Findings from the 2018 Minnesota

Snowmobiler Survey



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2018 Minnesota Snowmobiler Survey Executive Summary

The 2018 Minnesota Snowmobile Survey sought information from Minnesota snowmobilers about their snowmobiling experience over the winter of 2017-2018. The Minnesota Department of Natural Resources (DNR) developed the survey in collaboration with the Minnesota United Snowmobile Association (MnUSA). These research findings can assess what parts of the Minnesota snowmobile system are working well and point to potential areas for improvement. The findings may be helpful as the DNR, MnUSA and local snowmobile clubs work to provide high quality snowmobiling opportunities into the future.

The survey sample consisted of 2,999 individuals, drawn from the DNR's Electronic License System. The sample largely mirrors the distribution of registered snowmobiles by year and region of Minnesota. This report summarizes the results of 1,556 completed surveys (response rate of 52.7%).

Key Findings

Minnesotans snowmobiled an estimated 1.6 million days last winter

The average snowmobile owner rode 11.8 days last winter and the average snowmobiling household rode 21 days collectively. Women, young children, teens, and young adults ride less frequently than other groups. Minnesotans trailered their snowmobiles for an estimated 140,000 trips over the winter. Snowmobiling supports local economies across Minnesota through trip spending, equipment sales, and manufacturing; see <u>Economic Impact of Recreational Trail Use in Different Regions of Minnesota¹</u> for more information.

The average snowmobiler rode 12 days

Eighty-nine percent of respondents snowmobiled at least once last winter. Snowmobilers in northern Minnesota rode significantly more days than riders in other parts of the state. There was no significant difference in the average number of days ridden between snowmobilers in the southern, metro, and central regions.

Snowmobilers typically ride less than 100 miles a day and do most of their riding on groomed trails

About three-quarters of snowmobilers ride less than 100 miles on a typical riding day. About 75% do some, most, or almost all of their snowmobile riding on groomed grant-in-aid or state snowmobile trails. Twenty-five percent say that almost none of their riding is on groomed trails.

Group snowmobile rides are the most popular snowmobiling activity

Thirty-three percent of respondents participated in group snowmobile rides and 28% participated in snowmobiling social events. Focusing on the activities like these, which have the most universal appeal, could be an effective strategy for growing the sport of snowmobiling.

78,000 Minnesota households have at least one registered snowmobile

The average snowmobiling household owns 2.7 snowmobiles and has 2.5 registered sleds. Only 17% of snowmobiling households have a snowmobile that is not registered.

¹ Venegas, E. (2009). *Economic Impact of Recreational Trail Use in Different Regions of Minnesota*. MN Department of Employment and Development.

91% of snowmobiles are registered

Most snowmobiles that are not registered meet legal exceptions that do not require registration such as: snowmobiles less than 125 cc, collector or vintage sleds, or snowmobiles in need of repair. If all other barriers to registration were overcome, an additional 12,000 snowmobiles could be registered, which could result in up to \$420,000 in additional annual revenue for the snowmobile account.

75% of snowmobilers are satisfied or very satisfied with the Minnesota snowmobile system

Low satisfaction was most closely associated with lack of snowfall and not having opportunities to snowmobile last winter. People who snowmobiled last winter, and snowmobiled more often, were more satisfied with the overall system. Improved trail grooming, signage, and information about trails and activities may be the most effective ways to improve snowmobiler satisfaction.

Three-quarters of snowmobilers are satisfied with the size of the trail system

Seventy percent support adding miles of snowmobile trails and 78% oppose reducing the amount of trails in Minnesota.

Snowmobilers support investing more in trail maintenance and grooming

More than 70% support investing more in trail maintenance and grooming in areas that receive more snow, and 70% support investing more statewide. About 50% support investing more in trail maintenance and grooming in areas where people live.

Respondents oppose ATV usage of snowmobile trails

Over 70% oppose allowing ATVs on snowmobile trails, but opposition drops to 53% if the ATVs have tracks. Twenty-three percent support allowing ATVs with tracks on winter trails while 13% support allowing ATVs with or without tracks to use snowmobile trails.

Snowmobilers are generally older and more affluent than the Minnesota population

Snowmobilers are more highly educated, and much more likely to have associate or vocational degrees than Minnesotans overall. Women and people of color are underrepresented among snowmobilers and efforts to increase participation by these groups may have the biggest impact.

90% of snowmobiles are registered by men, but men only rode 75% of days

While women are underrepresented, they make up a larger share of snowmobiling trips than suggested by registration data alone. Young boys and girls snowmobile at almost equal frequency, but participation drops off among teenage girls; teenage girls and women of any age snowmobile less than half as often as men.

No significant differences based on registration year

Low numbers of new snowmobile registrations and renewals tend to coincide with winters that have less snowfall and inconsistent snowpack. This study did not find differences in behaviors or opinions between people who registered their snowmobiles in different years.

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Methodology

The 2018 Minnesota Snowmobile Survey sought information from Minnesota snowmobilers regarding trip characteristics, satisfaction, opinions and demographics. The study involved a mail survey in the spring of 2018 that asked people about their snowmobiling experience, from December 2017 through March 2018. The study followed a modified Dillman method; potential respondents received a cover letter and a three-page survey in the mail. Non-respondents received a reminder cover-letter and replacement survey about three weeks later.

A stratified random sample of Minnesota residents with at least one snowmobile registered for trail use in Minnesota was selected through the DNR's Electronic License System database. The sample only included Minnesota residents, with a valid trail use snowmobile registration. This sample excluded non-trail use registrations, collector registrations, dealer registrations, manufacturer registrations, and out-of-state residents. Trail registrations are valid for three years and the sample was stratified by the year that snowmobiles are registered through.

Samples from each registration year were drawn independently. People with snowmobiles registered in all three registration years had a higher chance of being selected for the survey since they could have been a part of each of the three sub-samples. Several duplicates were removed from the sample and replaced with another individual prior to the start of the survey.

Registration year was used to stratify the sample because it was thought that there may be different behaviors and opinions by year. Low numbers of new snowmobile registrations and renewals tend to coincide with winters that have less snowfall and inconsistent snowpack. However, this project did not find substantial differences in behavior or opinions between people who registered snowmobiles in different years.

The initial sample consisted of 2,999 individuals. Forty-seven questionnaires were undeliverable. Responses from 1,556 were included for analysis after removing duplicate responses and some incomplete questionnaires. This resulted in a response rate of 52.7%.

Snowmobile Registered Through	Total Snowmobile Owners	Sample Size	Survey Responses
June 30, 2018	53,781	1,094	566
	(35.7%)	(36.5%)	(36.4%)
June 30, 2019	56,889	1,133	564
	(37.8%)	(37.8%)	(36.2%)
June 30, 2020	39,812	772	426
	(26.5%)	(25.7%)	(27.4%)
Total	150,482	2,999	1,556

Table 1: Sample Strata and Responses

Several of the survey findings are analyzed by the four regions depicted on the following page. The number of survey returns by region closely mirrors the distribution of registered snowmobiles.

Respondents were assigned to a region according to the residential address listed with their snowmobile registration. People who travel to snowmobile or snowmobile at a seasonal residence may actually do most of their snowmobiling in a different region than what is indicated by registration data. The regions are a hybrid of DNR administrative regions and grant-in-aid funding rate zones. They are intended to align roughly with typical snowfall and snowmobile usage patterns, while maintaining appropriate statistical sample sizes. The DNR developed the survey project in coordination with the Minnesota United Snowmobile Association (MnUSA). Initial questions were drawn from snowmobile surveys completed in other states and filtered by topics of interest in Minnesota. The DNR sought input on the draft survey at the 2017 MnUSA Fall Workshop and shared preliminary findings from the survey at the 2018 Fall Workshop.

Figure 1: Snowmobile Survey Regions



Table 2: Responses by Region

Region	Percent of Registered Snowmobiles	Percent of Survey Responses
Northern	29.4%	29.0%
Central	23.9%	24.6%
Southern	19.0%	21.4%
Metro	27.7%	25.0%

Study Results

Demographics of Minnesotans with a Registered Snowmobile

Snowmobile owners are generally older, higher income, and somewhat more highly educated than the general population. Many snowmobilers have associate or vocational degrees. These findings largely reinforce findings about snowmobiler demographics from previous studies in Minnesota and other states.

Snowmobile owners are mostly male, with about 90% of registered snowmobiles. Women's share of snowmobiling trips is larger than their share of registrations, though they are still underrepresented. More information on snowmobiling trips starts on page 11.

People of color are substantially underrepresented, making up 2.4% of snowmobilers compared to 15.7% of the Minnesota population. People of color refers to anyone who identifies as multiple race, or any race or ethnicity other than white. Part of this discrepancy can be explained by the fact that snowmobiling is one of the most rural-based outdoor activities and large communities of color reside in the metropolitan Twin Cities area.

However, these findings do suggest that increasing the diversity of snowmobilers could be an effective way to grow the sport. Since people of color and women are currently the most underrepresented, efforts to increase snowmobiling participation by these groups may have the biggest impact.

*Statistics for the Minnesota population or Minnesota adults are from the 2016 American Community Survey 5-year population estimate unless otherwise noted.

Table 3: Age of Minnesotans with a Registered Snowmobile

Age	Minnesota Snowmobile Owners	Minnesota Adults ²
18-29	2.0%	20.9%
30-39	9.8%	17.2%
40-49	21.5%	16.6%
50-59	36.8%	18.8%
60-69	21.4%	13.8%
70 or greater	8.7%	12.7%

Table 4: Sex of Minnesotans with a Registered Snowmobile

Sex	Minnesota Snowmobile Owners	Minnesota Adults
Male	92.3%	49.30%
Female	7.7%	50.70%

² 2017 American Community Survey 1-year Estimate

Table 5: Race/ethnicity of Minnesotans with a Registered Snowmobile

Date	Minnesota Snowmobile Owners	Minnesota Adults
White alone	97.6%	84.3%
Persons of Color	2.4%	15.7%

Table 6: Educational Attainment of Minnesotans with a Registered Snowmobile

Educational Attainment	Minnesota Snowmobile Owners
Less than high school degree	1.9%
High school degree or GED	20.9%
Associate or vocational degree	30.3%
Some college but no degree	17.9%
Bachelor's degree	20.3%
Graduate or professional degree(s)	8.7%



*Note that some categories of educational attainment in Table 6 were collapsed in order to allow for a comparison with census information for the Minnesota population in Figure 2.



Participation in Snowmobiling Activities

Group snowmobile rides are the most popular snowmobiling activity among Minnesota snowmobilers, selected by 33% of respondents. This is not surprising because group snowmobile rides could mean anything from an organized event to simply going for a ride with a group of family or friends. Twenty-eight percent of respondents indicated that they participated in snowmobiling social events. Focusing on the activities like this, which have the most universal appeal, could be an effective strategy for growing the sport of snowmobiling.

More Minnesota snowmobilers engaged with local snowmobile clubs than MnUSA; 24% compared to 17% of respondents. Club engagement includes being a club member and/or attending any club meetings or events. Similar numbers of people spend time maintaining snowmobile trails and participating in vintage snowmobile events at about 17% each.

About 5% of respondents indicated that they participated in snowmobiling activities that were not listed as an option. Common write-in activities included assisting with snowmobile club events and activities, participating in swap meets or other snowmobiling events, and participating in snowmobile racing. Some respondents also commented about snowmobiling during ice fishing or hunting, long-distance snowmobile touring, or riding out-of-state.

Over 600 respondents (44%) did not select any options for this question; it is likely that many of them simply did not participate in any of these activities last winter. The question did not have an option for N/A or none of the above. About a quarter of the people who selected "other" wrote in N/A or none. Of the respondents that did not select any activities, 145 indicated that no one in their household snowmobiled last winter, and 147 said they did not ride snowmobile a single day last winter.

Table 7: Participation in Snowmobiling Activities

Snowmobiling Activities	Frequency	Percent
Participated in group snowmobile rides	519	33.4%
Participated in snowmobiling social events	430	27.6%
Member of local snowmobile club or attended local club meeting	379	24.4%
Member of MnUSA or attended MnUSA meeting	262	16.8%
Spent time maintaining trails (signage, brush clearing, etc.)	261	16.8%
Participated in vintage snowmobile show	228	14.7%
Spent time grooming trails	85	5.5%
Was a snowmobile safety instructor	56	3.6%
Other, please describe	87	5.6%
No response	681	43.8%
n=1556, includes all partially completed questionnaires		



Household Characteristics of Minnesotans with a Registered Snowmobile

Household sizes of Minnesotans with a registered snowmobile are similar to Minnesota households overall. Survey respondents reported a slightly larger household size (2.86) than the average of Minnesota households (2.47 in 2015).³ Almost half of respondents reported a household size of two people.

The distribution of the number of household members that snowmobiled last winter follows the distribution of household sizes, but is skewed lower. Ten percent of households reported that no one snowmobiled last winter and 29% reported that only one household member snowmobiled. The most common number of household members that snowmobiled was two, at 34%.

The share of household members who snowmobiled last winter decreases as household size increases. In a household of one the sole member must also be the snowmobile owner. Nearly all members of single person households reported snowmobiling last winter. About 70% of people in a household of two to six people snowmobiled last winter. The share of household members that snowmobiled decreases to 50% for households of 7 or more people.

Household Size	Total Household Members	Total Household Members that Snowmobiled Last Winter	Percent of Household Members that Snowmobiled Last Winter
1	140	137	97.9%
2	1,382	970	70.2%
3	672	451	67.1%
4	1,180	811	68.7%
5	625	437	69.9%
6	234	160	68.4%
7 or more	142	71	50.0%
Overall	4,375	3,037	69.4%

Table 8: Percent of Household Members that Snowmobiled Last Winter

Snowmobile Registration Characteristics

The average snowmobiling household owns 2.7 snowmobiles and has 2.5 registered snowmobiles. Respondents most commonly reported owning and registering between one and three snowmobiles per household. The data indicates that about 91% of all snowmobiles owned by these households are registered. This figure is likely an overestimate of registration rates of all snowmobiles since households that own snowmobiles but do not have any current registrations would not have been included in this survey.

Previously the DNR reported an average of 1.53 registered snowmobiles per owner. The difference between these figures may be due to the 2018 survey asking about registered snowmobiles by household while the previous report indicated registrations per owner. Some households contain multiple snowmobile owners.

An estimated 78,000 Minnesota households have at least one registered snowmobile. Eighty-three percent of respondents said all of the snowmobiles that they own are registered and 17% of households have at least one snowmobile that is not registered.

³ Minnesota State Demographer: <u>https://mn.gov/admin/assets/analysis-2015-population-household-estimates-msdc-nov2016_tcm36-270612.pdf</u>

Table 9: Total and Registered Snowmobiles per Household

Number of Snowmobiles per Household	Percent of Owned Snowmobiles that are Registered
1	102.0%
2	96.8%
3	91.6%
4	88.4%
5	87.8%
6 to 9	82.1%
10+	69.6%
Overall	91.0%

Table 9 shows that households that own a larger number of snowmobiles are more likely to have snowmobiles that are not registered. This could be explained by households that have a large number of vintage sleds that are not used, or households that have not sold snowmobiles after purchasing new machines.

Some households have registered snowmobiles that are not in working order. In the survey these snowmobiles are counted as registered, but were not reported as owned. These cases resulted in the figure of 102% for single snowmobile households.



Respondents selected several common reasons for not registering a snowmobile that they owned. The most common reason, selected by 25% of respondents, was that it needed mechanical work. The price of registration and lack of snow recently were also important reasons.

More than one-third of respondents selected "other" and wrote-in additional reasons that they did not register a snowmobile. The Table 10 is a content analysis summary of from 148 additional comments. The percentages are

calculated from all respondents who answered the question and the most common categories are included in the Figure 5. These reasons may be just as prevalent as some of the reasons included in the question since other respondents may have selected them if given the choice. Trail use snowmobile registrations are not required in many of the cases described by these comments.

Table 10: Other Reasons for not Registering a Snowmobile

Comment Category	Frequency	Percent
Collector or vintage snowmobile	37	7.6%
Do not use the snowmobile anymore (not needed for number of people in typical riding group, snowmobile in storage, or sold the snowmobile)	29	5.9%
Kid's snowmobile (less than 125 cc)	28	5.7%
Do not ride the snowmobile on groomed trails (only ride on private property or trails, use for fishing or hunting, use on farm, or racing snowmobile)	26	5.3%
Other (registered in another state, physical condition limits riding, will register next year, recently purchased, snowbike, etc.)	25	5.1%

Some of the reasons why people do not register snowmobiles include the price of registration, not enough snow lately, do not use the snowmobile anymore, do not ride on groomed trails, lack of interest, and being too busy. Actions by the DNR, snowmobile clubs, or other organizations may be able to motivate people to register snowmobiles that are not currently registered for these reasons. About 60% of unregistered snowmobiles fall into one of these categories. Snowmobiles that are not registered because of other reasons, for example needing mechanical work, are unlikely to be registered no matter what actions the DNR or other organizations may take.

Based on the registration rates provided by the survey, there are an estimated 20,000 snowmobiles in Minnesota that are not registered. This figure is likely an underestimate since people that do not have any registered snowmobiles were not included in this survey. If 60% of those snowmobiles could be registered by overcoming the barriers listed above, it would result in up to 12,000 additional registrations. These registrations have the potential to raise \$420,000 in annual revenue for the snowmobile account.

Many people wrote in additional comments related to registration, see page 18 for more information.

Snowmobiling Trip Characteristics

Minnesota snowmobilers typically ride less than 100 miles a day and do most of their riding on groomed trails.

Short snowmobiling trips are more common than long rides. Thirty-seven percent of respondents said they typically rode less than 50 miles each time they snowmobiled; 35% said they went 50 to 100 miles. Less than 30% of respondents go more than 100 miles on a typical ride.

Over 60% of respondents say they do most of their snowmobile riding on groomed grant-in-aid or state snowmobile trails. About 25% of respondents say that almost none of their riding is on groomed trails.⁴ People who do not ride on groomed trails may use their snowmobiles for hunting, ice fishing or riding on private property.

⁴ These values have been reclassified from the survey for clarity: almost none was 0-25% of riding on groomed GIA or state snowmobile trails, some was 25-50% of riding, most was 50-75% of riding, and almost all was 75-100% of riding.

About 55% of respondents trailered their snowmobile more than 50 miles at least once last winter (50 miles is typically used in the tourism industry to differentiate tourist trips from local use). The total frequency of trailering may be higher since some people may need to trailer their snowmobiles even if they are riding trails close to their home. Seven percent of respondents trailered their snowmobile six or more times last winter. Snowmobilers from northern Minnesota trailered less often and those from the Metro trailered more often.



Minnesota snowmobilers trailered their snowmobiles for an estimated 140,000 trips over the winter of 2017-18.



Days Snowmobiled Last Winter

Days Snowmobiled by Survey Respondents

About 89% of respondents snowmobiled at least once last winter. Respondents, on average, rode 11.8 days in the most recent snowmobiling season. Among respondents that snowmobiled at least once, the average number of days riding was 13.3.

Snowmobilers in northern Minnesota rode significantly more days last winter than riders in other parts of the state. There was no significant difference in the average number of days ridden between snowmobilers in the southern, metro, and central regions.

By extrapolating these averages to the entire population, Minnesota snowmobilers rode an estimated 1.6 million days in the winter of 2017-18. Since snowfall and trail conditions vary so much throughout the year and from season to season, these patterns may not represent typical conditions.

Since Minnesota snowmobilers reported riding some days out-of-state, some of the 1.6 million days took place elsewhere. We can estimate that people snowmobiled about 1.6 million days in Minnesota last winter if we assume that people from other states come to Minnesota to ride at the same rate that Minnesotans ride in other states.

Table 11: Average Days Snowmobiling by Region

Region	Average days riding
Northern	16.0
Central	9.9
Southern	10.5
Metro	9.9
Overall	11.8

In-state riding makes up 84% of all days that Minnesotans snowmobiled. Over half of riding was in the county where people live and about a quarter of riding days were somewhere else in the state. Fourteen percent of days were in another state and two percent were in Canada.



Days Snowmobiled by Households

Respondents reported the age and sex of up to six household members, along with how many days each household member snowmobiled last winter. While the previous section summarized riding by adults with a registered snowmobile, this section summarizes riding by entire households, including children and other household members that are not snowmobile owners. These figures may not be as accurate since the response rate was lower and respondents were asked to recall not only how many days they snowmobiled, but also how many days each member of their household rode.

Last winter, Minnesota snowmobiling households snowmobiled 21 days on average. Each household member snowmobiled eight days on average.

Of all the days reported, women rode about a quarter of all days and men rode about three quarters of all days. This reveals that women are snowmobiling more than is indicated by the registration data. Only 10% of snowmobiles in Minnesota are registered by women, yet women represent 23% of all snowmobiling days. This could be the result of households where snowmobiles are registered by men but used by female partners, children or friends. This is not due to female riders snowmobiling more often than men. In fact, women only snowmobiled 4.6 days on average compared to 10.7 days for men.

Household Size	Average Days per Household	Average Days per Household Member
1	11.4	11.4
2	16.0	8.0
3	23.4	7.8
4	27.7	6.9
5	37.2	7.4
6	55.7	9.3
Overall	20.9	7.9

Table 12: Average Days Snowmobiled by Households

Table 13: Days Snowmobiled by Sex

Sex	Percent of Registered Snowmobiles ⁵	Percent of Minnesota Snowmobilers	Percent of Days Snowmobiled
Female	10.3%	40.4%	22.9%
Male	88.1%	54.8%	73.8%
Unspecified	1.7%	4.8%	3.3%

Snowmobiling frequency also varies by age. Young children (4 or under), teens and young adults, and adults ages 70 and over snowmobile less often than other age cohorts. Figure 10 illustrates the difference in average days snowmobiling between men and women by age. Women, of any age, snowmobile less than half as much as men. Interestingly, there is

⁵ MN DNR Electronic Information System as of March 2018

not a large difference in snowmobiling frequency between young boys and girls (ages 10 and under). But the patterns diverge for teenage boys and girls, and teenage girls and women of any age snowmobile much less often than men.

The data suggest that snowmobiling is an important family activity. Children ages 5 to 14 and adults ages 30 to 54 are overrepresented in their share of snowmobiling days. That these two groups are both overrepresented may suggest that families with children are riding together. This trend is also reinforced by snowmobiling households having more members than the Minnesota population, overall.







Importance of Snowmobiling Factors

Respondents rated the importance of several factors for their snowmobiling experience. All of the factors were rated with at least moderate importance. The values are placed on a 1-5 scale, where 1=not important at all, 2=not important, 3=neutral, 4=important, and 5=very important.

The most important factor is the surface quality of the trail, with an average rating of 4.3. Trails that connect to destinations and convenience of trails close to home were each rated nearly as high. Quality of the trail scenery and environment, and opportunities for long distance riding are each somewhat less important to Minnesota snowmobilers. About 55% of respondents rated MnUSA corridors as important or very important; MnUSA corridors received the lowest overall rating, with an average of 3.6.



Snowmobiler Satisfaction

Minnesota snowmobilers are generally satisfied with the state snowmobile system. The values depicted in Figure 13 were classified on a scale of 1-5 for the purposes of analysis, where a 1=very dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied, and a 5=very satisfied.

Over 70% of respondents said they were satisfied or very satisfied with the overall Minnesota snowmobile trail system. Seventy-five percent of people who snowmobiled last winter were satisfied or very satisfied with the overall system. The size of the snowmobile trail system had the highest average satisfaction, at 3.9. About 70% expressed some level of satisfaction for the safety of trails.

A relatively small share of people expressed dissatisfaction with any part of their snowmobiling experience last winter. About 13% of respondents said they were dissatisfied or very dissatisfied with grooming of trails last year. Ten percent said they were dissatisfied or very dissatisfied on trails and eight percent said the same of information about trails and activities. Information about trails and activities had the lowest average satisfaction of all items (3.4), however, this is largely due to the number of people that selected neutral. The most effective way to increase overall satisfaction may be to improve grooming, signage, and information about trails and activities, since these are the areas where the largest number of people are dissatisfied.

Several groups expressed different levels of overall satisfaction with the Minnesota snowmobiling system.

- People who snowmobiled last winter were much more satisfied than respondents who did not ride at all. This may simply show that satisfaction is closely tied to weather and snow conditions. Average satisfaction among people who snowmobiled last winter was 3.9 compared to 3.3 among those who did not snowmobile at all.
- Club members, including members of a local club or MnUSA, are more satisfied than non-club members.
- Trail riders, people who said they do some, most or almost all of their riding on groomed trails, are more satisfied than non-trail riders.
- Snowmobilers from northern Minnesota expressed higher satisfaction than those from other regions. Again, since snowmobilers from northern Minnesota snowmobiled the most days, their higher satisfaction may the product of simply having better snow conditions and more opportunities to snowmobile over the winter of 2017-18.

Many people wrote in comments explaining that they would have been more satisfied if the snow was better and if they were able to ride more last winter. These comments, combined with the breakouts listed above, suggest that in many cases there is not a whole lot the DNR or snowmobile clubs could do to improve snowmobiler satisfaction.



Table 14: Snowmobiler Satisfaction

Snowmobiling Factors	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Average (1-5)
The overall Minnesota snowmobile trail system	16.3%	56.7%	21.7%	4.0%	1.3%	3.83
Size of the snowmobile trail system	21.6%	53.8%	21.5%	2.4%	0.6%	3.93
Safety of trails	13.9%	57.2%	25.0%	3.2%	0.7%	3.80
Accuracy of trail maps and information	13.8%	52.3%	28.9%	4.0%	1.0%	3.74
Signage on trails	13.9%	48.2%	28.6%	8.4%	0.9%	3.66
Grooming of trails	10.7%	45.3%	31.2%	10.5%	2.2%	3.52
Information about trails and activities	7.1%	39.1%	45.7%	7.1%	1.0%	3.44

Support and Opposition for Snowmobile Management Ideas

Respondents expressed levels of support and opposition to several snowmobile system management ideas. The responses were converted to a 1-5 scale where 1=strongly oppose, 2=somewhat oppose, 3=neutral, 4=somewhat support, and 5=strongly support for this analysis.

Respondents support adding miles of snowmobile trails in Minnesota and oppose reducing miles. About 70% somewhat or strongly supported adding miles. Nearly 80% of respondents expressed some level of opposition to reducing miles of snowmobile trails. These two options received the highest and lowest levels of support, respectively.

Respondents also support investing more in trail maintenance and grooming. The survey asked about three different scenarios; investing more statewide, investing more in areas that receive more snow, and investing more in areas where people live. There was about equal support for investing more statewide and in areas that receive more snowfall. Investing more in areas where people live, while still moderately supported, received the lowest level of support among the three with an average of 3.6.

The most polarizing ideas are related to allowing ATVs with or without tracks on snowmobile trails. At least half of respondents expressed some level of opposition to each option. About 22% of respondents expressed some level of support for allowing ATVs with tracks on snowmobile trails while about 12% expressed support for allowing ATVs without tracks. While both of these ideas are generally opposed, there is clearly more openness to allowing tracked ATVs than wheeled ATVs on snowmobile trails.

Many comments expressed opposition to allowing ATVs on snowmobile trails because to poor compatibility between different trail user groups. Some comments explained that ATVs are not compatible with snowmobiles since they generally travel at slower speeds. Others said that wheeled vehicles could result in more disturbance to groomed trails than tracked vehicles. Several commented that snow-bikes may be more compatible with snowmobiles than other types of after-market vehicle conversions because they have more similar vehicle sizes and travel speeds.

Some of the concern about allowing ATVs on snowmobile trails is related to funding. Some people provided additional comments explaining that they are opposed to allowing ATVs on winter trails because ATV registration fees do not help support winter trail maintenance and grooming. Some respondents opposed both statements about allowing ATV use, but commented that they may support sharing trails if ATV registration fees contributed to winter trail maintenance and grooming.



Table 15: Support and Opposition for Snowmobile Management Ideas

Snowmobile Management Idea	Strongly Support	Somewhat Support	Neutral	Somewhat Oppose	Strongly Oppose	Average (1-5)
Add miles of snowmobile trails in MN	37.4%	32.0%	27.6%	1.9%	1.1%	4.03
Reduce miles of snowmobile trails in MN	0.6%	1.7%	19.6%	20.3%	57.8%	1.67
Invest more in trail maintenance and grooming statewide	37.3%	32.2%	26.1%	3.3%	1.1%	4.01
Invest more in trail maintenance and grooming in areas that receive more snow	35.0%	35.8%	25.1%	2.8%	1.3%	4.00
Invest more in trail maintenance and grooming in areas where people live	19.1%	31.1%	40.7%	6.7%	2.4%	3.58
Allow ATVs with tracks on snowmobile trails	9.4%	13.7%	24.3%	17.6%	34.9%	2.45
Allow ATVs without tracks on snowmobile trails	6.1%	6.4%	13.8%	12.4%	61.3%	1.84

Several subgroups expressed different levels of support or opposition to some of these ideas.

- Metro snowmobilers, people with a higher household income, and snowmobile club members are more supportive of adding miles of trails to the system than other groups. These groups are also more opposed to reducing miles of trails in the system.
- Snowmobilers from the metro region and higher income households are more supportive of investing more in trail maintenance and grooming statewide, and in areas that receive more snow.

- Local or MnUSA club members are more supportive of investing more in trail maintenance and grooming statewide than non-club members.
- Snowmobilers that are not club members and women are less opposed to allowing ATVs with or without tracks on snowmobile trails than club members and men. Larger shares of non-club members and women selected neutral in response to both of these questions. This could indicate that these groups are more open to the idea, are unaware of the issue, or simply do not have an opinion about it.

Additional Comments and Feedback

About one-fourth of respondents provided open-ended feedback in addition to the questions asked as part of the survey. The survey did not ask for open-ended feedback on any particular topic and these individuals volunteered information that covered a wide range of topics. All comments were analyzed and coded. Since some people commented on multiple topics, the total number of open ended comments was about 400.

The comments fall into five general categories: system improvement, resource allocation, did not ride on Minnesota trails last winter, use of ATVs on trails, and enforcement. The three most frequently mentioned topics were snowmobile registration, trails (grooming, quality and connections), and lack of snow. The following section elaborates on the five categories and includes some specific examples of comments and suggestions.



*Other topics include all comments that do not fall into the top seven categories included in the above chart. All topics that multiple people commented on are described below.

System Improvement

Registration fees are too high

Many who submitted additional comments on the survey expressed concern about the snowmobile registration fee. Many believe registration costs are too high, and that current prices are unreasonable given the lack of snowfall in recent years and therefore smaller window of opportunity to ride, and the perceived poor quality of trail grooming and maintenance. Others felt that costs are unreasonable given their individual preferences for using snowmobiles. For example, some people pay the same registration fee, but only ride on private property or use snowmobiles for ice fishing and do not ride on groomed trails.

Another common concern addressed costs associated with owning multiple snowmobiles. Respondents who own multiple snowmobiles of different styles and ages, some being used by other family members and some being used as "back-ups," believe it is getting more difficult to renew registration on all of their snowmobiles. Some respondents are feeling increased pressure to sell some snowmobiles because they cannot afford to register all of them. Similarly, people who participate in a variety of recreational activities that require registration or licensure (e.g. boating, fishing/hunting, OHV), are concerned with accumulating costs.

Some respondents expressed concern that the DNR has raised fees as a way to maintain consistent funding with fewer registered snowmobiles. Others indicated their dissatisfaction with having to purchase a trail sticker when registering their machine. That being said, a trail sticker is not required at registration, and given the number of people who expressed this idea, people may be unaware of changes made to registration options, or do not understand the current options available to them. Other concerns include the cost of out-of-state trail passes.

Suggestions on how to improve registration

Many respondents provided suggestions for how to help mitigate the issue of registration costs. Some suggested making registration, including the cost of trail permits, cheaper if you are part of a local snowmobile club. Some also suggested creating a sliding scale system that corresponds to the age and/or value of the snowmobile, or having a reduced or free rate for older snowmobiles because they make for good beginner sleds and usually do not put a lot of miles on the trails. Others requested having a discounted price for owning and registering multiple machines, having a discounted or free registration rate if you are a landowner with a trail running through your land, and having registration fees based on horse power or the volume of internal combustion engine cylinders (i.e., engine cc) of the machine.

Respondents also communicated their dissatisfaction with having to register their snowmobiles on a three-year basis, and requested there be more options, including the option to register for one year. Respondents mentioned they may be more inclined to register more snowmobiles if this were an option. Lack of snow in recent years has also been a deterrent to some respondents' ability or desire to register snowmobiles, as they feel they may not get their money's worth. Because of this, a suggestion was made to make registration renewal annual as it may increase overall snowmobile registration numbers because owners will not be as inclined to "wait and see" if there will be snow.

Other respondents expressed discontent with having to register a snowmobile simply to transport it. Some of these respondents do not use the snowmobile in Minnesota, but only transport it here for storage, repairs, or other reasons.

Many respondents also made requests for other trail users (e.g. bicyclers, walkers, skaters, etc.) to be required to purchase a trail permit.

Prefer aspects of other state snowmobile systems

Many respondents who submitted additional comments expressed their preference for aspects of how other states manage their snowmobile systems, and suggested that the DNR should look to these states for examples. States mentioned included Wisconsin, Michigan (particularly the Upper Peninsula), Wyoming, Montana, and South Dakota (particularly trails near the Black Hills region). Respondents mentioned that Wisconsin and Michigan are "more welcoming" to snowmobilers, have better-maintained trails with better connections, and that are more scenic. Respondents who mentioned Wyoming and Montana said it is cheaper to snowmobile in these states on trails that have bigger riding areas and less enforcement. Some respondents said they prefer the speed limit regulations established in these states. Several commented that the quality of signs and trail maps was better elsewhere.

Communication and information

Respondents indicated through their submitted comments that there is inconsistency in quality of signage and maps both within and among different organizations. Some respondents commented that trail signage in some areas was either old, not complete, completely absent, or tough to find. Respondents also mentioned that some signage was not clear enough in what it was communicating, causing confusion at trail intersections and/or doubt about which trail they were on. Other comments included making signs bigger, putting names of towns on every sign, and integrating more maps displaying mileage between points. A few comments addressed safety concerns at curves and hills, and suggested adding more early warning signs at sharp turns, as well as signs telling riders to keep right.

A few respondents indicated they were dissatisfied with the lack of information regarding up-to-date trail conditions. It was suggested they would like to see a consolidated list of trail conditions, including state and grant-in-aid trails, with details about grooming status, when the trail was last groomed, and the grooming sequence.

Some respondents also expressed a need for snowmobile-related events, as well as general programs, to be promoted and advertised more, saying that they "sometimes hear about them after they have happened." One respondent believes more outreach and marketing is needed "because of the manufacturers and jobs right here in our state and many people in [the] Northern half of the state are very dependent on tourism!"

Also mentioned by some respondents is the importance of communicating safety. Some respondents would like to see an increase in enforcement, especially toward riding while under the influence of alcohol, as well as general safety campaigns from both DNR staff and local clubs, targeted specifically toward young riders.

Trail grooming, quality, and connections

Many respondents who submitted additional comments expressed dissatisfaction with the quality of grooming of some trails. Many of these comments indicated that there is inconsistent grooming on trails that have segments managed by different clubs and organizations. Commenters felt grooming should be completed more often, specifically before, during, and after weekends and holidays. Many also felt grooming should be done in accordance with the amount of rider traffic specific to that trail or trail section, as well as where there is more snow.

A few other respondents indicated a need for additional trails or trail connections to be added in some areas. Also mentioned in some comments was the idea of developing more "loop" trails that might appeal to other user groups such as families and senior citizens, who may not want to ride for long durations.

Many respondents also indicated that improvements could be made to existing trails. Some respondents expressed a desire for less "ditch" trails and more "wooded" or "scenic" trails. Respondents concerned about trail safety requested trails be made wider. Other concerns included the tedious process of establishing agreements and developing state trails, as well as having more flexible trail opening and closing dates that are decided by the maintainer of the trail.

Resource Allocation

Restructure system of investment

Many respondents expressed concern about where money and resources are being invested, saying a higher level of investment should be made where people ride and where there is more snow. Several respondents requested that more resources be invested in these areas, as opposed to where people live. Respondents also made comments regarding the allocation of funding to snowmobile clubs across the state. Some respondents feel funding should be assigned to clubs based on how often those clubs receive snow and are required to groom, in addition to a per-mile variable.

How registration fees are spent

Some respondents made comments on or had questions about how registration fee resources are being used. Overall, respondents would like to know that the money they spend on registration is going solely toward the snowmobile trail system. Given the number of respondents who had questions about how snowmobile funding is spent, it is clear that some users do not know where or how to find this information.

Support for local clubs

A few respondents suggested that additional funding and resources should be given to the local snowmobile clubs. Respondents would like to see "more support from the DNR to help the clubs in the Northern part of the state to maintain their trails." Additionally, respondents would like to see more consistent accountability among all organizations within the grant-in-aid system.

Did Not Ride on Minnesota Snowmobile Trails Last Winter

Lack of snow

Many respondents submitted comments communicating that they did not ride as often or at all due to the lack of good snow conditions in their area. Some respondents indicated that because of the lack of snow, and because they did not ride, it made it difficult for them to complete the survey. Many made the decision to ride elsewhere and in other states where snow conditions were better.

Do not snowmobile on groomed trails

Many respondents wrote in saying they did not use trails when snowmobiling. Some respondents said they only use their snowmobile for ice fishing, trapping, hauling wood, exploring the backcountry or on their own property for work and recreation.

Other reasons for not riding

Some respondents indicated they prefer to ride trails in others states, particularly Wisconsin and the Upper Peninsula of Michigan. A few respondents did not ride at all because they had sold their snowmobiles, and some respondents mentioned they had not ridden, but did not describe why.

Use of ATVs on Snowmobile Trails

Opposed to ATVs using trails

Some respondents who wrote additional comments expressed a strong opinion against allowing ATVs, or other vehicles besides snowmobiles, to use the snowmobile trails at all. People said that these types of vehicles will ruin the trails by creating ruts and going off track. Others feel it is a safety issue, saying ATVs will be too slow and "do not handle very well in the snow and pose a danger to snowmobilers on the trails."

However, while some respondents are very reluctant to allow ATVs on snowmobile trails during the winter, they are more supportive of ATVs using the trails during the summer and shoulder seasons where trail conditions and improvements permit.

Support for ATV/bikes using trails

A few respondents wrote in additional comments as to why they believe ATVs with and/or without tracks should be allowed on snowmobile trails in the winter. Some respondents believe ATVs with tracks should only be allowed on the snowmobile trails if these users are paying to use the trail, and therefore contributing to grooming and maintenance costs. Others approve of ATVs, with or without tracks, using the snowmobile trails as long as the trails are wide enough to accommodate them. Some believe there is no reason ATVs could not be used on frozen lakes where there is open space for them to operate.

Unsure about ATV/bikes using trails

A few respondents who submitted additional comments said they were unsure whether they would allow ATVs on the trails. One respondent said it would depend on the amount and quality of snow coverage. Another respondent said allowance would depend on how much damage ATVs would cause to groomed trails in the winter months, and how the trail base and adjacent ecosystem would be effected in the summer months.

Enforcement and Regulation

Enforcement

Some people communicated that they want to see more or less enforcement. Those wanting less enforcement indicated that the current level of enforcement has limited their enjoyment while riding and it has contributed to their decision to ride elsewhere. Those wanting more enforcement would like it to be focused on those riding under the influence of alcohol, those riding on the wrong side of the trail, and those driving pickups and ATVs with tires on the groomed snowmobile trails.

Speed limits

A few respondents mentioned in their additional comments that they believe speed limits should be raised, both during the day and at night. They expressed dissatisfaction with the 50 mile-per-hour speed limits, and say the current speed regulations deter them from having an optimal experience. Some respondents mentioned other states, such as Wisconsin and Michigan, as having better speed regulations.

Other regulations

A few respondents feel there are too many laws and regulations, or that the laws and regulations in place are too strict. In some instances, respondents said these regulations prevent them from having a great snowmobiling experience. Examples people provided of excessive regulation included limited access to some highway ditches, and exhaust/noise regulations.

Conversely, a few respondents submitted comments indicating they felt there aren't enough regulations. Suggestions included making studs mandatory, increasing regulation of loggers' use of trails, making stricter regulations on length and height of snowmobile tracks, and increasing or maintaining regulations on exhaust noise.

Other Comments and Feedback

Many respondents submitted comments that relayed neither complaints, nor suggestions for improvement. Instead, many submitted comments giving more detail to specific survey questions, telling their own snowmobiling stories, or other additional comments related to information gathered from the survey. Some respondents thanked snowmobile clubs and the DNR for providing this service.

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- Venegas, E. (2009). Economic Impact of Recreational Trail Use in Different Regions of Minnesota. MN Department of Employment and Development. <u>https://files.dnr.state.mn.us/aboutdnr/reports/trails/econ_impact_trails.pdf</u>

Appendix: Survey Instrument

2018 Minnesota Snowmobiler Survey

Please take a few minutes to answer the following questions about your household's experience snowmobiling last winter (last winter refers to December 1, 2017 until April 1, 2018). Your participation is important; please complete and return the survey even if you did not snowmobile last winter. Thank you!

How many people are in your household?

____ people

How many people in your household snowmobiled last winter?

_____ people

How many working snowmobiles does your household own? (not including registered collector sleds)

snowmobiles

How many snowmobiles do you have with a valid registration? Note: It is only necessary to have a valid registration when operating or transporting a snowmobile.

_____ snowmobiles

If you have a snowmobile without a valid registration, what is the main reason it is not registered?

- Needs mechanical work
- \bigcirc Too busy; hard to make it work with my schedule
- O Not enough snow lately
- \bigcirc Price of registration
- \bigcirc Not as interested in riding
- Other, please describe:__
- \bigcirc N/A; All of my snowmobiles have a valid registration

How many miles did you typically ride in a day when snowmobiling last winter?

- Less than 50 miles
- 50-99 miles
- 100-149 miles
- More than 150 miles

About what percentage of your snowmobile riding last winter was on groomed grant-in-aid or state <u>snowmobile trails</u>? (excludes riding on personal property, frozen lakes and rivers, or in road rights-ofway that are not part of a signed, groomed trail)

- 0-24%
- 25-49%
- 50-74%
- 75-100%
- 🔘 I don't know

How many times did you trailer your snowmobile(s) more than 50 miles last winter?

- 0; I did not trailer my snowmobile
- 1 or 2 times
- 3 to 5 times
- \bigcirc 6 to 10 times
- \bigcirc 11 or more times
- I don't know

Please enter the number of <u>DAYS</u> you snowmobiled in each location last winter.

- _____ days within the county where you live
- _____ days elsewhere in Minnesota
- _____ days in another U.S. state
- _____ days in Canada

Fill out the following table for each member of your household. Leave parts of the table blank if you have fewer than 6 people in your household. If you have more than 6 people in your household, complete it for yourself and the 5 most active snowmobilers.

	You	Household	Household	Household	Household	Household
		Member 1	Member 2	Member 3	Member 4	Member 5
Age (years)						
Male / Female	M / F	M / F	M/F	M / F	M / F	M / F
Total number of DAYS riding						
a snowmobile last winter						
(enter a number)						

How important are each of the following factors for your snowmobiling experience?

	Very Important	Important	Neutral	Not Important	Not Important At All
Opportunities for long distance trail riding	0	0	0	\bigcirc	0
Trails that connect to destinations (restaurants, communities, etc.)	0	0	0	0	0
MnUSA corridor trails	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Convenience of having trails close to home	\bigcirc	\bigcirc	0	\bigcirc	0
Surface quality of the trail (i.e. recently groomed)	\bigcirc	\bigcirc	0	\bigcirc	0
Quality of the trail scenery and environment	\bigcirc	0	0	\bigcirc	0

For the last winter, how satisfied were you with each of the following items?

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
The overall Minnesota snowmobile trail system	0	0	0	\bigcirc	0
Size of the snowmobile trail system (i.e. miles of trails available)	0	0	0	0	0
Signage on trails	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Grooming of trails	0	\bigcirc	\bigcirc	\bigcirc	0
Information about trails and activities	0	0	\bigcirc	\bigcirc	0
Accuracy of trail maps and information	0	0	\bigcirc	\bigcirc	0
Safety of trails	\bigcirc	0	\bigcirc	0	\bigcirc

How much do you support or oppose each of the following ideas?

	Strongly Support	Somewhat Support	Neutral	Somewhat Oppose	Strongly Oppose
Add miles of snowmobile trails in MN	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Reduce miles of snowmobile trails in MN	\bigcirc	0	\bigcirc	0	0
Invest more in trail maintenance and grooming statewide	0	0	0	\bigcirc	0
Invest more in trail maintenance and grooming in areas that receive more snow	0	\bigcirc	\bigcirc	\bigcirc	0
Invest more in trail maintenance and grooming in areas where people live	0	0	0	\bigcirc	0
Allow ATVs with tracks on snowmobile trails	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Allow ATVs without tracks on snowmobile trails	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0

Which of the following activities did you participate in over the last 12 months? (select all that apply)

- O Member of MnUSA or attended MnUSA meeting
- Member of local snowmobile club or attended local club meeting
- Spent time maintaining trails (signage, brush clearing, etc.)
- O Participated in snowmobiling social events
- Spent time grooming trails
- Participated in group snowmobile rides
- Was a snowmobile safety instructor
- Participated in vintage snowmobile show
- Other, please describe

What is your race or origin? (select all that apply)

- White
- Hispanic, Latino, or Spanish Origin
- O Black or African American
- Asian
- O American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- O Middle Eastern or North African
- \bigcirc Some other race, ethnicity, or origin

What is the highest level of education you have completed?

- Less than high school degree
- High school degree or GED
- Some college but no degree
- Associate or vocational degree
- Bachelor's degree
- Graduate or professional degree

Please indicate your total household income before taxes.

- 🔘 \$0 \$24,999
- () \$25,000 \$49,999
- () \$50,000 \$74,999
- () \$75,000 \$99,999
- \$100,000 or higher
- 🔘 I don't know

Feel free to write additional comments about snowmobiling in Minnesota on the back of this page. If you have a specific question, contact your local DNR Parks and Trails office or the DNR information center (Minnesota DNR, 500 Lafayette Road, St. Paul, MN 55155-4020, 1-888-646-6367, info.dnr@state.mn.us