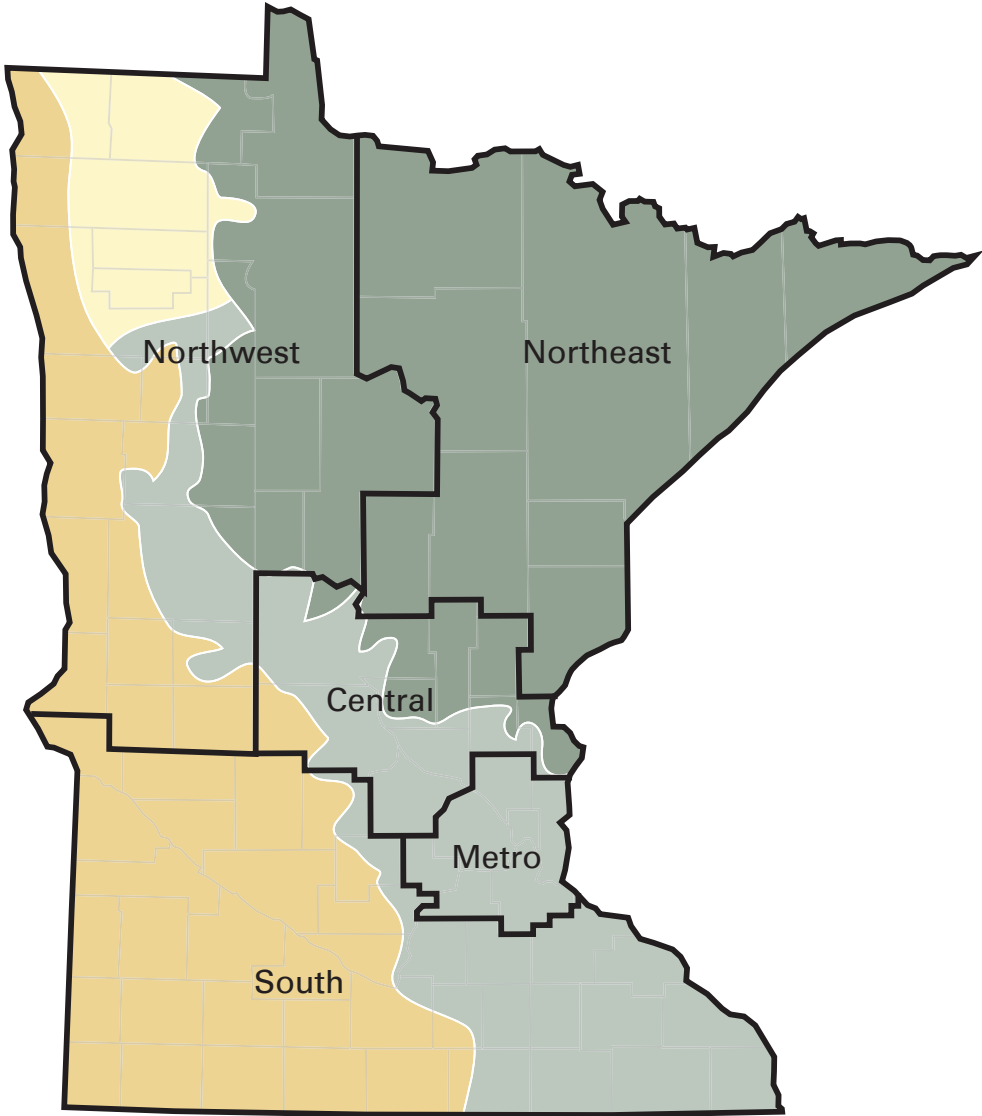


Minnesota's Network of Parks & Trails

An Inventory of Recreation Experience
Opportunities in Minnesota:

Northeast Region Profile



Draft Report
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Introduction

The University of Minnesota's Center for Changing Landscapes (CCL) was directed by the Minnesota Legislature to create a long-range Framework for an integrated statewide parks and trails system. The Framework considers existing science and information available on the natural resource-based recreation opportunities throughout the state and will guide statewide parks and trail planning into the future. Specifically, the Framework will respond to recreational trends and demographic changes, examine underserved areas and overused facilities, and will identify gaps in the current parks and trails system. As such, the framework will establish opportunities to enhance existing assets, develop new assets, and link those assets together effectively. To inform the Framework, an inventory of recreation experience opportunities was conducted in each of five regions across the state and is presented in a series of five regional profiles. The regional profiles offer a snapshot of existing recreation demand by examining county, regional and state population sociodemographic characteristics and recreation experience opportunity data available from past research and monitoring efforts. The profiles serve as the baseline for an in-depth analysis of current demand and existing recreation supply (e.g., parks and trail system) in light of (1) relative geographic distribution of resources and facilities, (2) future recreation demand projections (e.g., population sociodemographic and recreation participation), and (3) proposed or planned enhancements to the parks and trails system across the state. This report presents a profile of recreation experience opportunities in the Northeast Region.

This inventory takes into account several key components of an outdoor recreation opportunity including recreation activities, experiences, and potential constraints. Minnesotans engage in a broad spectrum of activities (e.g., boating or picnicking) in Minnesota's parks and trails and these activities afford recreationists a wide range of individual and social experiences (e.g., solitude or being with family). Understanding and managing for the recreation experiences parks and trails visitors seek and attain is important, because high quality experiences can bring about positive psychological outcomes both onsite (e.g., reducing tension) and off-site (e.g., higher productivity at work) to individuals (Driver, 2008). For instance, a 1993 study conducted in six Minnesota State Parks revealed that many recreationists visit parks to experience natural scenery, enjoy the smells and sounds of nature, be with members of their own group, and get away from the usual demands of life (Anderson, 2008). However, in some circumstances these experiences were not fully attained because of the constraints visitors encountered. Some State Park visitors reported problems related to noise, crowding, motorized use, litter, and full campsites. As was confirmed by the State Park study, certain setting attributes or conditions can constrain outdoor recreation opportunities and present problems to visitors. Thus, an integrated parks and trails system must consider both the quality of recreation settings and the quality of recreation experiences visitors have in those settings. More recent studies have shown that parks and trails can also benefit local communities and society (Anderson, Davenport, Leahy, & Stein, 2008). For example, communities can benefit from proximate parks and trails through economic revenue from increased tourism, an enhanced community identity, and higher quality of life for residents. Society benefits from the ecosystem services many recreation and conservation areas provide such as flood control, climate regulation, and air and water purification (Millennium Ecosystem Assessment, 2005).

To inventory recreation experience opportunities and recreation demand across the state, multiple attributes associated with the key components of an outdoor recreation opportunity described above, as well as important population sociodemographic characteristics were selected. These attributes were chosen to embody the range and diversity of recreation opportunities available in the state and Minnesota's diverse population (Appendix 1). To remain current, the recreation experience opportunity component was restricted to published data obtained through research and monitoring efforts conducted in nature-based outdoor recreation settings (i.e., forests, parks, and trails) since 2000.

Recreation Experience Opportunity Inventory Protocol

The recreation experience opportunity inventory was conducted systematically, following specific protocol to ensure consistency in data compilation, analysis and reporting. The inventory assesses previously conducted research and monitoring studies; thus no new data were collected for this inventory.

The recreation experience opportunity inventory tasks were to

- Establish a recreation experience opportunity inventory protocol
- Select recreation experience opportunity and sociodemographic attributes for analysis
- Compile recreation, monitoring and sociodemographic reports conducted in the state since 2000
- Organize data by county and regions
- Assess recreation research, monitoring studies, and sociodemographic data to identify county, regional, and state differences.

The recreation experience opportunity inventory protocol is based on a review of relevant recreation literature and planning documents and responds to the Framework objectives outlined by the Minnesota Legislature. Multiple attributes were selected to embody Minnesota's population diversity and the range of recreation opportunities available (Appendix 1). U.S. Census, Minnesota Demographic Center, and recreation research and monitoring reports were obtained through an intensive literature review and in collaboration with state and local officials and stakeholders. Data associated with the selected attributes were analyzed to identify reported frequencies or population proportions at the county, regional and state level (where available) and the magnitude of differences (positive or negative) in frequencies or proportions where available (e.g., population densities, median household income, recreation activity participation). Of specific interest were differences between (1) the counties and the region overall, (2) the counties and the state overall, and (3) between the region and the state overall. For site-specific recreation studies, data were analyzed to determine reported recreation activity participation, experiences sought and/or attained, and problems encountered by respondents.

Northeast Region Profile

The Northeast Region consists of 9 counties bordered by Crow Wing, Aitkin and Pine in the south and Koochiching, Itasca, Aitkin and Crow Wing on the west (see Appendix 2; Figure 2.1). In the Northeast Region a total of seven recreation experience opportunity studies conducted since 2000 were available for analysis: three region-wide studies, two county-specific, and two site-specific studies (see Appendix 3 for list of studies and sites).

Sociodemographics

Population Size and Density

In 2005, the population of the Northeast Region was about 415,000 people and accounted for about 8 percent of Minnesota's population (Table 1). Population projections, using 2005 population statistics, predict that by 2035 the Northeast region will grow by 12.7 percent but will only account for about 7 percent of Minnesota's overall population. The counties with the highest projected growth are Carlton, Crow Wing, and Pine. In contrast, Koochiching County is projected to experience a decline in its population by about 8 percent. The population density of the Northeast Region (19.9 persons per square mile) is considerably less than that of the State overall (61.8 persons per square mile; Table 2). Crow Wing, Carlton and St. Louis Counties have the highest population densities in the Region. Cook, Koochiching and Lake Counties have the lowest population densities.

Table 1
Projected Minnesota Northeast Region Population by County, 2005 to 2035

County	2005 Estimate	2035 Projection	% Change 2005-2035
Aitkin	16,319	19,630	20.3
Carlton	34,393	46,580	35.4
Cook	5,419	6,320	16.6
Crow Wing	60,556	81,610	34.8
Itasca	44,817	48,590	8.4
Koochiching	14,043	12,980	-7.6
Lake	11,262	12,320	9.4
Pine	28,795	37,030	28.6
St. Louis	199,103	202,240	1.6
NE Region	414,707	467,300	12.7
Minnesota	5,192,122	6,446,270	24.2

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences. Minnesota State Demographic Center (2007)

Age and Gender

In general, the population of the Northeast Region is older than that of Minnesota as a whole. All of the counties in the region have a greater proportion of older residents (residents 65 years of age or older) than the State. The counties with the greatest proportion of older residents are Aitkin, Lake and Koochiching (Table 2). Similarly, the Northeast Region has a smaller proportion of younger residents (residents under 18 years of age) than Minnesota overall. Cook, Lake, and Aitkin Counties have the lowest percentage of younger residents, while Crow Wing, Carlton and Pine have the highest percentage—slightly higher than the Northeast Region overall. Gender does not vary significantly between the counties and the Northeast Region or the State. Minnesota’s proportion of female residents overall is 50.2 percent.

Median Household Income

The median household income in the Northeast Region is about 22 percent less than the median household income in Minnesota overall. Carlton, Lake and Cook Counties have the highest median incomes in Northeast Region. Aitkin, Koochiching, and Crow Wing Counties have the biggest gap in median incomes when compared to the Region and State incomes (Table 2).

Table 2
Differences between Northeast Counties and the Northeast Region/State Overall in Density, Age, and Household Income

Attribute	Difference in Persons / sq mile*		Difference in Persons < 18 (%)**		Difference in Persons >= 65 (%)**		Difference in Median household income (\$)***	
	NE	MN	NE	MN	NE	MN	NE	MN
County	NE	MN	NE	MN	NE	MN	NE	MN
Aitkin	-11.5	-53.4	-1.5	-5.1	8.5	13.0	-4,670	-17,054
Carlton	16.9	-25.0	1.9	-1.7	-2.0	2.5	6,336	-6,048
Cook	-16.3	-58.2	-2.9	-6.5	0.4	4.9	879	-11,505
Crow Wing	35.4	-6.5	2.1	-1.5	1.0	5.5	-1,265	-13,649
Itasca	-3.4	-45.3	0.4	-3.2	1.3	5.8	342	-12,042
Koochiching	-15.3	-57.2	-0.6	-4.2	3.2	7.7	-1,316	-13,700
Lake	-14.6	-56.5	-1.8	-5.4	3.7	8.2	3,226	-9,158
Pine	-1.1	-43.0	0.9	-2.7	-1.2	3.3	529	-11,855
St. Louis	12.3	-29.6	-0.8	-4.4	-1.3	3.2	-582	-12,966
	NE	MN	NE	MN	NE	MN	NE	MN
Region and State Values:	19.9	61.8	20.4	24.0	17.0	12.5	43,280	55,664

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences for each attribute

*U.S. Census Data (2000)

**U.S. Census Data (2009)

***U.S. Census Data (2007)

Race and Ethnicity

Nine of ten (89%) Minnesotans are white. Similarly, the percentage of white residents in the Northeast Region is equal to or exceeds Minnesota percentages overall in 8 of 9 counties. However, 7 counties in the Northeast Region have higher proportions of American Indian or Alaska Native residents than the state. Cook, Carlton and Itasca counties have the highest proportion of American Indian or Alaska Native residents in the Region. The Northeast Region overall has a smaller proportion of black, Asian, and Hispanic or Latino residents than the State.

Table 3
Differences between Northeast Counties and the Northeast Region/State Overall in Race and Ethnicity

Attribute	Difference in White (%)		Difference in Black (%)		Difference in American Indian / Alaska Native (%)		Difference in Asian (%)		Difference in Hispanic / Latino (%)	
	NE	MN	NE	MN	NE	MN	NE	MN	NE	MN
County										
Aitkin	1.3	6.8	-0.6	-4.3	0.1	1.5	-0.4	-3.3	-0.1	-3.1
Carlton	-3.6	1.9	0.2	-3.5	3.1	4.5	-0.1	-3.0	0.1	-2.9
Cook	-6.0	-0.5	-0.6	-4.3	5.8	7.2	-0.3	-3.2	0.6	-2.4
Crow Wing	2.6	8.1	-0.3	-4.0	-1.7	-0.3	-0.1	-3.0	-0.1	-3.1
Itasca	-0.4	5.1	-0.6	-4.3	1.1	2.5	-0.3	-3.2	-0.2	-3.2
Koochiching	0.8	6.3	-0.4	-4.1	0.0	1.4	-0.4	-3.3	-0.3	-3.3
Lake	3.2	8.7	-0.8	-4.5	-1.7	-0.3	-0.4	-3.3	-0.4	-3.4
Pine	-0.9	4.6	0.8	-2.9	0.5	1.9	-0.2	-3.1	1.2	-1.8
St. Louis	-0.2	5.3	0.3	-3.4	-0.4	1.0	0.2	-2.7	-0.1	-3.1
	NE	MN	NE	MN	NE	MN	NE	MN	NE	MN
Region and State Values:	94.5	89.0	0.9	4.6	2.6	1.2	0.6	3.5	1.1	4.1

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences for each attribute. U.S. Census Data (2009)

Participation in Recreation Activities

According to a recent state-wide recreation participation study (Kelly, 2005), the recreation activities Northeast Region residents most frequently participate in are walking or hiking, boating, swimming and driving for pleasure, which parallel state-wide participation figures (Table 4). However, Northeast Region residents participate to a greater extent than State residents overall in gathering mushrooms, berries or other wild foods, ATV driving, and snowmobiling. Northeast Region residents are less likely to participate than State residents as a whole in biking, golfing, walking/hiking, or running and jogging. A similar study specific to Itasca County residents was conducted in 2002 (Itasca County, 2002). According to this study, Itasca County residents most frequently participate in fishing, hunting and camping (Table 5).

Table 4
Recreation Activity Participation by Region and State

Activity	Northeast (%)	Statewide (%)	Difference (%)
Walking/hiking	49	54	-5
Boating of all types, including fishing from a boat	42	43	-1
Swimming or wading (all places)	38	41	-3
Driving for pleasure on scenic roads or in a park	37	37	0
Picnicking	36	36	0
Fishing of all types	34	30	4
Biking (bicycling of all types, including mountain biking)	20	29	-9
Camping of all types	32	26	6
Visiting nature centers	21	25	-4
Nature observation of all types (e.g., viewing, identifying)	24	24	0
Golfing	17	24	-7
Outdoor field sports (e.g., soccer, softball/baseball, football)	20	21	-1
Visiting historic or archaeological sites	19	21	-2
Sledding and snow tubing	16	18	-2
Outdoor court sports (e.g., volleyball, basketball, tennis)	13	18	-5
Hunting of all types	23	16	7
Running or jogging	9	14	-5
Ice skating/hockey outdoors	8	12	-4
Inline skating, rollerblading, roller skating, roller skiing	5	11	-6
Off-road ATV driving	19	10	9
Snowmobiling	18	10	8
Downhill skiing/snowboarding	5	9	-4
Gather mushrooms, berries, or other wild foods	19	9	10
Cross country skiing	6	7	-1
Horseback riding	4	5	-1
Snowshoeing	8	4	4

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences (more than three highlighted shades represent ties among differences).

Kelly, T. (2005). Data based on population 20 years of age and older

Table 5
Outdoor Activity Participation of Itasca County Residents

Activity	% of Respondents	Frequency (n=195)
Fishing	17.9	35
Hunting	9.2	18
Camping	8.7	17
Bicycle riding	8.2	16
ATV riding	7.7	15
Snowmobile riding	6.2	12
Motor-boating	6.2	12
Walking	5.1	10
Cross country skiing	5.1	10
Hiking	5.1	10
Outdoor athletics/sports	5.1	10
Golfing	3.6	7
Parks/playgrounds	3.6	7
Picnicking	2.1	4
Canoeing	1.5	3
Horseback riding	1.0	2
Auto touring	1.0	2
Swimming	1.0	2
Kayaking	0.5	1
Jet-skiing	0.5	1
Wildlife viewing	0.5	1

Itasca County (2002)

Recreation activities were reported by visitors surveyed at the Lake Superior Water Trail and Finland State Forest (Kelly, 2009; MN DNR, 2001). Camping was a popular activity at both sites while the remaining activities were unique to the individual sites (Table 6).

Table 6
Recreation Activity Participation Documented at Recreation Sites in the Northeast Region

Activity	Lake Superior Water Trail (& shore)	Finland State Forest
Camping	x	x
Kayaking	x	
Nature observation	x	
Sight seeing	x	
Photography	x	
Fishing		x
Hiking/walking		x
OHV riding		x
Hunting		x

Note: Five most frequently reported recreation activities respondents participated in at each site. Kelly, T. (2009) & MN DNR (2001)

Nature-Based Tourism in the Northeast Region

The most recent nature-based tourism study indicates 5.8 million person-visits to the Northeast Region¹ from June 2007-May 2008 (Davidson-Peterson, 2008). The majority of these visitors are Minnesota residents (66%), with the largest segment coming from the Minneapolis/St.Paul area (48%) and the next largest segment coming from the Duluth/Superior area (18%). One of three visitors visited a state or national park and one of ten overnight visitors stayed at campgrounds. Two-thirds (66%) of visitors indicated participating in one or more recreational activities. The most common activities were hiking (34%), pool swimming (16%) and fishing (12%; Table 7).

¹ The designated Northeast Region comprises all of the counties in the DNR Northeast Region except Crow Wing and in addition to Isanti and Kanabec.

An Inventory of Recreation Experience Opportunities in Minnesota: Northeast Region Profile, DRAFT, updated May 2010

Table 7
Recreation Participation amongst travelers to the Northeast Region of Minnesota, 2005-2008

Activity	% Recreation Participation
Hiking	34
Pool swimming	16
Fishing	12
Wildlife viewing or bird watching	12
Biking	9
Lake/river swimming	9
Canoeing	6
Downhill skiing or snowboarding	6
Golfing	5
Snowmobiling	4
Motor boating/water skiing	3
Cross-country skiing	2
Hunting	2
Ice Fishing	1

Davidson-Peterson (2008)

Recreation Experiences

Recreation Experience Motivations

A recent trail study revealed that statewide, Minnesota’s recreational trail users are primarily motivated by aesthetics, physical exercise and escape (Schneider, Schuweiler, & Bipes, 2009). While motivations across the state were similar, some regional differences were noted. The largest regional differences in the experiences sought were that Northeast trail users report “to experience solitude” as more important and “to view the scenery” or “to get away from the usual demands of life” as less important than statewide trail users.

Table 8
Differences between Northeast Region and Statewide Trail Users in Experiences Sought

Reasons for participating	Average Importance ^a among Trail Users ^b		
	Northeast (n ≥ 565)	State (n ≥ 3023)	Difference
To view the scenery	4.17	4.27	-0.10
To be physically active	4.14	4.15	-0.01
To be close to nature	4.14	4.19	-0.05
To experience nature	4.09	4.16	-0.06
To get away from the usual demands of life	4.09	4.19	-0.10
To explore and discover new things	3.98	4.05	-0.07
To relax physically	3.92	3.92	0.00
To do something with my family	3.88	3.90	-0.02
To get/keep physically fit	3.86	3.91	-0.05
To enjoy different experiences from home	3.74	3.81	-0.07
To experience solitude	3.71	3.65	0.06
To be w/people who enjoy the same things I do	3.69	3.70	-0.01
To rest mentally	3.67	3.72	-0.05
To experience silence & quiet	3.54	3.51	0.03
To challenge myself	3.34	3.43	-0.09
To be on my own	3.29	3.26	0.02
To be with members of my own group	3.28	3.33	-0.04
To have thrills & excitement	3.18	3.26	-0.07
To test my skills & abilities	3.10	3.19	-0.09
To be away from other people	3.09	3.07	0.03

^aBased on respondents rating experiences on a scale of 0-5 with 1=very unimportant, 2=unimportant, 3=neither, 4=important, 5=very important.

^bNine types of trail users surveyed include: All-terrain vehicle riders, bikers, cross-country skiers, horseback riders, off-highway vehicle riders, off-road vehicle riders, snowmobilers, runners, and walkers/hikers.

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences in each column. More than 3 indicate a tie. Schneider et al. (2009)

Site-specific recreation experience data were limited to two sites, Finland State Forest and Lake Superior Water Trail (Kelly, 2009 & MN DNR, 2001). The four recreation experiences shared by both locations included enjoying natural scenery, getting away from crowds, enjoying the smells and sounds of nature, and experiencing silence and quiet (Table 9). In addition to site-specific data, countywide experience information was available for Itasca County. Itasca County residents overwhelmingly agreed or strongly agreed with the four recreation benefits presented: provide opportunities for families to spend time together (98.5%), improve quality of life (96.9%), contribute to the economy of the region (95.4%), and preserve the natural resources of the county (86.2%; Itasca County, 2002).

Table 9
Experiences Sought at Recreation Sites in the Northeast Region

Recreation experience sought	Lake Superior Water Trail	Finland State Forest				
	Kayakers	All users	Campers	Hikers	Hunters	OHV riders
Enjoy natural scenery	x	x	x	x	x	x
Get away from crowds	x	x	x	x	x	x
Enjoy smells & sounds of nature	x	x	x	x	x	
Get away from life's usual demands		x	x	x	x	x
Experience silence & quiet	x	x		x	x	
Experience fresh air	x					
Rest mentally			x			
Spend leisure time with family						x
Explore & discover new things						x

Note: Five most frequently reported experiences respondents sought at each site. OHV=Off-highway Vehicle
 Kelly, T. (2009b) & MN DNR (2001)

Problems or Constraints Encountered

Among Minnesota recreational trail users, conflicts happen infrequently, but when they do occur they most often originate with the signs or sounds of other visitors (Schneider et al., 2009). Trail users in the Northeast rated the frequency of encountering conflicts similarly to statewide trail users. The greatest regional differences are that Northeast trail users more frequently reported “seeing off trail/road use” and less frequently reported “too many other users on the trail” (Table 10).

At the two sites in the Northeast with data on recreation problems, Boundary Waters Canoe Area Wilderness and Finland State Forest, a variety of issues emerged (Table 11). However, common problems included: number of people encountered, environmental effects due to recreation users, litter, and a shortage of campsites. In addition to these two sites, winter recreation activity problems were assessed for Cook County. Less than three percent of residents found problems with cross country skiers and problems noted were related to conflict with snowmobile use, for example, skiers oppose snowmobile use/trails, ski on snowmobile trails and have more trails than snowmobilers (Greag & McTavish, 2003). Up to one third of Cook County residents did find problems with snowmobile use, including noise, driving on private property, and driving off trails (Table 11).

Table 10
Differences between Northeast Region and Statewide Trail Users in Sources of Recreational Conflict

Source of Conflict	Average Frequency of Conflict ^a among Trail Users ^b		
	Northeast (n ≥ 509)	State (n ≥ 2697)	Difference
Hearing other users on the trail	0.99	1.01	-0.03
Seeing evidence of off trail/road use	0.93	0.87	0.06
Litter on or near the trail	0.92	0.85	0.07
Seeing off trail/road use	0.86	0.74	0.12
Others going too fast	0.60	0.56	0.04
Rude or discourteous users	0.49	0.49	-0.01
Others passing too closely	0.46	0.46	0.00
Others not yielding	0.45	0.46	-0.01
Accessibility issue	0.42	0.43	0.00
Too many other users on the trail	0.40	0.46	-0.07
Others out of control	0.36	0.37	-0.01

^aBased on respondents rating sources on a scale of 0-3 with 0=Never, 1=Sometimes, 2=Many Times, 3=Almost Always. ^bNine types of trail users: All-terrain vehicle riders, bikers, cross-country skiers, horseback riders, off-highway vehicle riders, off-road vehicle riders, snowmobilers, and walkers/hikers.

Note: Cell shading indicates the 2 positive (dark) and 2 biggest negative (light) differences. Schneider et al. (2009)

Table 11
Problems Encountered at Recreation Sites in the Northeast Region

Problems Encountered	Boundary Waters Canoe Area Wilderness		Finland State Forest					Cook County
	Overnight users	Day users	All users	Campers	Hikers	Hunters	ORV riders	Residents (towards snow- mobilers)
Number of people encountered	x	x					x	
Congestion at portages	x	x						
Lack of info on where other users like to be	x	x						
Fire hazard from downed trees		x						
Lack of cellular phone access inside the forest			x	x	x	x	x	
Environmental effects due to recreation users	x		x	x	x	x		
Litter		x	x	x		x	x	
Noise			x	x		x		x
Lack of drinking water in the forest					x	x	x	
Environmental effects on forest from logging			x		x		x	
Visual impact on forest from logging			x		x		x	
Shortage of campsites	x		x	x				
Driving on private property								x
Driving off trails								x
Speeding or reckless driving								x
Air pollution or fuel smell								x

Five most frequently reported problems respondents encountered at each site (more than five activities presented represent ties among problems. ORV=Off-road Vehicle.

Kelly, T. (2009), Dvorak et al. (2008), and Kreag & McTavish (2003).

In response to problems or conflicts, Minnesota trail users utilized a variety of responses, but most frequently “follow established rules for trail etiquette” (Schneider et al., 2009). Similarly in the Northeast region, trail participants use a variety of responses when they encounter recreation conflict (Table 12). The largest regional differences in responses to conflict are that Northeast trail users more likely “don't let it get to me; refuse to think about it too much,” and less likely to “come up with a couple of different solutions” than statewide trail users.

Table 12
Differences between Northeast Region and Statewide Trail Users in Response to Recreational Conflict

Response	Response to Conflict ^a among Trail Users ^b		
	Northeast (n ≥ 292)	State (n ≥ 1491)	Difference
Follow establish rules for trail etiquette	2.45	2.45	0.00
Talk to other members of my group about the incident	1.91	1.87	0.04
Don't let it get to me; refuse to think about it too much	1.85	1.72	0.13
Refuse to get too serious about it	1.74	1.71	0.03
Wish the situation would go away or be over with	1.57	1.50	0.07
Think about why the incident occurred	1.56	1.49	0.07
Try not to burn bridges	1.55	1.49	0.06
Try to forget the whole thing	1.51	1.42	0.09
Go on as if nothing had happened	1.47	1.48	-0.01
I try to keep my feelings to myself	1.34	1.35	-0.01
Make light of the situation	1.26	1.25	0.01
I know what has to be done so double my efforts to make it work	1.16	1.22	-0.06
I make a plan of action and follow it	1.02	1.09	-0.07
Talk to area personnel about the incident	0.98	1.00	-0.02
Alter my pace to avoid others	0.95	0.98	-0.03
Come up with a couple of different solutions	0.92	1.02	-0.10
Leave and go to a different part of the area	0.92	0.98	-0.06
Change the time I will use the trail next time	0.86	0.85	0.01
Keep others from knowing how bad things were	0.82	0.82	0.00
Stand my ground and fight for what I wanted	0.82	0.79	0.03
Plan to avoid the area on my next visit	0.81	0.89	-0.08
Try to get the person responsible to change their mind	0.72	0.71	0.01
Express anger to the person who caused the incident	0.63	0.61	0.02
Leave the area altogether	0.63	0.68	-0.05

^aBased on respondents rating responses on a scale of 0-3 with 0=Do not use, 1=Use infrequently, 2=Use occasionally, 3=Use frequently

^bEight types of trail users: All-terrain vehicle riders, bikers, cross-country skiers, horseback riders, off-highway vehicle riders, snowmobilers, and walkers/hikers.

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences. More than 3 indicate a tie. Schneider et al. (2009)

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Appendices

Appendix 1

**Table 1.1
Recreation Experience Opportunity Inventory Attributes**

Recreation activity participation	
Recreation activity participation	Region or state-wide: <ul style="list-style-type: none"> • Percent participation Site-specific: <ul style="list-style-type: none"> • Five most frequently reported activities
Recreation experiences	
Experiences (sought or attained)	Region or state-wide: <ul style="list-style-type: none"> • Percent respondents rating experiences as important or very important Site specific: <ul style="list-style-type: none"> • Five most frequently reported important experiences
Problems encountered or sources of conflict	Region or state-wide: <ul style="list-style-type: none"> • Percent respondents reporting conflict source Site-specific: <ul style="list-style-type: none"> • Five most frequently reported problems or sources of conflict
Responses to conflict	Region or state-wide: <ul style="list-style-type: none"> • Percent respondents reporting response Site-specific: <ul style="list-style-type: none"> • Five most frequently reported responses to conflict
Sociodemographics	
Population size	County, Region, and State
Population density	County, Region, and State: <ul style="list-style-type: none"> • Persons per square mile
Age	County, Region, and State: <ul style="list-style-type: none"> • Persons < 18 years of age • Persons ≥ 65 years of age
Gender	County, Region, and State: <ul style="list-style-type: none"> • Percent female
Race and ethnicity	County, Region, and State (percent): <ul style="list-style-type: none"> • White • Black • American Indian/Alaska Native • Asian • Hispanic/Latino

Appendix 2

Counties in the Northeast Region

Aitkin
Carlton
Cook
Crow Wing
Itasca
Koochiching
Lake
Pine
St. Louis

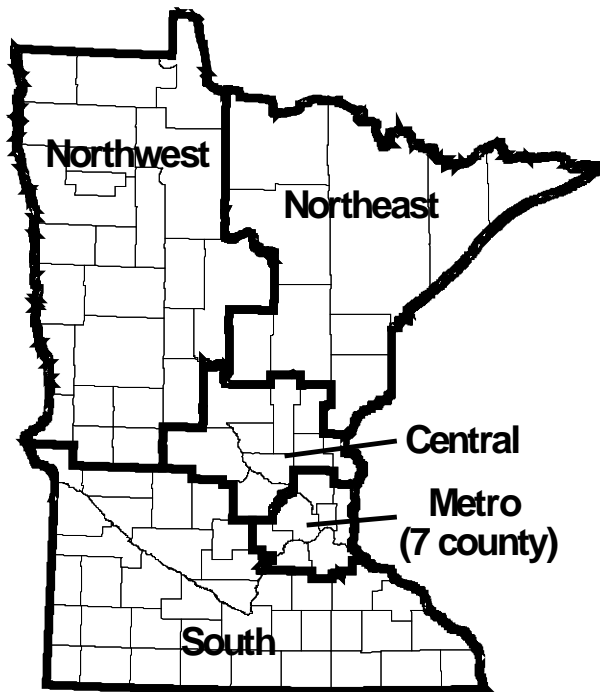


Figure 2.1 Resources Regions

Appendix 3

**Table 3.1
Recreation Experience Opportunity Studies in the Northeast Region**

Region-wide studies	
2004 Outdoor Recreation Participation Survey of Minnesotans	
2007 Boundary Waters Canoe Area Wilderness Visitor Use Study: Description of Users and Use Characteristics	
2008 Profile of Recreational Trail Users	
County-specific studies	County included
Cook County Winter Trail-based Visitor Study, 2003	<ul style="list-style-type: none"> • Cook County (cross-country skiers & snowmobilers)
Itasca County Recreation Resources Plan: 2002-2012 update	<ul style="list-style-type: none"> • Itasca County
Site-specific studies	Sites included
Results for Three Forest Recreation Studies: Foot Hills, 2004; Finland, 2007-08, Land O'Lakes, 2007-09	<ul style="list-style-type: none"> • Finland Forest Area
Survey of Sea Kayak Owners in Minnesota: Kayaking the North Shore of Lake Superior	<ul style="list-style-type: none"> • Lake Superior Water Trail

Appendix 4

**Table 4.1
Northeast Region Demographics by County**

County/ attribute	Population	Persons / sq mile, 2000	Persons < 18 (%)	Persons >= 65 (%)	Female (%)	White (%)	Black (%)	American Indian / Alaskan (%)	Asian (%)	Hispanic / Latino (%)	Median household income (\$), 2007
Aitkin	15,736	8.4	18.9	25.5	49.8	95.8	0.3	2.7	0.2	1.0	38,610
Carlton	33,933	36.8	22.3	15.0	49.4	90.9	1.1	5.7	0.5	1.2	49,616
Cook	5,437	3.6	17.5	17.4	49.6	88.5	0.3	8.4	0.3	1.7	44,159
Crow Wing	62,172	55.3	22.5	18.0	50.8	97.1	0.6	0.9	0.5	1.0	42,015
Itasca	44,512	16.5	20.8	18.3	50.1	94.1	0.3	3.7	0.3	0.9	43,622
Koochiching	13,251	4.6	19.8	20.2	50.6	95.3	0.5	2.6	0.2	0.8	41,964
Lake	10,609	5.3	18.6	20.7	50.5	97.7	0.1	0.9	0.2	0.7	46,506
Pine	28,297	18.8	21.3	15.8	47.7	93.6	1.7	3.1	0.4	2.3	43,809
St. Louis	196,864	32.2	19.6	15.7	50.5	94.3	1.2	2.2	0.8	1.0	42,698
Region	410,811	19.9	20.4	17.0	50.2	94.5	0.9	2.6	0.6	1.1	43,280
MN	5,220,393	61.8	24.0	12.5	50.2	89.0	4.6	1.2	3.5	4.1	55,664

Note: U.S. Census (2009)

Appendix 5

Table 5.1
Reasons for all-terrain vehicle riding

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 57)	% Statewide (n ≥ 308)	Difference
To be on my own	55.2	45.8	9.4
To be away from other people	44.8	36.5	8.3
To be close to nature	84.4	81.1	3.3
To get away from the usual demands of life	75.9	77.8	-1.9
To relax physically	72.9	64.9	8.0
To view the scenery	86.5	85.9	0.6
To experience silence & quiet	43.1	45.3	-2.2
To experience solitude	56.2	51.3	4.9
To have thrills & excitement	46.6	48.9	-2.3
To rest mentally	55.2	51.8	3.4
To experience nature	81.0	83.0	-2.0
To be w/people who enjoy the same things I do	62.1	66.1	-4.0
To challenge myself	34.4	30.9	3.5
To test my skills & abilities	32.7	29.1	3.6
To explore and discover new things	76.3	78.5	-2.2
To do something with my family	67.8	71.6	-3.8
To get/keep physically fit	44.1	36.2	7.9
To be physically active	67.8	55.0	12.8
To be with members of my own group	52.7	49.4	3.3
To enjoy different experiences from home	67.3	65.3	2.0

Schneider et al. (2009)

Table 5.2
Reasons for bike riding

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 85)	% Statewide (n ≥ 310)	Difference
To be on my own	36.4	40.3	-3.9
To be away from other people	31.0	30.1	0.9
To be close to nature	79.5	83.9	-4.4
To get away from the usual demands of life	76.2	82.2	-6.0
To relax physically	72.8	75.0	-2.2
To view the scenery	81.6	88.9	-7.3
To experience silence & quiet	61.4	59.0	2.4
To experience solitude	62.8	62.5	0.3
To have thrills & excitement	35.6	28.8	6.8
To rest mentally	60.9	66.2	-5.3
To experience nature	79.6	84.4	-4.8
To be w/people who enjoy the same things I do	49.4	55.1	-5.7
To challenge myself	49.4	49.7	-0.3
To test my skills & abilities	25.9	27.0	-1.1
To explore and discover new things	77.3	76.0	1.3
To do something with my family	74.1	74.8	-0.7
To get/keep physically fit	89.7	90.8	-1.1
To be physically active	89.8	94.0	-4.2
To be with members of my own group	26.7	35.0	-8.3
To enjoy different experiences from home	62.0	68.6	-6.6

Schneider, et al. (2009)

Table 5.3
Reasons for cross-country skiing

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 86)	% Statewide (n ≥ 497)	Difference
To be on my own	45.0	39.0	6.0
To be away from other people	34.5	33.9	0.6
To be close to nature	95.6	94.1	1.5
To get away from the usual demands of life	82.3	81.1	1.2
To relax physically	72.2	74.7	-2.5
To view the scenery	95.6	94.2	1.4
To experience silence & quiet	83.7	77.0	6.7
To experience solitude	76.7	69.0	7.7
To have thrills & excitement	35.2	34.0	1.2
To rest mentally	72.8	70.4	2.4
To experience nature	92.1	93.9	-1.8
To be w/people who enjoy the same things I do	20.0	54.3	-34.3
To challenge myself	67.3	62.6	4.7
To test my skills & abilities	44.4	42.6	1.8
To explore and discover new things	69.5	74.0	-4.5
To do something with my family	70.9	63.6	7.3
To get/keep physically fit	97.8	94.4	3.4
To be physically active	98.9	96.1	2.8
To be with members of my own group	26.2	31.5	-5.3
To enjoy different experiences from home	72.2	69.5	2.7

Schneider et al. (2009)

Table 5.4
Reasons for horseback riding

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 81)	% Statewide (n ≥ 445)	Difference
To be on my own	51.8	50.3	1.5
To be away from other people	38.6	37.9	0.7
To be close to nature	90.3	94.0	-3.7
To get away from the usual demands of life	91.6	93.6	-2.0
To relax physically	87.9	89.8	-1.9
To view the scenery	91.5	96.4	-4.9
To experience silence & quiet	75.9	74.9	1.0
To experience solitude	69.5	70.2	-0.7
To have thrills & excitement	47.0	46.4	0.6
To rest mentally	77.1	81.8	-4.7
To experience nature	87.8	93.1	-5.3
To be w/people who enjoy the same things I do	89.2	85.7	3.5
To challenge myself	62.2	60.3	1.9
To test my skills & abilities	57.8	56.4	1.4
To explore and discover new things	89.1	90.0	-0.9
To do something with my family	72.9	70.8	2.1
To get/keep physically fit	74.7	78.3	-3.6
To be physically active	89.0	88.0	1.0
To be with members of my own group	68.7	71.9	-3.2
To enjoy different experiences from home	81.9	80.2	1.7

Schneider, et al. (2009)

Table 5.5
Reasons for off-highway motorcycle riding

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 44)	% Statewide (n ≥ 307)	Difference
To be on my own	53.3	45.9	7.4
To be away from other people	34.8	32.7	2.1
To be close to nature	77.3	72.9	4.4
To get away from the usual demands of life	89.2	87.3	1.9
To relax physically	69.5	66.6	2.9
To view the scenery	82.2	79.5	2.7
To experience silence & quiet	32.6	30.2	2.4
To experience solitude	56.8	47.9	8.9
To have thrills & excitement	74.0	81.3	-7.3
To rest mentally	58.7	59.7	-1.0
To experience nature	74.0	72.3	1.7
To be w/people who enjoy the same things I do	82.6	74.7	7.9
To challenge myself	60.9	71.9	-11.0
To test my skills & abilities	62.3	70.4	-8.1
To explore and discover new things	89.1	86.1	3.0
To do something with my family	73.9	74.7	-0.8
To get/keep physically fit	63.0	68.9	-5.9
To be physically active	78.2	82.8	-4.6
To be with members of my own group	63.0	64.1	-1.1
To enjoy different experiences from home	69.6	77.4	-7.8

Schneider et al. (2009)

Table 5.6
Reasons for off-road vehicle riding

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 77)	% Statewide (n ≥ 369)	Difference
To be on my own	41.8	41.5	0.3
To be away from other people	36.7	30.9	5.8
To be close to nature	74.7	78.7	-4.0
To get away from the usual demands of life	85.0	82.7	2.3
To relax physically	75.1	66.7	8.4
To view the scenery	80.0	85.9	-5.9
To experience silence & quiet	43.6	37.7	5.9
To experience solitude	57.7	50.8	6.9
To have thrills & excitement	59.5	61.6	-2.1
To rest mentally	59.5	55.4	4.1
To experience nature	78.0	79.7	-1.7
To be w/people who enjoy the same things I do	69.6	71.6	-2.0
To challenge myself	45.6	53.1	-7.5
To test my skills & abilities	42.3	51.7	-9.4
To explore and discover new things	78.8	81.6	-2.8
To do something with my family	80.8	79.0	1.8
To get/keep physically fit	38.0	35.9	2.1
To be physically active	63.3	54.7	8.6
To be with members of my own group	54.5	60.7	-6.2
To enjoy different experiences from home	72.5	73.8	-1.3

Schneider, et al. (2009)

Table 5.7
Reasons for snowmobiling

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 45)	% Statewide (n ≥ 261)	Difference
To be on my own	26.0	37.5	-11.5
To be away from other people	28.3	28.5	-0.2
To be close to nature	73.9	82.1	-8.2
To get away from the usual demands of life	76.1	83.2	-7.1
To relax physically	67.4	61.7	5.7
To view the scenery	89.1	91.2	-2.1
To experience silence & quiet	39.1	35.7	3.4
To experience solitude	44.4	53.3	-8.9
To have thrills & excitement	41.3	62.4	-21.1
To rest mentally	46.7	54.6	-7.9
To experience nature	82.6	84.7	-2.1
To be w/people who enjoy the same things I do	76.1	75.3	0.8
To challenge myself	28.2	39.7	-11.5
To test my skills & abilities	21.8	32.7	-10.9
To explore and discover new things	71.8	79.8	-8.0
To do something with my family	80.4	79.5	0.9
To get/keep physically fit	50.0	50.2	-0.2
To be physically active	60.9	67.3	-6.4
To be with members of my own group	73.9	68.1	5.8
To enjoy different experiences from home	78.3	73.0	5.3

Schneider et al. (2009)

Table 5.8
Reasons for walking/hiking

Reasons for participating	Identified as Important or Very Important		
	% Northeast (n ≥ 75)	% Statewide (n ≥ 431)	Difference
To be on my own	48.7	43.2	5.5
To be away from other people	36.4	34.4	2.0
To be close to nature	84.2	89.9	-5.7
To get away from the usual demands of life	73.7	79.8	-6.1
To relax physically	72.2	80.6	-8.4
To view the scenery	89.8	91.7	-1.9
To experience silence & quiet	61.8	66.7	-4.9
To experience solitude	64.1	64.1	0.0
To have thrills & excitement	11.7	18.8	-7.1
To rest mentally	62.9	71.8	-8.9
To experience nature	89.7	88.3	1.4
To be w/people who enjoy the same things I do	50.7	48.3	2.4
To challenge myself	27.3	34.2	-6.9
To test my skills & abilities	22.6	23.9	-1.3
To explore and discover new things	66.3	73.2	-6.9
To do something with my family	65.3	70.1	-4.8
To get/keep physically fit	84.2	87.2	-3.0
To be physically active	91.9	94.0	-2.1
To be with members of my own group	31.6	28.8	2.8
To enjoy different experiences from home	50.7	65.4	-14.7

Schneider, et al. (2009)

Appendix 6

Table 6.1
Observations of potential conflict among all-terrain vehicle riding respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 54)	% Statewide (n ≥ 275)	Difference
Others going too fast	60.0	55.6	4.4
Too many others on the trail	34.5	33.7	0.8
Seeing off trail/road use	76.4	62.9	13.5
Accessibility issue	44.4	40.7	3.7
Others out of control	43.6	35.3	8.3
Litter on or near the trail	69.1	63.3	5.8
Seeing evidence of off trail/road use (erosion, marks, etc.)	76.4	68.1	8.3
Rude or discourteous users	41.8	41.6	0.2
Others passing too closely	34.5	32.1	2.4
Hearing other users on the trail	72.2	61.6	10.6
Others not yielding	38.2	37.8	0.4

Schneider et al. (2009)

Table 6.2
Observations of potential conflict among biking respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 83)	% Statewide (n ≥ 304)	Difference
Others going too fast	40.0	36.5	3.5
Too many others on the trail	29.4	31.2	-1.8
Seeing off trail/road use	58.8	50.6	8.2
Accessibility issue	22.4	21.9	0.5
Others out of control	16.5	22.8	-6.3
Litter on or near the trail	79.8	74.2	5.6
Seeing evidence of off trail/road use (erosion, marks, etc.)	63.5	57.4	6.1
Rude or discourteous users	41.0	43.1	-2.1
Others passing too closely	48.2	45.4	2.8
Hearing other users on the trail	70.6	71.8	-1.2
Others not yielding	47.1	52.3	-5.2

Schneider, et al. (2009)

Table 6.3
Observations of potential conflict among cross-country skiing respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 89)	% Statewide (n ≥ 499)	Difference
Others going too fast	19.8	17.4	2.4
Too many others on the trail	29.7	29.0	0.7
Seeing off trail/road use	42.2	45.7	-3.5
Accessibility issue	11.2	11.4	-0.2
Others out of control	22.0	22.4	-0.4
Litter on or near the trail	41.8	41.8	0.0
Seeing evidence of off trail/road use (erosion, marks, etc.)	43.8	50.8	-7.0
Rude or discourteous users	18.5	21.6	-3.1
Others passing too closely	20.9	21.1	-0.2
Hearing other users on the trail	77.5	73.1	4.4
Others not yielding	23.9	23.8	0.1

Schneider et al. (2009)

Table 6.4
Observations of potential conflict among horseback riding respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 80)	% Statewide (n ≥ 439)	Difference
Others going too fast	44.0	41.4	2.6
Too many others on the trail	26.2	31.6	-5.4
Seeing off trail/road use	65.1	55.3	9.8
Accessibility issue	32.5	35.1	-2.6
Others out of control	29.8	40.0	-10.2
Litter on or near the trail	72.6	70.3	2.3
Seeing evidence of off trail/road use (erosion, marks, etc.)	71.6	61.7	9.9
Rude or discourteous users	49.4	48.0	1.4
Others passing too closely	47.1	41.4	5.7
Hearing other users on the trail	78.3	75.6	2.7
Others not yielding	28.6	33.3	-4.7

Schneider, et al. (2009)

Table 6.6
Observations of potential conflict among off-highway motorcycle respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 39)	% Statewide (n ≥ 286)	Difference
Others going too fast	50.0	53.1	-3.1
Too many others on the trail	26.8	38.3	-11.5
Seeing off trail/road use	57.5	51.4	6.1
Accessibility issue	40.0	45.0	-5.0
Others out of control	26.8	37.8	-11.0
Litter on or near the trail	58.5	53.7	4.8
Seeing evidence of off trail/road use (erosion, marks, etc.)	64.1	67.5	-3.4
Rude or discourteous users	29.3	42.0	-12.7
Others passing too closely	26.8	34.6	-7.8
Hearing other users on the trail	56.1	68.8	-12.7
Others not yielding	29.3	38.8	-9.5

Schneider et al. (2009)

Table 6.7
Observations of potential conflict among off-road vehicle respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 71)	% Statewide (n ≥ 324)	Difference
Others going too fast	52.1	46.4	5.7
Too many others on the trail	31.5	36.9	-5.4
Seeing off trail/road use	59.2	50.2	9.0
Accessibility issue	32.9	35.8	-2.9
Others out of control	38.4	34.5	3.9
Litter on or near the trail	65.3	61.3	4.0
Seeing evidence of off trail/road use (erosion, marks, etc.)	63.0	63.4	-0.4
Rude or discourteous users	43.8	39.0	4.8
Others passing too closely	35.6	31.5	4.1
Hearing other users on the trail	67.1	68.0	-0.9
Others not yielding	42.5	35.4	7.1

Schneider et al. (2009)

Table 6.8
Observations of potential conflict among snowmobile respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 44)	% Statewide (n ≥ 95)	Difference
Others going too fast	82.2	81.1	1.1
Too many others on the trail	44.4	59.8	-15.4
Seeing off trail/road use	77.8	80.7	-2.9
Accessibility issue	36.4	38.6	-2.2
Others out of control	55.6	53.4	2.2
Litter on or near the trail	60.0	58.3	1.7
Seeing evidence of off trail/road use (erosion, marks, etc.)	68.2	71.7	-3.5
Rude or discourteous users	75.6	71.9	3.7
Others passing too closely	64.4	62.7	1.7
Hearing other users on the trail	80.0	77.0	3.0
Others not yielding	71.1	65.9	5.2

Schneider et al. (2009)

Table 6.9
Observations of potential conflict among walking respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Northeast (n ≥ 74)	% Statewide (n ≥ 438)	Difference
Others going too fast	36.5	42.3	-5.8
Too many others on the trail	34.7	38.2	-3.5
Seeing off trail/road use	54.5	49.9	4.6
Accessibility issue	24.3	22.7	1.6
Others out of control	21.3	21.0	0.3
Litter on or near the trail	85.5	79.0	6.5
Seeing evidence of off trail/road use (erosion, marks, etc.)	68.0	63.1	4.9
Rude or discourteous users	45.3	44.9	0.4
Others passing too closely	36.8	43.3	-6.5
Hearing other users on the trail	72.4	74.0	-1.6
Others not yielding	36.0	41.3	-5.3

Schneider et al. (2009)

Appendix 7

Table 7.1
Use of coping strategies among all-terrain vehicle riders who experience interference

Coping Strategy	Used Strategy		
	% Northeast (n ≥ 11)	% Statewide (n ≥ 58)	Difference
Change the time I will walk next time	20.0	18.2	1.8
Alter my pace to avoid others	28.3	22.3	6.0
Plan to avoid the area on my next visit	23.3	20.1	3.2
Talk to area personnel about the incident	26.7	26.1	0.6
Try not to burn bridges	33.3	32.4	0.9
Stand my ground and fight for what I wanted	21.7	24.5	-2.8
Think about why the incident occurred	31.7	31.1	0.6
I make a plan of action and follow it	25.0	29.6	-4.6
I know what has to be done so I double my efforts to make it work	30.0	30.8	-0.8
Make light of the situation	30.0	29.2	0.8
Keep others from knowing how bad things were	30.0	23.9	6.1
Try to get the person responsible to change their mind	20.0	25.5	-5.5
Don't let it get to me; refuse to think about it too much	33.3	31.8	1.5
Come up with a couple of different solutions	30.0	28.6	1.4
Leave the area altogether	18.3	20.1	-1.8
I try to keep my feelings to myself	28.3	29.2	-0.9
Leave the area and go to a different part of the area	25.0	25.5	-0.5
Express anger to the person who caused the incident	20.0	19.5	0.5
Wish the situation would go away or be over with	33.3	30.8	2.5
Talk to other members of my group about the incident	35.0	36.5	-1.5
Try to forget the whole thing	25.0	27.4	-2.4
Refuse to get too serious about it	33.3	32.1	1.2
Follow established rules for trail etiquette	45.0	43.4	1.6
Go on as if nothing had happened	28.3	27.4	0.9

Schneider et al. (2009)

Table 7.2
Use of coping strategies among bike riders who experience interference

Coping Strategy	Used Strategy		
	% Northeast (n ≥ 22)	% Statewide (n ≥ 63)	Difference
Change the time I will bike next time	32.6	26.9	5.7
Alter my pace to avoid others	33.7	28.8	4.9
Plan to avoid the area on my next visit	28.1	25.1	3.0
Talk to area personnel about the incident	29.2	26.0	3.2
Try not to burn bridges	42.7	35.6	7.1
Stand my ground and fight for what I wanted	30.3	25.4	4.9
Think about why the incident occurred	40.4	36.8	3.6
I make a plan of action and follow it	34.8	28.8	6.0
I know what has to be done so I double my efforts to make it work	36.0	32.2	3.8
Make light of the situation	43.8	36.8	7.0
Keep others from knowing how bad things were	33.7	27.6	6.1
Try to get the person responsible to change their mind	25.8	19.5	6.3
Don't let it get to me; refuse to think about it too much	50.6	44.6	6.0
Come up with a couple of different solutions	28.1	27.6	0.5
Leave the area altogether	27.0	24.1	2.9
I try to keep my feelings to myself	42.7	25.4	17.3
Leave the area and go to a different part of the area	36.0	28.8	7.2
Express anger to the person who caused the incident	24.7	21.4	3.3
Wish the situation would go away or be over with	37.1	36.2	0.9
Talk to other members of my group about the incident	44.9	40.6	4.3
Try to forget the whole thing	43.8	38.7	5.1
Refuse to get too serious about it	49.4	40.6	8.8
Follow established rules for trail etiquette	49.4	44.3	5.1
Go on as if nothing had happened	47.2	41.8	5.4

Schneider et al. (2009)

Table 7.3
Use of coping strategies among cross-country skiers who experience interference

Coping Strategy	Used Strategy		
	% Northeast (n ≥ 14)	% Statewide (n ≥ 91)	Difference
Change the time I will ski next time	49.1	45.5	3.6
Alter my pace to avoid others	54.7	52.3	2.4
Plan to avoid the area on my next visit	40.7	49.8	-9.1
Talk to area personnel about the incident	45.3	52.4	-7.1
Try not to burn bridges	69.2	63.5	5.7
Stand my ground and fight for what I wanted	30.8	35.8	-5.0
Think about why the incident occurred	64.2	69.0	-4.8
I make a plan of action and follow it	48.1	50.2	-2.1
I know what has to be done so I double my efforts to make it work	51.9	57.0	-5.1
Make light of the situation	68.6	68.9	-0.3
Keep others from knowing how bad things were	46.0	49.2	-3.2
Try to get the person responsible to change their mind	30.8	32.0	-1.2
Don't let it get to me; refuse to think about it too much	83.9	80.8	3.1
Come up with a couple of different solutions	48.0	48.6	-0.6
Leave the area altogether	28.8	36.9	-8.1
I try to keep my feelings to myself	72.5	70.6	1.9
Leave the area and go to a different part of the area	43.4	50.2	-6.8
Express anger to the person who caused the incident	25.9	30.5	-4.6
Wish the situation would go away or be over with	68.5	63.1	5.4
Talk to other members of my group about the incident	66.7	71.4	-4.7
Try to forget the whole thing	67.9	68.8	-0.9
Refuse to get too serious about it	78.4	81.3	-2.9
Follow established rules for trail etiquette	84.5	87.0	-2.5
Go on as if nothing had happened	69.8	74.6	-4.8

Schneider et al. (2009)

Table 7.4
Use of coping strategies among horseback riders who experience interference

Coping Strategy	Used Strategy		
	% Northeast (n ≥ 15)	% Statewide (n ≥ 100)	Difference
Change the time I will horseback ride next time	24.4	30.7	-6.3
Alter my pace to avoid others	24.4	20.1	4.3
Plan to avoid the area on my next visit	30.2	25.3	4.9
Talk to area personnel about the incident	37.2	30.1	7.1
Try not to burn bridges	45.3	35.5	9.8
Stand my ground and fight for what I wanted	31.4	27.3	4.1
Think about why the incident occurred	45.3	39.6	5.7
I make a plan of action and follow it	32.6	30.1	2.5
I know what has to be done so I double my efforts to make it work	41.9	25.3	16.6
Make light of the situation	40.7	23.3	17.4
Keep others from knowing how bad things were	26.7	24.9	1.8
Try to get the person responsible to change their mind	29.1	23.3	5.8
Don't let it get to me; refuse to think about it too much	59.3	41.4	17.9
Come up with a couple of different solutions	33.7	30.9	2.8
Leave the area altogether	17.4	17.1	0.3
I try to keep my feelings to myself	45.3	33.1	12.2
Leave the area and go to a different part of the area	29.1	25.3	3.8
Express anger to the person who caused the incident	29.1	21.5	7.6
Wish the situation would go away or be over with	43.0	37.0	6.0
Talk to other members of my group about the incident	43.0	47.0	-4.0
Try to forget the whole thing	47.7	35.1	12.6
Refuse to get too serious about it	51.2	41.0	10.2
Follow established rules for trail etiquette	44.2	46.6	-2.4
Go on as if nothing had happened	46.5	38.6	7.9

Schneider et al. (2009)

Table 7.5
Use of coping strategies among off-highway motorcycle users who experience interference

Coping Strategy	Used Strategy		
	% Northeast (n ≥ 8)	% Statewide (n ≥ 65)	Difference
Change the time I will OHM ride next time	17.0	20.7	-3.7
Alter my pace to avoid others	21.3	27.1	-5.8
Plan to avoid the area on my next visit	21.3	25.2	-3.9
Talk to area personnel about the incident	29.8	32.8	-3.0
Try not to burn bridges	34.0	35.0	-1.0
Stand my ground and fight for what I wanted	31.9	24.5	7.4
Think about why the incident occurred	38.3	37.3	1.0
I make a plan of action and follow it	29.8	33.8	-4.0
I know what has to be done so I double my efforts to make it work	29.8	36.6	-6.8
Make light of the situation	25.5	34.7	-9.2
Keep others from knowing how bad things were	25.5	27.4	-1.9
Try to get the person responsible to change their mind	29.8	24.9	4.9
Don't let it get to me; refuse to think about it too much	29.8	36.3	-6.5
Come up with a couple of different solutions	27.7	34.1	-6.4
Leave the area altogether	25.5	24.5	1.0
I try to keep my feelings to myself	31.9	34.7	-2.8
Leave the area and go to a different part of the area	27.7	31.8	-4.1
Express anger to the person who caused the incident	17.0	23.9	-6.9
Wish the situation would go away or be over with	38.3	34.7	3.6
Talk to other members of my group about the incident	44.7	45.9	-1.2
Try to forget the whole thing	29.8	32.8	-3.0
Refuse to get too serious about it	29.8	36.9	-7.1
Follow established rules for trail etiquette	44.7	46.8	-2.1
Go on as if nothing had happened	27.7	33.1	-5.4

Schneider et al. (2009)

Table 7.6
Use of coping strategies among snowmobilers who experience interference

Coping Strategy	Used Strategy		
	% Northeast (n ≥ 15)	% Statewide (n ≥ 104)	Difference
Change the time I will snowmobile next time	50.0	52.5	-2.5
Alter my pace to avoid others	57.9	62.1	-4.2
Plan to avoid the area on my next visit	40.5	52.3	-11.8
Talk to area personnel about the incident	65.8	66.5	-0.7
Try not to burn bridges	65.8	75.0	-9.2
Stand my ground and fight for what I wanted	45.9	60.1	-14.2
Think about why the incident occurred	78.9	77.4	1.5
I make a plan of action and follow it	52.7	62.4	-9.7
I know what has to be done so I double my efforts to make it work	60.5	70.1	-9.6
Make light of the situation	67.5	76.1	-8.6
Keep others from knowing how bad things were	60.5	58.7	1.8
Try to get the person responsible to change their mind	42.1	54.4	-12.3
Don't let it get to me; refuse to think about it too much	81.6	84.0	-2.4
Come up with a couple of different solutions	58.0	67.0	-9.0
Leave the area altogether	39.5	46.2	-6.7
I try to keep my feelings to myself	81.0	78.9	2.1
Leave the area and go to a different part of the area	42.1	55.7	-13.6
Express anger to the person who caused the incident	50.0	51.0	-1.0
Wish the situation would go away or be over with	77.7	71.9	5.8
Talk to other members of my group about the incident	90.3	89.4	0.9
Try to forget the whole thing	73.7	77.6	-3.9
Refuse to get too serious about it	76.4	85.2	-8.8
Follow established rules for trail etiquette	92.5	95.8	-3.3
Go on as if nothing had happened	71.7	78.6	-6.9

Schneider et al. (2009)

Table 7.7
Use of coping strategies among walkers who experience interference

Coping Strategy	Used Strategy		
	% Northeast (n ≥ 18)	% Statewide (n ≥ 88)	Difference
Change the time I will walk next time	31.6	30.4	1.2
Alter my pace to avoid others	27.8	28.8	-1.0
Plan to avoid the area on my next visit	32.9	27.3	5.6
Talk to area personnel about the incident	30.4	29.3	1.1
Try not to burn bridges	39.2	34.1	5.1
Stand my ground and fight for what I wanted	31.6	25.7	5.9
Think about why the incident occurred	45.6	40.8	4.8
I make a plan of action and follow it	35.4	30.2	5.2
I know what has to be done so I double my efforts to make it work	36.7	33.9	2.8
Make light of the situation	36.7	35.9	0.8
Keep others from knowing how bad things were	25.3	28.6	-3.3
Try to get the person responsible to change their mind	22.8	19.5	3.3
Don't let it get to me; refuse to think about it too much	48.1	48.8	-0.7
Come up with a couple of different solutions	27.8	27.3	0.5
Leave the area altogether	29.1	22.6	6.5
I try to keep my feelings to myself	39.2	39.9	-0.7
Leave the area and go to a different part of the area	35.4	29.0	6.4
Express anger to the person who caused the incident	26.6	21.7	4.9
Wish the situation would go away or be over with	43.0	40.1	2.9
Talk to other members of my group about the incident	45.6	44.3	1.3
Try to forget the whole thing	50.6	44.3	6.3
Refuse to get too serious about it	48.1	48.1	0.0
Follow established rules for trail etiquette	53.2	49.9	3.3
Go on as if nothing had happened	45.6	42.6	3.0

Schneider et al. (2009)