (Stull 2012). Although horse prices have declined since 2008, primarily for lower-priced horses probably already bound for slaughter, higher-priced horses have maintained their value (General Accounting Office 2011). Despite harsh economic conditions, the recreational horseback trail riding segment of the horse industry should remain viable as people seek participation in horse-related

recreational activities. Given the size and potential growth of this recreational activity, understanding the horseback trail experience is important.

Despite a long history of recreational horseback trail riding on public and private lands, little is known about these recreationists or their recreational experience. Recreational horseback trail riders are unique from other trail user groups in that the horse adds another dimension to consider in the experience. Specifically, horses are “flight” animals and react to real or perceived danger by fleeing the situation (Battaglia 1998). Horses can be easily startled by motorized vehicles, dogs, debris on the trail, and loud or sudden noises. Given the potential growth of horseback riding and riders’ use of multiple-use trails, interest in visitor conflict level is of interest. In 1994, conflicts on multiple-use trails were identified as a high priority by the national trails program and related research subsequently followed (Moore 1994). However, little information regarding nonwilderness horseback trail riders currently exists. Existing information reveals that conflict experienced related to horseback trail riders is typically asymmetrical and that horseback trail

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riders are more often the source of conflict than those experiencing it (Watson and Kajala 1995). Even less information exists on how horseback riders respond to conflict. In fact, no information that documents responses to conflict among horseback trail riders was found in the published literature.

Visitor conflict has been identified as an issue since the 1980s (Hammit 1981), with visitor surveys indicating that up to 40% of visitors have something that interferes with their experience (Schneider 2000). Compared with other types of conflict, resolution of recreation conflict appears high (Floyd et al. 1996). Conceptually, visitor conflict has evolved in its definitions from goal interference to suggestions of origins in values, stress, hassles, or constraints. Initially, visitor conflict was defined as goal interference attributed to another's behavior (Jacob and Schreyer 1980). However, through the end of the 20th century, suggestions arose that visitor conflict was also related to a predisposition to goal interference rather than a specific response to an experience (Watson et al. 1993). Simultaneously, conflict was conceptualized and empirically identified as an actual stress in the visitor experience as conflict causes stress (Schneider and Hammit 1995b) and as a conflict of social value, suggesting that conflict could occur without direct contact between groups and as a result of differences in meanings ascribed to a place or toward management (Vaske et al. 1995, Carothers et al. 2001). In the 21st century, conflict conceptualizations include it as a hassle (Schuster et al. 2006) and as a constraint (Schneider and Wilhelm Stanis 2007).

Visitor responses to conflict can be both emotional and problem focused. Emotion-focused strategies include cognitive responses such as regulating emotions, product shift (i.e., changing the definition of the experience), rationalization (i.e., reevaluating the situation more favorably), and psychological avoidance. In contrast, problem-focused strategies find the individuals taking direct actions such as managing the environment, substitution (i.e., changing the time, place, or type of activity done in an area), or displacement (i.e., moving within the site or leaving the site altogether to avoid the stress). Until 2000, knowledge of actual visitor responses to conflict was rather limited in that the majority of research focused on hypothetical responses (cf. Hammit and Patterson 1991). Since 2000, however,

more studies have focused on actual responses to change such as conflict and results suggest that between 42 and 92% of visitors are temporally displaced due to onsite social conditions (changing the time when they recreate), whereas 15 to 86% are spatially displaced (changing where they recreate) (Hall and Shelby 2000, Schneider 2000, Gramann 2002, Barnett 2004, Johnson and Dawson 2004). None of these studies, however, considered the horseback trail rider.

Given the dearth of information on horseback trail riders and the necessity to understand this potentially growing group, this project sought a deeper understanding of the recreational horseback trail riding experience with an emphasis on recreational conflict. Specifically, the type and occurrence of conflicts were examined among horseback trail riders, as were the type and occurrence of responses to these conflicts.

Methods

A mail questionnaire was used to collect data from a systematically selected sample of state horse pass trail holders in Minnesota. Legislation establishing a horse pass in Minnesota was authorized in 2006. As the law states, while riding, leading, or driving a horse on lands administered by the Commissioner of the Department of Natural Resources (DNR), a person 16 years of age or older shall carry in immediate possession a valid horse pass. Annual passes are valid for 1 calendar year, whereas a daily pass is valid only for the date shown. Horse passes may be purchased from DNR-authorized electronic license service vendors or may be purchased online. The population included state residents who purchased a state horse trail pass in the last 12 months. A total of 804 Minnesota residents were randomly selected, with a systematic start, from this database.

The eight-page questionnaire was de-

veloped based on previous research and included a variety of sections, including sections on motivations and conflict experiences. Specifically, respondents identified the importance of 20 motivations, based on Driver's (1977) classic recreational experience preferences and how often they experienced 12 potential sources of conflict (Schneider 2000, Carothers et al. 2001) and, if they experienced a conflict that was stressful, how they responded to the conflict.

Specifically, respondents identified the importance of 20 motivations using a five-point scale ranging from "very unimportant" to "very important." Respondents reported the occurrence of 11 trail-related conflicts: rude or discourteous users, others passing too closely, others out of control, others going too fast, litter on or near the trail, seeing off-trail/road use, seeing evidence of off-trail/road use (e.g., erosion), too many other users on the trail, hearing other users on the trail, accessibility issues, and others not yielding. Conflict observation was reported on a four-point scale, ranging from "never" to "almost always." Respondents also indicated whether the conflict was stressful. A list of 24 coping items was developed based on past coping research adapted for use in recreational contexts (Schneider and Hammit 1995a, 1995b, Schuster et al. 2006). Using a four-point scale ranging from "do not use" to "use frequently," respondents indicated how often they used each of the 24 coping strategies when experiencing the conflict that "interfered the most" with their trail experience. Examples of coping strategies included "try to forget the whole thing," "stand my ground and fight for what I wanted," and "plan to avoid the area on my next visit." The completed questionnaires were analyzed using SPSS (version 17).

The questionnaire was distributed via the US Postal Service using a modified Dill-

Management and Policy Implications

Eighty-five percent of recreational horseback trail riding occurs on federal lands, and participation in this activity is projected to grow 44 to 86% by 2060. However, minimal information exists about these recreationists. Results from a mail questionnaire sent to recreational horseback riders revealed that opportunities to successfully manage trail experiences for them include (1) planning and developing trails with attention to viewsheds and soundscapes, (2) providing timely and targeted educational messaging regarding the importance of trail etiquette and associated quiet, (3) providing regional riding information to inform trip planning, and (4) identifying and documenting physical activity as part of the experience.

man (2000) technique, which included an initial packet with letter and questionnaire, a postcard reminder 1 week later, and a replacement packet 2 weeks later.

Results

Of the 804 surveys mailed, 14 were returned undeliverable and one addressee asked to be removed from the list, leaving an adjusted sample size of 789. Of these 789 surveys, 473 were returned, resulting in a response rate of 59.9%. Fifteen of the returned surveys were not usable; consequently, 458 surveys were used for subsequent analysis.

Of the 20 possible motivations for horseback riding, 11 were important or very important to more than 75% of respondents. These motivations included “to view the scenery” (96.4%), “to be close to nature” (94.0%), “to get away from the usual demands of life” (93.6%), “to experience nature” (93.1%), “to explore and discover new things” (90.0%), “to relax physically” (89.8%), “to be physically active” (88.0%), “to be with people who enjoy the same things I do” (85.7%), “to rest mentally” (81.8%), “to enjoy different experiences from home” (80.2%), and “to get/keep physically fit” (78.3%) (Table 1).

Of the 12 potential sources of conflict included in the study, only four were experienced by a majority of respondents. More than one-half of the respondents did report “hearing other users on the trail” (75.6%), “litter on or near the trail” (70.3%), “seeing evidence of off-trail/road use” (61.7%), and “seeing off-trail/road use” (55.3%) (Table 2). Less than 48% of trail users reported “rude or discourteous users,” “others going too fast,” “others passing too closely,” “others out of control,” “accessibility issue,” or “too many others on the trail.” Of those who reported anything that interfered the most with their trails experience ($n = 274$; 55.0%), about one-third (31.9%) indicated it was other horseback riders. Slightly more than half of the respondents (52.0%) indicated that the interference was stressful.

The most common strategies used to respond to the interfering experiences were to “talk to other members of my group about the incident” (47.0%), “follow established rules for trail etiquette” (46.6%), and “don’t let it get to me; refuse to think about it too much” (41.4%). Less than one-quarter of the respondents cited “make light of the situation” (23.3%), “express anger to the person who caused the incident” (21.5%),

Table 1. Reasons identified in a mail questionnaire for participating in horseback trail riding in Minnesota.

Reasons for participating	Mean ¹	% identify as important or very important
To view the scenery	4.58	96.4
To be close to nature	4.5	94.0
To get away from the usual demands of life	4.61	93.6
To experience nature	4.45	93.1
To explore and discover new things	4.4	90.0
To relax physically	4.38	89.8
To be physically active	4.28	88.0
To be with people who enjoy the same things I do	4.28	85.7
To rest mentally	4.14	81.8
To enjoy different experiences from home	4.11	80.2
To get/keep physically fit	4.03	78.3
To experience silence and quiet	3.9	74.9
To be with members of my own group	3.9	71.9
To do something with my family	3.99	70.8
To experience solitude	3.95	70.2
To challenge myself	3.68	60.3
To test my skills and abilities	3.58	56.4
To be on my own	3.44	50.3
To have thrills and excitement	3.37	46.9
To be away from other people	3.18	37.9

¹ Measured on a scale where 1 = Very unimportant, 2 = Unimportant, 3 = Neither, 4 = Important, and 5 = Very important.

Table 2. Prevalence of potential sources of conflict observed by horseback trail riders on Minnesota trails and stress associated with each conflict.

Source of potential conflict	% of respondents who observed source of potential conflict ¹	% of respondents who cited conflict as stressful ²
Hearing other users on the trail	75.6	33.3
Litter on or near the trail	70.3	20.0
Seeing evidence of off-trail/road use	61.7	42.9
Seeing off-trail/road use	55.3	43.8
Rude or discourteous users	48.0	67.5
Others going too fast	41.1	87.5
Others passing too closely	41.1	42.9
Others out of control	40.0	77.8
Accessibility issue	35.1	39.4
Others not yielding	33.3	50.0
Too many others on the trail	31.6	50.0
Other	30.2	69.9

¹ Respondents had the opportunity to report the observation of more than one source of potential conflict, if necessary. Responses were measured on a scale where 0 = never, 1 = sometimes, 2 = many times, and 3 = almost always; respondents had a “don’t know” option as well.

² Respondents were asked whether the sources of conflict were stressful when encountered with a dichotomous yes or no choice.

“alter my pace to avoid others” (20.1%), or “leave the area altogether” (17.1%) as a response strategy to the conflict (Table 3).

Discussion

A mail questionnaire about the horseback trail rider experience revealed both management opportunities and challenges related to recreational motivations and visitor conflict. Although this group of trail users has motivations for recreation and responses to conflict similar to those of other outdoor recreation trail users, their conflict experiences appeared more stressful than

those of other trail users (Schneider 2000, Schneider et al. 2009).

The set of motivations identified as important for horseback trail riding mirrors decades of research on experience preferences. The opportunity to enjoy the scenery in a natural setting and escape everyday life are common for many trail experiences, particularly those in forested environments (Bowker et al. 2004a, 2004b, Schneider et al. 2009). The emphasis on the motivation to view scenery highlights the importance of visual resource management for all visitor types and eye levels. The viewshed for users

Table 3. Coping strategies used by horseback trail riders in response to various sources of conflict encountered during trail riding activity on Minnesota trails.

Coping strategies	% use of coping strategy [†]
Talk to other members of my group about the incident	47.0
Follow established rules for trail etiquette	46.6
Don't let it get to me; refuse to think about it too much	41.4
Refuse to get too serious about it	41.0
Think about why the incident occurred	39.6
Wish the situation would go away or be over with	37.0
Go on as if nothing bad happened	38.6
Try not to burn bridges	35.5
Try to forget the whole thing	35.1
I try to keep my feelings to myself	33.1
Come up with a couple of different solutions	30.9
Change the time I will horseback ride next time	30.7
I make a plan of action and follow it	30.1
Talk to area personnel about the incident	30.1
Stand my ground and fight for what I wanted	27.3
I know what has to be done so I double my efforts to make it work	25.3
Leave the area and go to a different part of the area	25.3
Plan to avoid the area on my next visit	25.3
Keep others from knowing how bad things were	24.9
Make light of the situation	23.3
Try to get the person responsible to change their mind	23.3
Express anger to the person who caused the incident	21.5
Alter my pace to avoid others	20.1
Leave the area altogether	17.1

[†] Respondents had the opportunity to report using more than one coping strategy, if applicable. Responses were measured on a scale where 0 = did not use, 1 = use infrequently, 2 = use occasionally, and 3 = use frequently.

both walking and those elevated on horseback increases in importance in planning and maintenance of multiple use trails.

One potentially unexpected finding was the importance of physical activity as a motivation for horseback trail riders: nearly four of five riders indicated that physical activity was an important reason to ride. Given the 2002 Presidential Executive Order mandating that federal land agencies promote the use of recreation for improved health (Exec. Order No. 13266) and the recent assessment of physical activity on forestlands (Kline et al. 2011), the importance of physical activity for horseback trail riders presents an opportunity to capture and docu-

ment the breadth of benefits associated with horseback trail riding. In the most recent assessment of net energy per visit on national forest lands, horseback riding was the 10th highest on the list of 28 activities assessed (Kline et al. 2011). If horseback trail riding increases as projected (Cordell 2012), it is possible the net energy expended will increase proportionately. Both horseback riders and trail managers can pay attention to this health benefit and seek resources to support it accordingly. For example, efforts to document the benefits of trails could include the actual or projected net energy expenditures from horseback trail riding.

Half of the recreational horseback trail riders identified a conflict that interfered with their experience and was stressful. Compared with the experiences of other types of trail visitors, the conflict frequency and stress attributions were both higher (Schneider et al. 2009). Although litter and off-trail uses commonly incite conflict among recreationists, particularly unique among horseback riders was the frequency of hearing others on the trail. In fact, horseback trail riders were second only to cross-country skiers in the importance attributed to the opportunity for silence and quiet (Schneider et al. 2009). Perhaps this conflict was rated high because loud or foreign noises can startle or scare a horse, inciting a flight response (Battaglia 1998) that can result in an accident or injury to the horse, rider, or other trail users. Thus, enhancing awareness of the importance of quiet, as detailed in the Leave No Trace principles (Leave No Trace Center for Outdoor Ethics), and providing detailed actions regarding how to maintain that quiet may be essential to protect and enhance the quality of horseback trail-riding experiences, as well as other recreational experiences.

In addition to the importance of experiencing quiet, horseback riders have unique safety concerns compared with those of other trail users related to their activity as well as the multiple-use trails they often ride. On a positive note, trail density was not identified as interfering by the majority of respondents, thus minimizing direct conflicts. Of course, as recreational horseback riding increases, monitoring perceived density levels may be important to ensure that this remains the case.

In response to experiencing conflict, respondents indicated that they commonly followed trail etiquette. Among horseback riders, several commonly understood eti-

quette practices are encouraged for horseback trail riding such as leaving dogs at home, riding single file with one horse length between riders on narrow trails, keeping to the right when passing others, not passing others at high rates of speed, placing less experienced riders and horses in the middle of a group, calling out cautions when necessary, avoiding making unnecessary loud sounds or rapid movements, remaining on designated trails, and tying a red ribbon on the tail of a horse known to kick. Trail etiquette is a reflection of the horse owner's knowledge of horse behavior; however, other trail users may not be aware of commonly used horseback trail riding etiquette or have basic horse behavior knowledge. By understanding and adhering to these etiquette practices, the noise and litter frequently cited as conflicts would be reduced.

Subsequently, expanding both understanding and dissemination of common trail etiquette information for all users seems appropriate to enhance not only the horseback trail rider experience but all recreation experiences. As communication continues to evolve with technological advances, visitor communication remains an ongoing challenge but an essential element of visitor management. Because persuasive information and education are most effective for changing the behaviors of new, uninformed, or unskilled visitors (Roggenbuck 1992), interesting and appealing delivery designed for new or novice users is most likely to be effective. For the more experienced recreationist, successful campaigns should include specific messages that appeal to their sense of responsibility to follow trail etiquette. Opportunities to engage local riders in volunteer patrols or as area ambassadors may be effective.

Among these respondents, strategies to respond to conflict primarily involved group conversations and following trail etiquette. However, 25% indicated they moved within an area and planned to avoid the area during their next trip, and one in five was displaced and left the area altogether. Determining whether the number of respondents displaced is too high or acceptable is a management decision. Certainly, adding the level of conflict and types of responses to conflict to the application of frameworks such as limits of acceptable change is one management approach. Regardless of the decision regarding acceptability, the emphasis on disseminating trail etiquette information remains high. Further, understanding that visitors will

avoid areas sheds new light on the type and amount of information that can be shared about trail use. For example, providing information about regional riding opportunities can both disperse use and inform readers about alternative site options.

Arguably, “the role of science is to help managers accomplish the objective of constructive conflict management by informing them about the likelihood of success and the costs associated with different management actions” (Watson and Kajala 1995, p. 253). This project brought forth data from one particular state to expand the limited information that currently exists about recreational horseback trail riders. Certainly limitations to this project exist, including the general rather than detailed examination of conflict situations and its sample from only one state. Further research with ample resources is encouraged to provide more details on specific conflict incidents, consider the breadth and depth of the experience with qualitative work, and expand the sample geographically.

Despite the limitations, results indicate that opportunities to successfully manage for the recreational horseback trail rider include planning and developing trails with attention to view sheds and soundscapes, providing timely and targeted educational messaging regarding the importance of trail etiquette and quiet, and identifying and documenting physical activity as part of the experience. Further, framing the information in the recreation conflict literature revealed that equestrians experience similar types of conflict and respond like other trail users but have higher assessments of conflict as stressful. Certainly learning more about these experiences is imperative to trail managers, particularly as this user group grows.

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