4-H ONTARIO PROJECT

Responsible Rider
Snowmobile Project

LEADER RESOURCE
The 4-H Pledge
I pledge my Head to clearer thinking,
my Heart to greater loyalty,
my Hands to larger service and
my Health to better living
for my club, my community and my country.

The 4-H Motto
Learn To Do By Doing

4-H Ontario Provincial Office
5653 Hwy 6N, RR5
Guelph, ON N1H 6J2
tf: 1-877-410-6748
tel: 519-824-0101
fax: 519-824-8759
email: inquiries@4-hontario.ca
web: 4-HOntario.ca

Project Resource Information:
Written by:  Elizabeth Johnston, 4-H Ontario
Layout by:  Christa Ormiston
Edited by:  Marianne Fallis, 4-H Ontario
           Ron Purchase, OFSC
           Mike Farr, OFSC
           Craig Nicholson, OFSC
           Jean Noordhoff, OFSC
Date: December, 2012

4-H Ontario grants permission to 4-H Volunteers to photocopy this 4-H project resource for use in their local 4-H program.

All information presented in this Project Resource was accurate at the time of printing.

The development of this project resource was made possible through the support of: The Ontario Federation of Snowmobile Clubs
INTRODUCTION

Welcome to 4-H Ontario’s Responsible Rider Snowmobile Project!

Snowmobiling is one of the most enjoyable family recreational winter activities in Ontario. It can provide you with many winters of fun and enjoyment on the trails with your family and friends. It’s a great way to get some high intensity adventure or to enjoy the scenery of a natural environment in a new location during the winter months. But, as with most recreational activities, the right way to enjoy the activity is to get trained first. Throughout this project you will explore everything about snowmobiles – history, maintenance and safe operation of snowmobiles, learn about the trail system in Ontario operated by the Ontario Federation of Snowmobile Clubs, as well as how to enjoy snowmobiling in an environmentally responsible way.

Objectives
To understand the history of the snowmobile and snowmobiling in Ontario.
To learn to identify the parts of a snowmobile.
To understand snowmobile maintenance and its importance.
To understand the prescribed trail system in Ontario and the role of the Ontario Federation of Snowmobile Clubs (OFSC).
To learn the importance of volunteering with community organizations.
To learn the laws for enjoying snowmobiling in Ontario.
To understand the principles of being a safe snowmobile operator.
To learn how to obtain a Motorized Snow Vehicle Operators Licence.
To learn respect for the environment while enjoying snowmobiling.

How to Use This Manual
4-H Ontario’s Snowmobile project is made up of 2 parts:

The Reference Book:
The reference book is laid out into 6 meetings:

Meeting 1 – Discover Snowmobiling!
Meeting 2 – Knowing Your Snowmobile
Meeting 3 – Getting Ready to Hit the Trails
Meeting 4 – Following the Trail
Meeting 5 – Making Smart Choices - Safety First
Meeting 6 – Snowmobile Etiquette!
Each meeting has been broken down into an Introduction with Sample Meeting agendas, References and Resources, Topic Information and Activities.

**Sample Meeting Agendas:** are at the beginning of each meeting. The agendas give suggestions for topic information, activities and judging and/or communications activities along with suggested times for each section. These are only suggestions – you will know your group best and will know the skill and attention level of your members. There is more topic information and activities than what can be completed in a two hour meeting. Be creative!

Activities: should be used in combination with the discussion of topic information to teach members in a hands-on, interactive learning environment. The variety of learning material and activities should help you tailor the Responsible Rider Snowmobile Project’s activities to the needs of your members.

**The Record Book**

This booklet is designed to make it easier for members to record information throughout the club. Members are to record their expectations and goals for the project in addition to contact information, meeting dates and roll calls. Print or photocopy pages from the Reference Book that you think will benefit the members either as a resource or an activity. Answers for the Activity Pages can be found at the back of the Record Book.

The Record Book should be given to each member at the beginning of the first meeting. Ask members to keep it in a binder or duotang so they can add to it easily.

Go through the Record Book with the members and explain the charts and forms. Encourage them to use their Record Books at every meeting and record as much information as possible. As an added incentive, a prize could be given at the end of the project for the best Record Book.
Planning a Meeting

Plan your meetings well. Review all the information well in advance so you are prepared and ready!

**Before Each Meeting:**
- Read the topic information and activities and photocopy any relevant resources for the members’ Record Books.

- Be familiar with the topic information for each meeting. Think of imaginative ways to present the information to the members. Do not rely on just reading the information out loud. Review available resources, plan the meetings and choose activities and themes that complement the ages and interests of your members. The Record Book contains extra activities that can be used if you need to fill in time or if one of the suggested meeting activities does not suit your group of members.

- Gather any equipment and/or resources that will be needed to complete the meeting.

- Each 4-H project must be held over a period of at least 4 separate meetings (most clubs are generally 6 meetings), totaling a minimum of 12 hours. Typically, 4-H meetings are approximately 120 minutes (2 hours) in length. Before each meeting, create a timeline to ensure that you are providing an adequate amount of instructional time for club completion.

Included on the following page is a Leader’s Planning Chart to help with the planning of meetings. In addition to the chart, keep track of what went well and what should be changed next time. That way, each time this project is run, the content of the meetings can be different!

When planning each meeting, a typical 4-H meeting agenda should include the following:

- Welcome & Call to Order
- 4-H Pledge
- Roll Call
- Parliamentary Procedure:
- Secretary’s Report
- Treasurer’s Report (if any)
- Press Report
• New Business: local and provincial 4-H activities/opportunities, upcoming club activities
• Meeting content and activities
• Clean-up
• Social Recreation and/or refreshments
• Adjournment

Judging and Communications:

Each meeting must include either a judging or public speaking activity.

• Judging gives the members an opportunity to use judging techniques as part of the learning process. Through judging, members learn to evaluate, make decisions and communicate with others. They also develop critical thinking skills, confidence and self-esteem. Many examples are used in this reference book but use your imagination! As long as members are setting criteria and critically thinking about where items fit within that set of criteria, they are learning the basic skills of judging!

• A communications activity has been provided for each meeting but can be included in the Roll Call or social recreation time. These activities do not need to involve the topic of snowmobiling as the outcome is more about understanding the concepts of effective communication.
Leader’s Planning Chart

<table>
<thead>
<tr>
<th>Mtg.#</th>
<th>Date/Place</th>
<th>Topics Covered</th>
<th>Activities</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As a club volunteer your responsibilities are to:

• Complete the volunteer screening process and to attend a volunteer training session.

• Notify the local 4-H Association of the club, arrange a meeting schedule and participate in club meetings, activities and the Achievement program.

• Review the project material in the Reference and Record books to familiarize yourself with the information and adapt it to fit your group. Be well organized and teach the material based on your group's age, interest and experience level.

• Seek out possible linkages with the local OFSC member snowmobile club, association or district. www.ofsc.on.ca

• Organize the club so members gain parliamentary procedure, judging and communication skills.

• Have membership lists completed and submitted along with Membership fee collected (if applicable) by the end of the second meeting.

• Have members fill out a Participant Agreement form and identify any health concerns. Ensure that all members, leaders and parent helpers know the appropriate actions during any emergency. Check with members for any food allergies or dietary restrictions and plan snacks accordingly.

As a club member your responsibilities are to:

• Participate in at least 2/3 of his/her own club meeting time. Clubs must have a minimum of 4 meetings and 12 hours of instructional time.

• Complete the project requirement to the satisfaction of the club leaders.

• Take part in the project Achievement Program.

• Fill in and complete the Record Book.
Achievement Program Ideas/Suggestions

Volunteer with your local OFSC club to help:
- get trails ready for the season in October or November
- removal of trail signs and stakes in the spring
- set up a Facebook page or other social media opportunities
- assist with a fund-raiser hosted by the OFSC club
- raise awareness of snowmobile safety by working with the Trail Patrol program
- organize an environmental activity such as a season end trail sweep.

Communicate with your community by:

- Holding a Snowmobile Safety Information Night, possibly in conjunction with a Farm Safety event.
- Making a display and setting it up at a local mall, grocery store, local agricultural fair or community event that details the importance of the snowmobiling industry and winter tourism to your area.
- Having members make a presentation at school about why it is important for youth 12 years old and older to get their Motorized Snow Vehicles Operator's License with the OFSC Driver Training course.
- Creating a fun skit about safe snowmobiling, an environmentally friendly approach to snowmobiling or why snowmobiling is important in your area and present it at a school assembly, community function/festival, etc.

Special Projects

These projects are done outside of meeting time and are for members interested in doing more – often senior members. It is up to you as the leader to decide if you will require members to complete a Special Project for club completion. See the inside back cover for suggestions.

Tour Ideas

• Visit a dealership that sells and/or fixes snowmobiles.
• Attend an OFSC club or association meeting in your area.
• Have guest speakers attend meetings to supplement the material in the Reference Manual. Speakers could include a local OFSC member, OPP officer, S.T.O.P. officer, Ministry of Transportation representative, Nurse, Doctor or Paramedic, Snowmobile Salesman, Snow Race organizer, etc.
• Visit an OPP station for a tour.
I pledge my Head to clearer thinking, my Heart to greater loyalty, my Hands to larger service and my Health to better living for my club, my community and my country.

4-H Ontario
Glossary of Terms

**BAC** - Blood Alcohol Concentration level – measures the level of alcohol in the bloodstream.

**OFSC** - Ontario Federation of Snowmobile Clubs

**OFSC Trail Patrol** - Trail patrollers are dedicated club volunteers who provide valuable trailside information and assistance to snowmobilers while promoting the OFSC user pay system.

**OFSC User Pay System** - Snowmobilers who wish to use the OFSC trail network pay a user fee to obtain a trail permit. This allows snowmobilers to enjoy the over 30,000km of OFSC prescribed trails in Ontario. The funds generated from the sale of permits supports OFSC non-profit snowmobile clubs and their volunteers to build and maintain the trails.

**OMSVA** - Ontario Motorized Snow Vehicle Act – the act that lists the laws which govern the operation of Motorized Snow Vehicles in Ontario.

**Snowmobile** - A land vehicle specifically designed for winter travel on snow. Sometimes also referred to as a sled. Legally referred to as a Motorized Snow Vehicle.

**Snowmobile Club** - A member of the OFSC which is an incorporated non-profit, volunteer driven, organization with a strong community base of support. Often several clubs works co-operatively in a snowmobile trail association or in a geographical district.

**Snowmobile Trail Permit** - Mandatory permit required by all recreational operators of snow vehicles using OFSC prescribed trails in Ontario. Administered by the OFSC through an agreement with the Ministry of Transportation. Snowmobilers not displaying a permit on their snowmobile while riding on OFSC trails are trespassing and can be charged under the Ontario Motorized Snow Vehicle Act.

**S.T.O.P.** (Snowmobile Trail Officer Patrol) - A key safety enforcement initiative, S.T.O.P. puts trained club volunteers sworn in as special constables to work with the OPP in enforcing provisions of the Ontario Motorized Snow Vehicle Act.
Additional References and Resources

Antique and Classic Snowmobile Club of Canada  www.acscc.com
Arctic Man Classic Race  www.arcticman.com
Bombardier  www.bombardier.com
Canadian Council of Snowmobile Organizations  www.ccso-ccom.ca
Canadian Living  www.canadianliving.com
Canadian Snowcross Racing Association  www.snowcross.com
Cold Water Boot Camp  www.coldwaterbootcamp.com
Discovery Education  www.discoveryeducation.com
Education World  www.educationworld.com
Emergency Kits Canada Inc.  www.shop.emergencykitscanada.ca
ExploreNorth  www.explorenorth.com
Food Network Canada  www.foodnetwork.ca
Game Ideas for Kids  www.gameideasforkids.com
General Mills  www.lifemadedelicious.ca
Go Outdoor Sports  www.gooutdoorsports.com
Government of Ontario Tourism  www.gorideontario.ca
International Association of Snowmobile Administrators  www.snowiasa.org
International Snowmobile Manufacturers Association  www.snowmobile.org
International Watercross Association  www.iwausa.org
Iron Dog Snowmobile Race  www.irondograce.org
J. Armand Bombardier Museum  www.bombardiermuseum.com
Ontario Federation of Snowmobile Clubs  www.ofsc.on.ca
Ontario Guide  www.ontarioguide.com/snowmobile
Ontario Ministry of Agriculture, Food & Rural Affairs  www.omafra.gov.on.ca
Ontario Ministry of Transportation  http://www.mto.gov.on.ca/english/safety/topics/snowmobile.shtml
Ontario Ministry of Transportation (Motorized Snow Vehicles Act)  http://www.mto.gov.on.ca/english/safety/topics/snowmobile.shtml
Ontario Mutual Insurance Association  www.ontariomutuals.com
OPP Annual Fatality Incident Report  www.opp.ca
Ontario Snowmobiling  www.ontariosnowmobiling.com
Ontario Trails Council  www.ontariotrails.on.ca
Ride Connection  www.rideconnection.ca
Search and Rescue Volunteer Association of Canada – Adventure Smart  www.adventuresmart.ca
Snowmobile Canada  www.snowmobile-canada.com
Snowmobile.com  www.snowmobile.com
SnowmobilerTV  www.snowmobiler.tv
Snow Goer Canada  www.snowgoercanada.com
Snow Trails TV  www.snowtrailstv.com
Snow Trax Television  www.snowtraxtv.com
Statistics Canada  www.statcan.gc.ca
Supertrax  www.supertraxmag.com
Take a Friend Snowmobiling  www.gosnowmobiling.org
This Land is Your Land – OFSC Landowner Information Booklet  www.ofsc.on.ca
The Intrepid Snowmobiler  www.intrepidsnowmobiler.com
Try Riding  www.tryriding.com
Ultimate Canadian Motorsports Association  www.ucmaracing.com
Utah Snowmobile Safety Course  www.snowmobilecourse.com
Vintage Sledders  www.vintagesledders.com

Video Resources

Visit the OFSC website for a series of ten different Get Started Snowmobiling videos:
www.ofsc.on.ca
# MEETING 1  DISCOVER SNOWMOBILING!

## Objectives:
- Learn the election procedure for establishing an executive.
- Learn about the history of snowmobiling in Canada.
- Learn what types of snowmobiles are available.
- Learn what is being done to protect the environment and to encourage responsible snowmobile operation.
- Learn what the Code of Ethics is in regards to snowmobiling.

## Roll Calls
- Have you ever been snowmobiling and, if so, where?
- What is your reason for wanting to learn more about snowmobiling?
- Do you own a snowmobile and, if so, what type is it?

## Sample Meeting Agenda – 2 hrs. 40 minutes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, Call to Order &amp; Pledge</td>
<td>10 min</td>
</tr>
<tr>
<td>Roll Call</td>
<td>5 min</td>
</tr>
<tr>
<td>Public Speaking/Judging Activity</td>
<td>20 min</td>
</tr>
<tr>
<td>“Cool Introductions”</td>
<td>20 min</td>
</tr>
<tr>
<td>Parliamentary Procedure</td>
<td>30 min</td>
</tr>
<tr>
<td>Elect executive, hand out Record Books and discuss club requirements. Fill out club and member information in Record Books, and have each member fill out their “Member Expectations and Goals” page.</td>
<td></td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>30 min</td>
</tr>
<tr>
<td>Discuss history of snowmobiling, snowmobile features &amp; types of snowmobiles. If possible, have magazines available with pictures and descriptions of different types of snowmobiles.</td>
<td></td>
</tr>
<tr>
<td>Activity Related to Topic</td>
<td>15 min</td>
</tr>
<tr>
<td>Activity #2 – Snowmobile Puzzles</td>
<td></td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>20 min</td>
</tr>
<tr>
<td>Discuss Environmental Impact of Snowmobiling and the Code of Ethics for Snowmobilers.</td>
<td></td>
</tr>
<tr>
<td>Wrap up, Adjournment &amp; Social Time!</td>
<td>10 min</td>
</tr>
<tr>
<td>At Home Challenge</td>
<td></td>
</tr>
<tr>
<td>Choose one of the At Home activities to complete.</td>
<td></td>
</tr>
</tbody>
</table>
ELECTING YOUR EXECUTIVE

Elections can be chaired by a Youth Leader, Senior Member or Club Leader. The person chairing the elections is not eligible for any positions.

**Procedure:**

1. All positions are declared vacant by the chairperson, who indicates this by saying “I'd like to declare all positions vacant.”
2. The group decides on the method of voting (i.e. show of hands, ballot or standing).
3. The chairperson accepts nomination from Members for each position being filled.
   Nominations do not require a seconder. Nominations are closed by motion or declaration by the chairperson.
4. Each Member nominated is asked if he/she will stand for the position. Names of Members who decline are crossed off.
5. Voting takes place by selected method and majority rules (i.e. Member with most votes).
6. Announce the name of the successful Member. Offer congratulations and thank all others that ran for the position.
7. If ballots are used, a motion to destroy the ballots is required and voted on.

**Steps in Making a Motion**

The motion is a very important key to having good meetings. Motions are a way of introducing topics for discussion and allowing each member to speak and vote. Any member can make a motion.

**Steps in making a motion:**

1. Address the chairperson (i.e. raise your hand).
2. Wait for the chairperson to acknowledge you.
3. Make the motion: “I move that…”
4. Another person seconds the motion: “I second the motion.”
5. Chairperson states the motion.
6. Chairperson calls for discussion of the motion.
7. Chairperson restates the motion.
8. Chairperson calls the vote: “All in favour? Opposed?”
9. Chairperson announces the result of the vote: “Motion carried” or “Motion defeated.”
Topic Information

Snowmobiling is a great family lifestyle. It is an activity that keeps parents and kids together. Historically, individuals who snowmobile at a young age continue to snowmobile throughout the rest of their lives. Snowmobiling is great exercise that brings people outdoors to interact with nature and each other. It is an invigorating activity that is great for stress release and good mental health and can be close to home or can take you on wonderful trips. And, above all, its a lot of fun!

**How did snowmobiling get started in Canada?**

Before highways, snowplows and snowblowers people in Ontario had difficulty getting around in the wintertime. Many people lived in the country and often farmers had to rely on snowshoes to move about between houses and barns to ensure livestock were looked after even in the worst snowstorms.

*Source: Patents and the History of Technology www.patentpending.blogs.com*

In 1927, the first patent for a snowmobile was issued to Carl J. Eliason of Sayner, Wisconsin. The patent listed Eliason's invention as a snow machine. Between the years of 1927 and 1962, thirteen patents were granted to inventors for snow vehicles considered the predecessors to the modern snowmobile. These vehicles helped doctors, farmers, loggers and trappers travel in heavy snow.

In 1958, Joseph-Armand Bombardier designed the modern snowmobile. Bombardier, a Canadian born in Valcourt, Quebec in 1907, is considered the father of snowmobiling. His development in 1958 of the type of sport machine that we know today as a “snowmobile” was instrumental in changing life in all regions that get snow. In the far north, those changes were both rapid and dramatic.
As a teenager, Bombardier was fascinated with mechanics. His passion was to develop a machine that could travel across both snow and muskeg, and by 1930 he had built a successful machine that was driven by tracks. It was steered by braking one track or the other, as in the tractors of the time. In 1937 he made his first major breakthrough, building a vehicle with steerable skis in front of a set of tracks.

In 1942, Bombardier established a company to manufacture his tracked vehicles. Great strides were made in the technology during the war, and in 1947 Bombardier announced a new 12-passenger enclosed snow machine. Designed primarily for military use, it was quickly adopted for use by the Canadian police, mining and oil exploration companies and even a few ski-hill operators.

In late 1958, the revolutionary Bombardier sports machine, the Ski-Doo, was introduced. Although the concept was similar to the company’s larger machines the size and price of the new “snowmobile” made it an instant hit. Within a decade even dog-teams in Inuit villages were being replaced by machinery.

Bombardier died in 1964 but his company has continued to grow and now not only makes snowmobiles but also ATV’s, roadsters, boats and personal watercraft. In 2003 this company separated from Bombardier Inc. to become Bombardier Recreational Products (BRP). BRP is headquartered in Valcourt, Quebec and owns manufacturing facilities in Canada, the United States, Mexico, Finland and Austria. BRP has a workforce of over 6000 people and BRP products are distributed in over 100 countries worldwide. Not bad for a guy who started out designing “snow machines”!
Snowmobiling Today

Today, four major manufacturers service a market of approximately four million snowmobiling enthusiasts across North America: Arctic Cat, Skidoo, Polaris and Yamaha. Ontario had approximately 150,000 snowmobiles that were insured in the 2011 season with over one quarter of a million people using those snowmobiles. In Canada, there were almost 650,000 registered snowmobiles in 2011. Of that number, 40,900 snowmobiles were purchased new in Canada in 2011. Over 90,000 full time jobs are generated by the snowmobile industry in North America. Those jobs are involved in manufacturing, dealerships and tourism-related businesses.

**FUN FACT: Did You Know?**
The average age of a snowmobiler in North America is 43 years old. The average snowmobiler rides their snowmobile 1,836km (1,414 miles) per year in North America.

What is a Snowmobile?

A snowmobile is a land vehicle specially designed for winter travel on snow. As per the definition in the Ontario Motorized Snow Vehicles Act, a motorized snow vehicle is defined as a self-propelled vehicle designed to be driven primarily on snow. It is driven by a track or tracks in contact with the snow and steered by a ski or skis, also in contact with the snow.

A snowmobile’s flotation supports it on top of snow with very little sinking. A snowmobile track has almost 35 times more area than a person’s foot to support itself and its load on top of deep snow. That is why a snowmobile will float on deep snow while a person will sink in the same spot of snow when stepping off a snowmobile even though the average weight of a new snowmobile is 205kg (450lbs). However, depending on the machine and the snow conditions, even the best snowmobiles can get stuck.

The various parts of the snowmobile, such as the hood, engine, fuel, tank, headlight, rear axle, bogie wheels track support (in older snowmobiles) or slide suspension mechanism, skis, ski suspension and running boards are supported on a frame.

The development of a lightweight power train made the snowmobile possible. The power train is made up of a power source and a drive system.

The power source is a relatively small but powerful two-cycle or four-cycle engine. Modern snowmobile engines have significantly reduced emissions and noise levels.
FUN FACT: Did You Know?
4-H offers a wide variety of projects including a 4-H Small Engines Project where members learn about the mechanics of internal combustion power sources.

The drive system consists of the engine, drive or centrifugal clutch, drive belt, drive clutch or torque converter, chain and sprockets and track with its suspension.

Other components and functions of the power train are:

**Engine** - its spark plugs, carburetor, air intake and exhaust systems keep the machine moving.

**Carburetor/Fuel Injection** - Blends the correct fuel and air mixture for firing the spark plugs.

**Engine Cooling Fans or Heat Exchangers** (depending on the machine) – These are necessary for the engine to operate efficiently and at a safe operating temperature.

**Exhaust System** – The system is comprised of an air intake and silencer (muffler) which, along with the engine mounting system are important components for the proper operation of the snowmobile and for controlling sound levels in the machine.

Types of Snowmobiles

The range of choices for types of snowmobiles on offer is staggering. So if you are looking for a new snowmobile where do you start?

The snowmobile market has now been split into many sectors including the following:

- Trail/Cross Over
- Mountain/Deep Snow
- Performance/Activity/Racing
- Touring
- Utility

**Trail/Cross Over**
Trail snowmobiles are also known as entry level sleds. These snowmobiles come equipped with engines ranging from 60-70 horsepower. The vehicles are easy to ride, are relatively inexpensive and can be equipped with electric start and reverse for easy starting and maneuvering. If you are just starting out this might be the best place to start.
**Mountain/Deep Snow**
A Mountain snowmobile is, as the name suggests, a sled specifically designed for mountain riding. They usually have longer tracks, large paddle lugs and are narrower than other snowmobiles.

**Performance/Activity/Racing**
Performance snowmobiles tend to be just that - high performance machines. They have higher horsepower engines, are heavier than entry level machines and benefit from more robust suspension. This allows the snowmobile to cope with travelling over humps at increased speeds.

**Touring**
A touring snowmobile is basically a two-passenger machine. As such, they are larger and less agile than one man machines. Their primary purpose is to ride for a long distance in comfort.

**Utility**
Utility snowmobiles are the workhorses of the snowmobile range. They are typically used to tow equipment and are adept at working trails with heavy snow. Utility snowmobiles feature extra wide tracks to help support the additional weight these sleds carry.

**Environmental Impact of Snowmobiling**

Snowmobilers have been riding with nature and doing their part to keep it beautiful for years. Snowmobiling contributes to the economy of rural regions and enhances residents’ quality of life but it can also cause conflict with some environmentalists and the ecosystem.

Many steps have been taken over the years to minimize the impact of snowmobiling on the environment. These include:

**Stay on the Trail** - Whenever possible, reduce your environmental footprint by riding on organized snowmobile trails, which act as defined corridors to move snowmobiles with minimal impact on nature.

**Embrace New Technologies** - Today's clean and advanced technology snowmobiles run even more efficiently, effectively and are much quieter too. They also benefit the environment by significantly reducing emissions and virtually eliminate smoke and smell.
Leave Tracks, Not Trash - If you had the space to bring it in, then respect nature by carrying litter out with you. This includes sleds parts, such as broken belts, oil containers or used spark plugs.

Spread the Word - Snowmobiling and the environment is a good news story. Snowmobilers are proud of their stewardship contributions and the Canadian Council of Snowmobile Organizations (CCSO) encourages every rider to spread the word about our progress in keeping nature beautiful.

Protect Wildlife - Animals are more vulnerable in winter, so keep your distance and leave them alone, allowing them to move away from you at their own pace. Avoid riding in areas reserved for endangered species.

Maintain Your Snowmobile - A well-tuned snowmobile is more environmentally friendly, efficient and reliable, so be sure your sled is in tip top shape before each ride.

Keep It Quiet - Refrain from replacing the manufacturer’s certified and approved muffler with noisy after market pipes that may disturb wildlife, increase emissions and annoy others.

Respect Sensitive Areas - There are lots of other places to ride, so avoid areas marked as environmentally sensitive or protected habitats.

Snowmobilers care about the environment!

Code of Ethics - Canadian Council of Snowmobile Organizations

Part of being a responsible snowmobile operator is following the Code of Ethics as set out by the Canadian Council of Snowmobile Organizations. It states: 
“As a snowmobiler I understand and accept the risk associated with snowmobiling and I will take responsibility for my own actions.”

As a responsible snowmobiler...
• I will ride in a manner that is a credit to our recreation.
• I will influence other snowmobilers to adhere to this Code of Ethics.
• I will respect the rights of others including property owners and other outdoor enthusiasts.
• I will protect our natural environment.
• I will ride in a responsible manner and will use only marked trails, areas or roads open to snowmobiles.
• I will not harass or harm wildlife or the natural surroundings.
• I will minimize my impact on the environment.
• I will ride smart, be prepared and stay in control.
• I will check ice and weather conditions before riding.
• I will help those in distress.
• I will obey all laws and rules governing our recreation.
• I will promote proper snowmobile education and training.
• I will practice Zero Alcohol with respect to impaired driving.

**FUN FACT: Did You Know?**
Approximately 80% of snowmobilers use their snowmobile for trail riding and touring on marked groomed trails. The other 20% of snowmobilers use their snowmobile for work, ice fishing and transportation.

**BEFORE THE NEXT MEETING**

*Try one of these activities at home.*

Using a blank 8 ½” X 11” piece of paper, make a collage of snowmobile pictures using pictures from magazines or the Internet. Put the collage in your Record Book.

**OR**

Interview someone who owns a snowmobile. Find out what kind and type of snowmobile they have, what they use it for, how old the snowmobile is and how long they have been operating a snowmobile. Record your findings in your record book.
Respecting the Environment
Today’s snowmobiles help keep nature beautiful by operating more efficiently, effectively and quietly than ever before, while virtually eliminating smoke and smell. Moreover, increased fuel efficiency means that less fuel is being burned, which also results in lower emissions.

The Truth About Snowmobiling – Fact versus Myth
• Snowmobiling occurs in defined locations such as organized trails and designated riding areas.
• The total surface footprint of snowmobile trails in Canada equals approximately 240 square miles, about the size of a medium size town.
• Because snowmobiling occurs in this comparatively small footprint, interaction between snowmobilers and wildlife remains minimal.
• Snowmobiling occurs when a blanket of snow protects the ground, thereby minimizing its impact on plants and earth.
• After the snow melts, nature flourishes again, including where snowmobiles have travelled.
• Snowmobile trails help wildlife conserve energy by providing packed surfaces for easier foraging and movement during harsh winters.
• Today’s snowmobiles are built 94% quieter than early sleds and when left in stock condition produce a minimal sound level as certified by professional engineers. Overall, snowmobiles account for a small fraction of all the motor fuel burned annually in Canada.
• Today’s snowmobiles use significantly less fuel and oil, and run much more efficiently than older sleds.
• Today’s snowmobile engines produce 98% fewer hydrocarbons than older snowmobiles.
Source: Canadian Council of Snowmobile Organizations

The Ontario Federation of Snowmobile Clubs (OFSC) is committed to being a leader in fostering the environmentally responsible development and use of Ontario Snowmobile Trails by working with stakeholders through a sustained program of dedicated funding, research, public education and innovative special projects.

Since 1992, the OFSC has invested over $1.5 Million in projects to improve the environment and to assist clubs in minimizing environmental impacts. With $1 dollar from every Ontario trail permit committed to the environment, OFSC snowmobile clubs work closely with partners and member clubs to educate the public, draw attention to the environment and make capital improvements to trails and water crossings on their vast network of trails of over 30,000 kms.

From planting trees, to working with the media, to creating public service announcements, to holding public forums, the OFSC, its Board of Governors and its thousands of volunteers fully understand and are committed to letting the world know that snowmobilers really do care about the environment!

Snowmobilers get the unique opportunity to see the winter environment like no one else can. Travelling in areas that would be difficult or almost impossible to travel to by foot gives snowmobilers the opportunity to see nature up close. With this opportunity, comes responsibility – a responsibility that snowmobilers take very seriously!

Wildlife is an important part of the winter environment. While many animals hibernate, not all do. Research what animals snowmobilers might encounter while travelling on Ontario's network of Snowmobile Trails. If possible include pictures.
Meeting 1 - Activities

Activity #1

Cool Introductions!

Have members write three words or sentences about themselves on a piece of paper. They should not put their names on their papers. Then have each member crush his or her paper into a ball. Now you're ready for a getting-to-know-you “snowball fight.” Tell members they cannot begin until you say “go” and that they must stop when you say “freeze.” Remind members not to throw “snowballs” at anyone's face. When you say “go,” give members 30 seconds to a minute to toss their “snowballs.” When you say “freeze,” every member should pick up one snowball. Each member should open up the snowball and find the person it belongs to. Members should chat with their partners about the information on the sheets. Then members will be responsible for introducing the member whose snowball they “caught” to the rest of the group.

Activity #2

Snowmobile Puzzles

Gather fairly large magazine/poster pictures of different types and brands of snowmobiles. If possible, laminate pictures. Cut pictures into various puzzle shapes, making sure to have at least one puzzle piece for each member. Give each member a puzzle piece and have them work as a group to find the matching puzzle pieces to complete the snowmobile pictures.
MEETING 2 - KNOWING YOUR SNOWMOBILE

Objectives

- Learn to identify the parts of a snowmobile.
- Learn what to do for pre-season and regular maintenance of a snowmobile.
- Learn what to do for a pre-ride inspection.
- Learn what to look for when buying a new or used snowmobile.

Roll Calls

- Name one part on a snowmobile.
- Name one reason maintenance of a snowmobile is important.
- Have you ever helped with maintenance on any piece of equipment and if so, what was it and what did you do?

Sample Meeting Agenda – 2 hrs. 25 minutes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, Call to Order &amp; Pledge</td>
<td>10</td>
</tr>
<tr>
<td>Roll Call</td>
<td>5</td>
</tr>
<tr>
<td>Parliamentary Procedure</td>
<td>10</td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>25</td>
</tr>
<tr>
<td>Public Speaking/Judging Activity</td>
<td>30</td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>30</td>
</tr>
<tr>
<td>Activity Related to Topic</td>
<td>25</td>
</tr>
<tr>
<td>Wrap up, Adjournment &amp; Social Time!</td>
<td>10</td>
</tr>
<tr>
<td>At Home Challenge</td>
<td></td>
</tr>
</tbody>
</table>

If possible, have a snowmobile available to review the parts of a snowmobile.

If possible, have 2 or more snowmobiles for members to compare, preferably a combination of newer and older snowmobiles. Activity #1 - have members judge the same parts on each snowmobile (using the judging card in the Record Book) to determine which part is in better shape and why.

Discuss what is involved with pre-season and regular maintenance as well as what to do for a pre-ride inspection. Discuss what to look for if buying a new or used snowmobile.

Winter Password Game. See Activity #2 in the Record Book.
One of the key parts of safe, enjoyable and trouble-free snowmobiling is having a snowmobile that is well maintained. But, before you can maintain it, you will need to know the names and location of the parts of a snowmobile.

1. **Headlight(s)** – illuminate the path in front of your snowmobile and alert other riders to your presence. Most snowmobile headlights have high and low beam settings.

2. **Hood or Cowl** - protects and covers the engine and other mechanical components.

3. **Engine** - snowmobile engines are generally two stroke except for some newer models that use four stroke engines.

4. **Hull or Tub** - also known as a belly pan, it’s meant to aid in flotation in deep snow and to also protect the undercarriage from rocks, ice and other hard debris.

5. **Front and Rear Bumpers** - help to protect against minor collisions with trees, rocks and other snowmobiles.

6. **Ski Tip Handle** - handy for pulling, moving and lifting the vehicle.

7. **Skis** - including wear bars and carbides, the skis glide along the surface of the snow
8. **Ski Spindle** - connects the ski to both the suspension and the steering systems.

9. **Shock Absorber** - using either springs, hydraulics or both, “shocks” will help give you a comfortable and smooth ride over bumpy terrain while keeping the skis in contact with the snow to maintain steering control.

10. **Track** - made from reinforced rubber, the “track” is wrapped around the rear suspension system of the snowmobile and is driven by the engine.

11. **Rear Suspension** - suspends the track as it digs into the snow which helps to maintain contact between the snowmobile and the snow. It also supports the rear of the snowmobile by absorbing bumps, allowing for a smooth ride.

12. **Running Board** - the running board is located on both sides of the snowmobile and is used to rest the feet on while the snowmobile is in motion.

13. **Tail Lights** - always make sure that your rear lights and brake lights are in proper working order. Always carry spare bulbs in the tool kit.

14. **Passenger Strap** - make sure your passenger has a solid, safe strap on which to hold. Only carry a passenger if the snowmobile is designed for it.

15. **Vehicle Identification Number** - this is a unique number assigned to the snowmobile by the Ministry of Transportation and is used to identify your snowmobile.
When sitting on the seat of your snowmobile, looking at the controls, there are also a few names you need to know.

1. **Windshield** - protects you from the wind and deflects any debris, ice or snow that may fly up during operation.

2. **Handlebars/Steering Column** - this is your main steering mechanism.

3. **Engine Stop Switch** - a way to stop the engine quickly. To activate it, you must push the switch down.

4. **Throttle** - squeezing the throttle lever feeds more fuel to the engine which in turn powers the driveshaft and rubber track, making you move forward (or backwards on snowmobiles equipped with reverse).

5. **Grip Warmer On/Off Switch** - turns the grip warmers, including the throttle and thumb warmers, on and off (not available on all snowmobiles).

6. **Speedometer** - the gauge that tells you what speed the snowmobile is travelling at (can be kph or mph).

7. **Instrument Panel** - the location of instruments and controls important to the operation of the snowmobile.

8. **Tachometer** - the gauge that tells you the rotation speed of the driveshaft in RPM’s (revolutions per minute).

9. **Electric Starter Button** - allows you to start the engine once the keys are in the ignition (not included on all snowmobiles).

10. **Brake Lever** - squeezing the brake lever slows down or brings the snowmobile to a stop.

11. **Headlight Switch** - controls the functioning of the snowmobile’s headlights.

12. **Parking Brake Lever** - the parking brake should always be used when your snowmobile is not in operation.
Snowmobile Maintenance

Throughout the course of the season, a snowmobile is often subjected to some very extreme conditions. Proper maintenance however involves a lot more than simply fixing a part of the machine when it breaks. Proper maintenance also includes preventative measures that must be taken before the snowmobile season begins.

Snowmobiles should receive a tune-up at the beginning of every season. This kind of maintenance can go a long way to preventing problems on the trail.

Your owner’s manual will have detailed instructions and diagrams explaining what should be done at the beginning of each season to make sure your snowmobile is in top condition.

At the start of the season check the following snowmobile parts for wear or cracks and lubricate, adjust or replace as necessary:

* **Headlights and tail lights** – replace if not working.

* **Reflectors** – replace if cracked.

* **Windshield** – a cracked, scratched, faded or broken windshield should be replaced.

* **Ski s** – replace if worn.

* **Track & Shocks** - check for damage, missing inserts or track guides. Also check track tension and alignment.

* **Steering mechanism** - check for tightness of steering arms, tie rods, ball joints, spring coupler bolts, shock absorbers and spindles.

* **Drive and Fan belts** – check for cracks, fraying, shininess and uneven wear and replace as necessary.

* **Spark plugs** – consult the owner’s manual for correct spark plug replacement specifications. It’s usually a good idea to change them at the start of the season.

* **Electrical wiring** – check for loose connections, stripped wires or damaged insulation and replace as necessary.

* **Brakes** – adjust according to instructions in the owner’s manual.
Battery - check the electrolyte level and add distilled water if necessary. Remove corrosion from battery connections with a wire brush and clean with a solution of baking soda and water. Rinse and dry well.

Exhaust system - snug up bolts but do not over-tighten.

Chain case - check oil level and top up if necessary.

Coolant (on liquid cooled snowmobiles) - check coolant level and top up if necessary.

Proper maintenance and care of a snowmobile does not end after a preseason tune-up. It is an ongoing process. Regular maintenance throughout the entire snowmobile season will keep your snowmobile running smooth and relatively trouble free. A snowmobile that is properly cared for is more likely to have a lower environmental impact (through emissions and noise) and will result in better fuel conservation. It’s a good idea to take your sled to a qualified mechanic for regular maintenance.

Regular maintenance and proper care includes (but is not limited to):

• Following the manufacturer’s recommendations for fuel and oil.
• Regularly checking the spark plugs and check to see what colour the tip is. If it’s light brown or tan its normal. If the tip is black or light grey/chalk white it needs to be replaced and could indicate a further problem with the snowmobile.
• Maintain all fluid levels.
• Avoid making any aftermarket alternations to your exhaust system. Not only can it result in louder noise emissions, it can also void your warranty and make your exhaust illegal. • Responsible riders keep the environment in mind at all times.
• Check the skis, track and drive belt for damage and wear.
• Follow the owner’s manual for regular maintenance tips.

The Pre-Ride Inspection
Whether you are going for a short ride or for the entire day, it is important to do a pre-ride inspection to ensure a fun, safe experience. Before starting your snowmobile be sure to check the following:

Throttle - squeeze the throttle to the fully open position to make sure it doesn’t stick and returns to the idle position immediately when released. Do this two or three times.

Fuel, Oil & Coolants - make sure you have enough fuel for your trip and make sure that oil and coolant are at recommended levels.
**Skis and Track** - inspect your snowmobile's skis, track and suspension for wear or damage. Make sure the track and skis are not frozen to the ground or obstructed by debris.

**Battery** - check the battery for corrosion and make sure the connections are tight and the battery is secure.

**Drive Belt** - check for tears or cracks and make sure there is correct tension.

**Handlebars/Steering** - make sure you can turn the handlebars both ways and that the skis respond and move accordingly.

**Clutch Guard** - ensure clutch guard is in position and securely fastened.

**Bolts & Nuts** - Visually inspect the entire machine for loose bolts and nuts and tighten where necessary.

**Emergency/Survival Kit** - make sure it is packed and has everything you will need for your trip.

**Weather Conditions & Trails** - check weather and trail conditions and plan accordingly.

**Helmet** - make sure helmet is properly adjusted and fastened.

**Positioning** - make sure your snowmobile is pointing towards a clear and unobstructed path before starting the engine.

**Parking Brake (if your snowmobile has one)** - make sure the parking brake is on before starting the engine.

Now you are ready to start your snowmobile but you are not done inspecting yet. Once your snowmobile is running and before you drive, also look at:

**Brakes & Brake Lights** - test the brake lever to make sure it is operating freely and smoothly. There should be some resistance when it's squeezed. Also check to make sure the brake lights work with the brake lever is squeezed.

**Headlights and Taillights** - check to make sure they are working properly.

**Engine Stop Switch** - make sure the engine stop switch is functioning properly.

**Idle** - allow adequate time for your snowmobile to warm up. Run your machine for 30 seconds or more before releasing the parking brake and carefully taking off.
Now that you are ready to go, your snowmobile might need a few adjustments. The way in which you position yourself on your snowmobile has a significant impact on how it will handle in different situations. It is important to adjust your snowmobile to fit you and your riding style before heading out. A few suggestions include:

**Suspension** - often the suspension for both the front and the rear of your machine can be adjusted according to your weight and riding position.

**Handlebars** - the handlebars should be adjusted to a height that allows for optimal control and comfort while riding.

**Mirror** - you will need to adjust the mirror depending on your height and riding position to allow you to properly see what is behind you.

**Headlight** - depending on your weight and riding position, the angle or tilt of the headlight can be adjusted to allow for the best possible visibility.

### Summer Storage of your Snowmobile

To get the most out of your snowmobile, prevent deterioration by preparing it for summer storage properly.

- Clean the machine thoroughly inside and out with a mild detergent and water.
- Touch up all scratch marks with paint and spray all bare metal parts with metal protector.
- Wax the hood and all painted surfaces.
- Carry out the manufacturer’s storage lubrication procedures outlined in the owner’s manual for both oil and fuel.
- Remove the drive belt. This prevents damage to the drive belts and clutches and also prevents the chance of condensation between the belt and clutch sheaves.
- Block off the muffler outlet, carburetor air intake, cooling system intake and outlet holes. This will prevent insects and small animals from building nests.
- Take the battery out and put it in a safe place. Make sure it is out of the sunlight. Charge the battery once a month with a small charge that is rated at no more than 2amp/hr.
- Buy a metal snowmobile stand or make one out of scrap lumber and store the machine in a dry place with its track completely off the ground.
- Cover the snowmobile with a tarp that permits ventilation or use a standard ready-made snowmobile cover.
- Put your trailer on blocks out of the sun. Raise the tongue to the same level as the axle. Let half the air out of the tires.
Buying a New or Used Snowmobile

There are many factors to consider when thinking about buying a new or used snowmobile. The prime consideration though in selecting a snowmobile is how it will be used and for what purpose.

If most of your time will be spent trail riding on groomed trails and driving in areas where the snowfall is moderate, then most models will satisfy your needs.
If you will be operating the snowmobile for most of the season in deep snow or you will be carrying a passenger and/or extra equipment, you will need a machine that has a large motor and longer track and chassis length.

Most snowmobiles are reliable and can be depended upon for trouble-free enjoyment, provided the recommended maintenance schedules are followed. The dealer in your area is also a consideration as you will be relying on them for parts, advice or maintenance from time to time.

Most of the new snowmobiles are comparable in safety and have low noise levels. For older machines though, it is wise to discuss the safety features with a dealer. Machines with wide tracks are somewhat more stable and are excellent for snowmobiling in hilly country but a more powerful engine is required.

When buying a used snowmobile, the same caution should be taken that would be applied to the purchase of any type of used machinery. Make sure that:
• All moveable parts have been properly maintained and are not unduly worn.
• All electrical systems are operable.
• The machine has not had harsh treatment.

Test drive the snowmobile, or have a parent test drive the snowmobile, to see how it rides and handles.
Before the Next Meeting

Try one of the following activities.

1. Conduct a survey among friends that snowmobile. Find out what brand of snowmobile they have, whether they like it and why they like or don’t like it. Is it because of its style and appearance? Is it because it accelerates quickly.? Is it because it gives a smooth ride? Is it because of the features on it such as heated handle-bars? Is it because it doesn't break down very often? Is it too hard (or too expensive) to fix and maintain it? Record your findings in your Record Book.

OR

2. Find snowmobile dealerships in your area. List where they are located, the distance from the dealership to where you live, what brand(s) of snowmobiles they sell and whether they have a service department. Is there anyone in your area that doesn't sell snowmobiles but fixes them? List them as well.
Buying a New or Used Snowmobile

Today’s clean, advanced technology snowmobiles are as quiet, reliable and state of the art as automobiles and offer many features. Regardless of the make or model, all snowmobiles have the same basic characteristics. The difference is how each of the major components accomplishes its task. So a performance snowmobile will usually have more finely-tuned power, stiffer suspension and aggressive features - like a sports car - while a touring model will have more middle of the road power, a cushier suspension and a more comfortable seat. Shop for the features that are best suited to your riding expectations, style and experience level and that come within your budget range.

Buying a New Snowmobile

Each of the four snowmobile brands has a network of dealers where you can select from current and used snowmobiles, hear expert advice and get service done. These dealerships are located around Ontario and also offer parts, accessories and clothing. Dealers are also a good source of snowmobiling information or you can also contact your local snowmobile club.

Typically, the four manufacturers introduce their new model line-ups each spring with special offers and packages, although the main selling season is in the fall of each year. Dealers often have a mix of current, new non-current and used sleds for sale.

Buying a Used Snowmobile

While dealers often have good used snowmobiles available many used sleds are also for sale privately in newspapers, buy and sell publications and on the Internet.

Helpful Tips for buying a Used Snowmobile

When buying a used snowmobile it’s important to do your homework first! There are several things to check when considering such a large purchase.

1. **Visible damage** - Check front and rear suspension, bulkhead, tunnel, track, rails, etc. for impacts, cracks or bends. Check the track for broken/missing/damaged lugs and missing or bent studs. Bring a flashlight with you to be able to have a better look underneath the machine.

2. **Mileage** - there is no “right” number, but you should be aware of the mileage.
3. **Oil** - Check the oil level, colour, and type. Ask what kind of oil was used. Automotive oil is not always as good as snowmobile specific oil.

4. **Compression Test** - If possible do a compression test. This can be tricky on engines with automatic decompression.

5. **Start it and run it** - A cold start is best, so make sure the seller hasn’t started the machine prior to you arriving. Check for smoke out the tail pipe. When warm, most engines should produce very little smoke, although most 2-stroke engines will always smoke at idle, especially when cold. Ask to ride it if possible. A ride can tell you a lot - worn shocks will bottom, loose steering is more noticeable and worn drives will make a ratcheting sound.

6. **Belt and Clutch** - Check the belt and clutch for signs of excessive wear. The belt surface should be smooth with no cracks or fraying.

7. **Maintenance** - Ask for service records or history. Also ask how the snowmobile is stored in the off-season. Storing indoors in a controlled climate is the ideal scenario as there is minimal temperature change and therefore, less chance of condensation. Stored in a closed trailer is better than sitting outside in the elements, but not by much since temperatures can swing much higher in a closed trailer with no ventilation.

    Condensation is the enemy since it will rust steel as well as corrode and pit aluminum. It’s also bad for paint and plastics. Soaking vulnerable parts with something like WD40 before storage will help to alleviate much of this problem.

8. **Talk to the seller** - Get a feel for how they talk and how the snowmobile was maintained. For example, the snowmobile may have been raced. Although some of these snowmobiles are very well maintained many of the parts, including the frame, have been exposed to great stress while racing. Parts may be weakened or even broken, so inspect carefully if you are considering purchasing one of these snowmobiles.

9. **Accessories** - Is the seller including accessories with the snowmobile? Sometimes they will include covers, saddle bags, saddle bags, extra carbides, sliders, handlebar muffls etc.

10. **Take your time and look around!** Don’t necessarily buy the first snowmobile you see. Read magazine reviews. Some models have specific problems that you should be aware of. And, bring a friend with you. They might see something that you didn’t.
AFTER YOU’VE PURCHASED YOUR USED SNOWMOBILE

1. Have a professional mechanic do a full tune-up on the machine. Ask friends and other snowmobilers for recommendations on dealerships with good, reliable service departments.

2. Get the snowmobile registered. Even if you are only going to be operating it on your own premises it must be registered with the Ministry of Transportation.

3. Take it easy as you get used to your new machine. Learn how it operates and handles. Respect your snowmobile’s power and abilities and get used to it slowly.

4. Get legal! Make sure you have the required insurance, trail permits and operator license needed to be out on the trails.

5. Enjoy your new snowmobile! Ride safe!

Start a Fixer-Upper Project This Summer!

Fixing up an old snowmobile is a great way to spend your summer and then enjoy the coming winter. With the growing interest in old snowmobiles, it’s a great way to learn about parts and maintenance of a snowmobile without having to spend a lot of money. There are a growing number of events dedicated to having fun with old snowmobiles ranging from serious events where folks showcase their full restoration sleds to more casual drive-in events sponsored by local snowmobile clubs and on-trail restaurants and local businesses.

 Depending on what you want to accomplish, such a summer project can range from taking up a weekend or two to lasting a year or more. To have more fun with your project, get a friend or family member to join you and make the time and work go by quickly.

If you don’t already have an older snowmobile to work on you might find one at a local snowmobile swap meet. The Internet is also a good source of used, vintage snowmobiles. You could also talk to vintage snowmobile collectors. They tend to have knowledge that they are more than willing to share about where to buy a vintage snowmobile, how to fix them up and the best places to find parts.

There are a variety of older snowmobiles to choose from many of which aren’t manufactured anymore. Several models that are no longer manufactured include Rupp, John Deere, Rolo Flex, Sno Jet, Mercury, OMC, Moto Ski, Bolens, Massey Ferguson, Phantom, SnoWolf and Boa Ski among others.
Restoring an older snowmobile is a great way to learn about small engines and will get you on the road to enjoying snowmobiling. Contact your local snowmobile club to find out if anyone in the area restores vintage snowmobiles. The Internet is also another source to find someone in your area. Visit the Antique and Classic Snowmobile Club of Canada’s website at www.acsc.com for contact information. If there is someone in your area, contact them to find out how long they have been restoring snowmobiles, how many snowmobiles they’ve restored, the average length of time it takes to restore a snowmobile, the costs involved, where they find parts and whether they show their restored snowmobiles at various events in the area. Record your findings below.
MEETING 2 - ACTIVITIES

Activity #1

Judging Snowmobiles (use judging cards found in Record Book)

Activity #2

Winter Password Game

Choose two members to be the “contestants.” Those two members are to go to the front of the room and face the rest of the members. As the leader, stand behind the two contestants and reveal a secret word to everyone but the contestants by having it written on a large piece of paper. The members raise their hands to give one-word clues to help the contestants guess the word. The clue cannot contain any part of the word shown on the paper. Contestants take turns calling on clue volunteers until one of the contestants correctly guesses the secret password. When a member gives a clue each contestant only gets one guess at the answer. The contestant who guesses the password remains at the front of the class. The member who gave the final clue replaces the other contestant.

The leader has the final decision on all answers given.

Possible Secret Words
Hood, Engine, Bumpers, Skis, Track, Headlights, Passenger, Snowmobile, Handlebars, Throttle, Speedometer, Tachometer, Brake, Windshield, Trail, Muffler, Belts, Helmet, Fuel, Oil, Coolant
# MEETING 3 - GETTING READY TO HIT THE TRAILS

## Objectives
- Learn about the trail system in Ontario, operated by the Ontario Federation of Snowmobile Clubs (OFSC).
- Understand the Ontario Motorized Snow Vehicles Act (OMSVA).
- Learn to recognize trail signs and what they mean.
- Learn hand signals for travelling on a snowmobile.

## Roll Calls
- Name a traffic sign you think you might see on a snowmobile trail.
- Name a hand signal you think snowmobilers should use on a trail.
- Have you snowmobiled on a trail in Ontario and if so, where was the trail?

*Sample Meeting Agenda – 2 hrs. 15 minutes*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, Call to Order &amp; Pledge</td>
<td>10 min</td>
</tr>
<tr>
<td>Roll Call</td>
<td>5 min</td>
</tr>
<tr>
<td>Parliamentary Procedure</td>
<td>10 min</td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>30 min</td>
</tr>
<tr>
<td>Activity Related to Topic</td>
<td>30 min</td>
</tr>
<tr>
<td>Public Speaking/Judging Activity</td>
<td>20 min</td>
</tr>
<tr>
<td>Wrap up, Adjournment &amp; Social Time!</td>
<td>10 min</td>
</tr>
<tr>
<td>At Home Challenge</td>
<td></td>
</tr>
</tbody>
</table>

At Home Challenge: Choose one of the At Home activities to complete.
Topic Information

Snowmobile Trails
With over 30,000 kilometres of groomed trails, there is almost nowhere in Ontario you can’t go by snowmobile. Each winter, Ontario rolls out its white carpet of snowmobile trails, welcoming everyone to the best snowmobiling in the world. Today’s reliable, clean technology snowmobiles make it comfortable and enjoyable for everyone, regardless of their age or lifestyle.

Trails are patrolled by the Ontario Provincial Police, municipal police, conservation officers and Snowmobile Trail Officer Patrol (STOP) officers. All Ontario Federation of Snowmobile Clubs (OFSC) prescribed trails require an Ontario trail permit, regulated by the Ministry of Transportation. This includes trails on private property, municipal property and land owned by the government. Check with the local snowmobile club to find out where you can purchase a permit or check the OFSC website at www.ofsc.ca.

A trail permit must be attached to the bottom centre of the windshield or to the top of the engine cowling as close as possible to the centre of the windshield. The permit must be clearly visible at all times. Drivers convicted of driving without a trail permit on an OFSC prescribed trail, failing to provide evidence of their trail permit or not properly affixing the permit to their snowmobile face fines of hundreds to thousands of dollars.

Every motorized snow vehicle driven on an OFSC prescribed trail is required to display a valid trail permit with the following exceptions:

- Landowners, their tenants and immediate family members when operating the snowmobile on their own property
- Aboriginal people of Canada
- Bait harvesters
- Commercial fish harvesters
- Trappers
- Prospectors
- Forest workers
- Utility companies
- Mining or exploration companies

Ontario has the world’s largest inter-connected snowmobile trail system with 32,658km (20,411 miles) of trails in 2012. The trail system is composed of the OFSC Trans Ontario Provincial (TOP) Trails (15,591km) plus regional and club trails (almost 17,067km).

The Ontario Federation of Snowmobile Club’s trails are easily accessible from many areas, including hotels, restaurants and gas stations, making it easy to plan an adventure. OFSC trails are well mapped and marked to make navigation easy.
**FUN FACT: Did You Know?**

There are over 3,000 snowmobile clubs worldwide involved in trail grooming, charity fundraising and family activities. Snowmobile clubs within the OFSC raise almost one million dollars annually for Ontario charities. Recently funds have been raised for Easter Seals, Ride For Dad (Prostate Cancer), the Ontario Association of Food Banks and the Kelly Shires Breast Cancer Snow Run.

---

**Ontario Motorized Snow Vehicles Act**

Last updated in 1990, the Ontario Motorized Snow Vehicles (OMSV) Act governs the operation of motorized snow vehicles in Ontario. The act covers all aspects of snowmobiling including licensing, registration, permits and laws for operation of a snowmobile in Ontario. It is enforced by the Ontario Provincial Police (OPP) and municipal police. In addition to police, conservation officers and Snowmobile Trail Officer Patrol (STOP) Special Constables help to patrol the trail systems in Ontario.

The act can be found at the following link:
http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90m44_e.htm

**Motorized Snow Vehicle Registration**

Every snowmobile in Ontario must be registered and the operator of the snowmobile is required to carry the snowmobile’s registration while driving the snowmobile. The only exception is if the snowmobile is being operated on the owner’s property. The operator must produce the registration when requested by a Police officer, S.T.O.P. officer or Conservation officer. Operators who fail to provide a valid registration for the snowmobile they are driving may be responsible for paying fees ranging from hundreds to thousands of dollars.

**Motorized Snow Vehicle Operator’s License**

Anyone operating a snow vehicle in Ontario must have either a valid Driver’s License or a Motorized Snow Vehicle Operator’s License unless the snow vehicle is being operated on the owner’s property. All applicants for a Motorized Snow Vehicle License are required to complete a Motorized Snow Vehicle Safety Training Course. These six hour courses are offered in communities across Ontario by certified instructors who are club volunteers as part of the OFSC Driver Training Program. Upon successful completion of the course, the instructor will issue a license to operate a motorized snow vehicle.
Motorized snow vehicle operators must produce either their Driver’s License or Motorized Snow Vehicle Operator’s License when requested by a Police officer, STOP officer or Conservation officer.

**Age Restrictions for Driving Snow Vehicles**

A person must be 12 years old before they can take the Motorized Snow Vehicle Safety Training Course and, subsequently, receive their Motorized Snow Vehicle Operator’s License. At 12 to 15 years of age, license holders can drive on an available OFSC prescribed trail and in parks or conservation areas where permitted but not on a highway (including streets and roads). This restriction prohibits operating a snowmobile to travel across a road or highway.

At 16 years old and older, people possessing a Motorized Snow Vehicle Operator’s License can drive on an available OFSC prescribed trail across a highway at right angles or along a highway (where permitted, excluding all 400 series highways).

**FUN FACT: Did You Know?**

Approximately 4,500 students are trained every year through the Motorized Snow Vehicle Safety Training Course (also known as the Driver Training program) that is administered through the Ontario Federation of Snowmobile Clubs (OFSC). Over a quarter of a million (250,000) students have been trained since the course began in the 1980s.

A Motorized Snow Vehicle Operator’s License may only be used legally by the person to whom it was issued and cannot be lent out for use by anyone else.

Once a person has a valid Driver’s License for a motor vehicle they do not require a Motorized Snow Vehicle Operator’s License. It is an offense to possess both a valid Driver’s License of any class and a Motorized Snow Vehicle Operator’s License at the same time.

**It is illegal for anyone under 12 years of age to operate a snow vehicle.**
Know the Signs!

Like operating any other type of motorized vehicle, the rules of the road, or in this case, the trail, must be understood in order for everyone to have a safe and fun experience while snowmobiling.

Signs are placed on trails as a courtesy and are for your convenience to provide visual assistance for riders who take the personal responsibility to operate their snowmobiles within the law and with care and control. Signs also remind riders to stay on the trails and respect the environment.

Signage is not a substitute however, for rider knowledge, choice or awareness. OFSC signage continues to remind riders that snowmobiling is an inherently risky activity that each individual chooses to participate in of their own free will and at their sole risk.
Red signs on a trail indicate a serious warning. Failure to obey a red sign may result in personal injury or death.

Yellow signs indicate caution ahead. Slow down and be prepared to navigate whatever lies ahead on the trail.

Signs that are in any other colour are information signs and can include signs indicating speed limits, no trespassing, distance to next destination, etc.
OFSC TRAIL SIGNS

Signs are placed on snowmobile trails as a courtesy and convenience, to provide visual assistance for riders who take personal responsibility to ride legally, with care and control. Signage is never a substitute for rider knowledge, choice or vigilance.

RED:

Indicates significant warning. Failure to obey may result in personal injury or death. These signs include:

![Stop](image1)
![Trail Ends](image2)
![Trail Closed](image3)

YELLOW:

Indicates caution ahead, so get ready. These signs include:

![Stop Ahead](image4)
![Slow](image5)
![Railway Crossing](image6)
![Bridge Hazard](image7)

INFORMATIONAL:

Any other colour sign is intended to provide information such as speed limit, no trespassing, destination, distance, etc.

![No Trespassing](image8)
![Maximum 50 km/h](image9)
![OFSC Prescribed Trails](image10)

For more signage information visit ofsc.on.ca
Hand Signals

Knowing internationally recognized hand signals is a must when snowmobiling. They provide riders around you with a visual cue about your intentions or about other snowmobiles on the trail. Snowmobilers are much like scuba divers in that it’s sometimes hard to communicate using voice communication with everyone, so we have to rely on hand signals.

It is important that everyone snowmobiling know these hand signals and that they use them every time they are on the trails. If you are travelling in a group, everyone in the group should repeat the signal received from the rider in front, passing it back along the line so that even the last rider knows exactly what to expect.

The following hand signals are approved by the Canadian Council of Snowmobile Organizations, the American Council of Snowmobile Associations and the International Snowmobile Council. If we all use these same hand signs we will be communicating the same message - safety!
STOP*
Arm raised from the shoulder and extended straight up over the head with palm of hand flat. Left arm may also be used to signal “STOP”.

SLOWING
Left arm extended out and down from the side of the body with a downward flapping motion of hand to signal warning or caution.

RIGHT TURN
Left arm raised at shoulder height, elbow bent and forearm vertical with palm of hand flat.

LEFT TURN
Left arm extended straight out from shoulder and pointing in the direction of the turn.

LAST SLED IN LINE
Raise forearm from handle bar and show clenched fist at shoulder height.

SLEDS FOLLOWING
Arm raised, elbow bent, with thumb pointing backward, in a hitch-hiking motion move arm forward to backward over your shoulder.

ONCOMING SLEDS
Left arm raised at shoulder height, elbow bent and forearm vertical, wrist bent, move arm from left to right over head, pointing to right side of trail.
BEFORE THE NEXT MEETING

Try one of the following activities:

1. Using an 8 ½” X 11” blank piece of paper, pick one of the trail signs and make a poster, drawing the sign and stating why this sign is so important. Make the poster attractive and colourful so that you are able to get your message across. Put the poster in your record book.

OR

2. Practice the hand signals needed for travelling on snowmobile trails. Practice in front of a mirror. When you are comfortable with making the hand signals, teach them to a parent, grandparent, sibling or friend. Why are hand signals so important when out on the trail? Take a picture of yourself, or have a family member take it to create a poster displaying all of the hand signals. Place your poster in your Record Book and plan to share your knowledge of hand signals at the next meeting.

OR

3. Use the OFSC Provincial Trail Guide (Ontario map of the trail system) to begin to plan a four day snowmobile vacation tour to share at the next meeting.

Contact the District Administrator for your District to obtain a copy of the District and/or Provincial Guide.
OFSC Trail Patrol Program

Trail patrollers are dedicated snowmobile club volunteers who regularly patrol Ontario’s snowmobile trails. They provide valuable trailside information to snowmobilers and promote the user pay system. Over 1,000 patrollers act as trail ambassadors offering snowmobile safety education and monitoring trail conditions as they travel throughout the club’s trail system. For individuals who wish to contribute to recreational snowmobiling and actively promote safety, a rewarding opportunity exists to join the Trail Patrol Program. It demands an adventurous spirit and a high degree of personal integrity. Training is provided by the local club and requires about six hours of time to cover the Motorized Snow Vehicles Act (MSVA) and program procedures. As a volunteer patroller you may often deal with unstructured outdoor situations that will test your resourcefulness. For youth, 16 years of age or older, patrolling is a great opportunity to make new friends and learn firsthand about the local club and to practice snowmobile safety. Whether you become a patroller or just ride along with a group of patrollers, you can make a difference through your participation!

For further information on becoming involved with Trail Patrol, contact your local snowmobile club.

Snowmobile Trail Officer Patrol (S.T.O.P.)

In this program, OFSC volunteers are trained by partnering police services, and sworn in as Special Constables and Provincial Offenses Officers. They then become members of the Snowmobile Trail Officers Patrol (S.T.O.P.), empowered to enforce provisions of the Motorized Snow Vehicle Act by issuing tickets and encouraging safe riding behaviours. For Motorized Snow Vehicle Act (MSVA) enforcement purposes, S.T.O.P. Officers have many of the same authorities as police officers.

One of the primary goals of the S.T.O.P. program is to increase awareness of snowmobile safety and the dangers of drinking and riding a snowmobile.
History of the S.T.O.P. Program in Ontario

In 1992, the Solicitor General and Minister of Correctional Services approved the implementation of a three year pilot project in Sudbury to assess the feasibility of volunteer snowmobile enforcement, which became known as the Snowmobile Trail Officer Patrol or S.T.O.P. program. By the start of the 1994/1995 season, a significant reduction in the injury and fatal statistics was observed in the Sudbury area, compared to the period prior to the pilot project.

In 1995, the Solicitor General and Minister of Correctional Services announced that the S.T.O.P. pilot project was a success and that S.T.O.P. would become a permanent program, expanding gradually across the province.
MEETING 3 - ACTIVITIES

Activity #1

*Travelling on the Trails Jingle Contest!*

Members will work in groups and will be given approximately 10 minutes to make up a song related to riding the snowmobile trails and perform it for the rest of the members in the club. Songs can use the tune of an already existing song or can be a new tune. Songs can include information about trail signs, trail permits or travelling on the trails.

Leaders will decide on the most creative, the funniest or the weirdest jingles.

Activity #2

*Operating in Silence!*

Out on the trail it can be hard to hear with your helmet on and with the sound of the snowmobile. So, silence is the name of this game!

On sticky notes, write out the name of each hand signal. If you have more members in your club than hand signals, write out the names of trails signs as well. Assign a sticky note to each member. The member cannot show their word to any other member. Have them put themselves in alphabetical order by acting out their assigned word. And remember, no one can talk or mouth the words!

*Hand Signals*
Stop, Slowing, Right Turn, Left Turn, Sleds Following, Last Sled in Line, Oncoming Sleds

*Trail Signs*
Trail Ends, Trail Closed, Railway Crossing, Ice Crossing, Bridge Hazard, No Trespassing, Speed Limit, OFSC Signs, Use at your Own Risk
Meeting 4 - FOLLOWING THE TRAIL

Objectives
• Learn what the OFSC does for snowmobiling in Ontario.
• Learn what volunteer opportunities are available through OFSC.
• Learn how landowners contribute to Ontario's snowmobile trail system.

Roll Calls
• Have you ever volunteered to do something in your community?
• Have you ever volunteered with a snowmobile club in your area and, if so, what did you do?
• Do you know a landowner in your area that allows an OFSC trail on their property?

Sample Meeting Agenda – 2 hrs. 35 minutes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, Call to Order &amp; Pledge</td>
<td>10 min</td>
</tr>
<tr>
<td>Roll Call</td>
<td>5 min</td>
</tr>
<tr>
<td>Parliamentary Procedure</td>
<td>Minutes &amp; Business 10 min</td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>20 min</td>
</tr>
<tr>
<td>Public Speaking/Judging Activity</td>
<td>30 min</td>
</tr>
<tr>
<td>Activity Related to Topic</td>
<td>60 min</td>
</tr>
<tr>
<td>At Home Challenge</td>
<td></td>
</tr>
</tbody>
</table>
Snowmobile Clubs in Ontario

There are over 200 local snowmobile clubs within the 16 geographical districts that make up the Ontario Federation of Snowmobile Clubs (OFSC) and one of them is likely located in your area. Each club is a not for profit entity comprised of a dedicated group of local volunteers who live and work in your community and who take it upon themselves to provide groomed snowmobile trails for the enjoyment, well-being and recreation of their families, friends and neighbours. Which district do you live in? Check it out on the OFSC trail guide!

Over 7,000 dedicated volunteers make up the OFSC member snowmobile clubs that help to groom and maintain Ontario’s trails each year. There are many kinds of volunteer projects within these clubs ranging from outdoor tasks to office work to assisting with social activities or fundraising. There is something for everyone to do, no matter what their age. Volunteers work behind the scenes at clearing brush, putting up signage, stuffing newsletters, visiting landowners, attending meetings or working at their computers. Without these volunteers, Ontario would not have the largest recreational trail network in the world for everyone to enjoy. Volunteering with a not for profit snowmobile club is a rewarding and enjoyable investment of your valuable time! Check out the www.ofsc.on.ca website to find the contact information for the area you live in so you can volunteer with your local snowmobile club.
FUN FACT: Did You Know?

Out of everyone who volunteers in Canada, the age group with the highest number of volunteers is youth ages 17 to 24. Thirty-seven percent of this age group choose to volunteer!
Source: 2002 Canadian Census Data

The Ontario Federation of Snowmobile Clubs is the umbrella organization that works with local snowmobile clubs to provide services for those snowmobiling in Ontario. The OFSC’s mission, vision and values are as follows:

OFSC Mission Statement:
The Ontario Federation of Snowmobile Clubs (OFSC) is a volunteer led not-for-profit association, which through strong leadership, provides a wide range of quality programs and services to and on behalf of, its member organizations.

OFSC Vision: Our provincial network of organized snowmobile trails connects Ontario communities providing responsible riding experiences that are safe, enjoyable, and environmentally sustainable.

OFSC Values: As a provincial federation, the OFSC succeeds when our members succeed. Consequently, we strive to fully understand and consistently meet the needs and expectations of all of our members. Our decision-making processes are accountable, transparent, inclusive, timely, provincial in perspective, and respectful of local interests and priorities.

To Achieve Our Vision and Mission We:

Listen: Work earnestly to understand the needs and concerns of our members and others who have interest in what we do.

Learn: Work continuously to gather facts and data upon which good decisions can be made.

Lead: Work persistently to be effective stewards of our organization, its brand, and its people, and to inspire common purpose that enables and empowers action.

Proceeds from the sale of trail permits required to enter OFSC trails provide primary funding for both the trail operations of local snowmobile clubs and the provincial organization. With membership now standing at almost 200,000 family participants, the OFSC is the largest snowmobiling organization in the world.
User Pay System

To assist the club volunteers in maintaining the trails, the OFSC implemented the User Pay System by having each person operating a snowmobile on the trails possess a Snowmobile Trail Permit. In 2001, Snowmobile Trail Permits became mandatory on snowmobiles using the OFSC prescribed trails. The permit is administered by the OFSC through an agreement with the Ministry of Transportation.

The Snowmobile Trail Permit is the primary source of trail revenue. For the 2012-2013 season, a Seasonal Snowmobile Trail Permit was $260.00. If purchased before December 1, 2012 an early bird price of $210 was available. The OFSC also offers a special full season permit for older snowmobiles that are 15 years old or older called the Classic Permit which is one half the cost of the regular Seasonal Trail Permit.

Building and maintaining recreational snowmobile trails is expensive, even with all of the donated volunteer time and efforts. Over 90% of the money collected from the sale of snowmobile trail permits goes towards funding trail operations. The remainder is invested into OFSC programs, club services and administration that support each of the local clubs.

**FUN FACT: Did You Know?**

To operate each kilometre of trail every season, it costs not for profit snowmobile clubs an average of $412 in cash, in-kind and volunteer labour.
Landowner Use Agreements

Landowners are an integral part of the stakeholder network that helps to create and sustain Ontario’s snowmobile trail system. These landowners include farmers, cottagers, hunt camp owners, woodlot operators, absentee landlords, businesses, corporations and many, many others. Landowners provide their own private land to be used for trails during the winter months and do not get compensated for allowing snowmobile trails to cross their property. By designating a specific route across their land for OFSC snowmobiles during the winter, landowners contribute immeasurably to their local snowmobile clubs and home communities.

A Land Use Permission form is signed between the landowner and the OFSC. When this form is signed, the landowner agrees that there will be an exclusive route (trail) across their land designated for OFSC snowmobiles during the winter. This trail will be monitored, maintained and groomed by OFSC club volunteers. The landowner will be insured by the OFSC’s Third Party General Liability Policy in case of any legal liability claims that happen as a result of trail activities on the landowner’s property. The landowner will also be protected by the club for losses from damage caused by snowmobilers that went off the trail and on to other parts of the landowner’s land.

Even though an agreement has been signed by the landowner and OFSC to allow the use of snowmobiles on the landowner’s property, the landowner still owns and controls the land. The OFSC will erect signs on the trail with the OFSC and Province of Ontario logos on them but neither the OFSC or anyone else can have any rights or control over the landowners land. The signs just indicate where a Snowmobile Trail Permit is required so that the laws can be properly enforced.

**FUN FACT: Did You Know?**

There are over 15,000 land use permission forms signed in Ontario in order to make up Ontario’s elaborate trail system across the province.

The voluntary use of the landowners’ property each winter is a privilege, not a right. Snowmobile operators must respect the land that landowners graciously donate the use of each winter and use the trails responsibly.
Snowmobilers respect landowner property by:
1. Staying on the trail - some farm fields may be planted with wheat or alfalfa while others may be plowed and dangerous to cross.
2. Leaving the stakes intact.
3. Leaving gates and fences alone.
4. Respecting equipment and property.
5. Avoiding farm animals and pets.
6. Using the trail for snowmobile use only.
7. Using the trail only for snowmobile use.
8. Using only when the trail is open.
9. Respecting the Landowner.

There are two Ontario laws in the form of Acts that govern the use of property, both which relate to snowmobiling in Ontario. They are the Trespass to Property Act and the Occupier's Liability Act.

**FUN FACT: Did You Know?**

One of the purposes of a landowner agreement is to ensure that the liability for the operation of snowmobiles on the landowner’s land lies with the OFSC, NOT the landowner.

**Trespass to Property Act**

The Trespass to Property Act, which was last updated in 1990, provides protection from trespassers on land that the landowner (occupier) owns. Snowmobiles are treated the same as any other vehicle in the Trespass to Property Act. Snowmobile owners can be fined for trespassing offences committed by any individual who drives their snowmobile on private property that is not an OFSC trail. Fines can be up to $2000 plus payment for any damage caused while trespassing.

**Fines can be laid for:**
- Entering a premise without the permission of the occupier(s), either written or oral.
- Entering a premise when entry is prohibited (see below).
- Engaging in an activity on a premise when the activity is prohibited under the Act.
- Not leaving the premises immediately after being directed to by the occupier of the premise or a person authorized by the occupier, such as a Trail Patroller.

Under this Act, there are some premises on which entry is prohibited without notice such as lawns, golf courses, young tree lots (two metres in height or less) and railroad property.
Occupiers’ Liability Act

The Occupier’s Liability Act was last updated in 1990 and states that a landowner (occupier) is in no way responsible for the welfare of anyone driving, riding or being towed by a snowmobile. It doesn’t matter if the driver or rider is a trespasser or is licenced to be there.

This Act stipulates that those who enter a landowner’s premises for recreational purposes without paying a fee are responsible for their own safety. If they have paid for a trail permit fee, then the landowner is covered under the liability insurance of the OFSC. The payment of the trail permit fee though, is not considered permission to enter private property.

Under no circumstances can the landowner create a dangerous situation by deliberately intending to do harm or damage to a trespasser or someone with a license.

Colour Marking System

The colour marking system legislation allows the occupier of the land to give notice of their intention.
- Red Markings – Entry is prohibited.
- Yellow Markings – Entry is prohibited except for certain activities. It is up to the person wanting to enter the land to find out from the occupier what certain activities are allowed.

Markings can be any shape and must be large enough to accommodate a circle 10cm (4 inches) in diameter within the marking. The markings can be made with paint or other natural materials and posted on natural objects or old fence posts.

A Win-Win Situation!

The partnership between club volunteers and landowners who allow access their land is unique to organized snowmobiling. It is based on a one-on-one, personal relationship, much like other dealings throughout rural Ontario. Each party is generously contributing a resource for the greater good of their community.

Snowmobilers now spend about $1 billion annually in Ontario on snowmobiling-related activities. This spending is especially significant because it’s concentrated in rural Ontario. There are few other activities that pump this amount of revenue into rural economies each winter. So, while organized snowmobiling may not directly benefit a landowner for the use of the land, it does help ensure a healthy, vibrant winter economy in rural Ontario, an economy that benefits everyone who lives and works in the community, including landowners.
Snowmobiling in Ontario succeeds because it is well organized and because clubs, volunteers and landowners work together to provide the world’s largest trail network. These trails attract snowmobilers from across North America and help to generate a prosperous winter tourism season that benefits Ontario’s businesses, individuals and communities.

**Want to try snowmobiling but don’t have a snowmobile?**

That’s no problem! There are other ways to get involved. The OFSC offers their “Get Started’ section of their website for those wanting to try out this winter activity. Check it out at www.ofsc.on.ca!
BEFORE THE NEXT MEETING

Try one of the following activities at home.

1. Go onto the Internet to the Ontario Federation of Snowmobile Clubs website, www.ofsc.on.ca, to find out what the name is of the snowmobile club in your area. If the club has their own website, check it out to see what activities and fundraisers they do for your community. Record your findings in your Record Book.

OR

2. Interview a club volunteer, find out the following and record your findings in your record book:
   • Why they give their time?
   • What they enjoy most?
   • Challenges facing volunteers?
   • Where do they need more help?
MEETING 4  DIGGING DEEPER

Attracting & Retaining Volunteers – Building More Than Just Great Trails!

No matter which organization you are a part of, recruiting volunteers should be a process rather than a problem! Not everyone enjoys searching out individuals to help do a job or, in other words, asking someone to volunteer. Recruiting volunteers can be a time-consuming process. Unfortunately, it often becomes a case of looking for a “warm body”, somebody, anybody, to get the job done. Recruiting should be a process of getting the right person in the right job, with the right skills at the right time.

Why Recruit?

Organizations recruit volunteers to:
• to help spread the work among members
• to keep the organization alive
• for new ideas
• to get the work done

A volunteer program is a two-way street. It must meet the needs of the organization and the needs of the volunteer for everyone to win!

Barriers to Volunteering

One of the most cited reasons for not volunteering is “not enough time.” In many cases “not enough time” actually translates into “I can’t commit hours and hours of time or help throughout the whole year” or “I’m not available at the right time” due to a number of reasons including school, family and work commitments.

Not Enough Time

According to the 2002 Canadian Census, 75% of the people who volunteer do so for only a few hours (less than 20 hours) each year. Given the busy pace of most people’s lives, this limitation is to be expected. These volunteers are sometimes called “episodic” volunteers. To try and get the help that these people can offer make sure your organization promotes a wide variety of tasks that can be completed in short periods of time such as single day events. Or, break big jobs into smaller units.
For those not available at the right times, suggest helping with things they can do at home such as administration, newsletter publishing, web maintenance or doing some phone calls for the organization. These tasks provide flexibility within their schedules. Offer them a club calendar to help them fit your organization’s activities into their schedule.

**Other barriers to Volunteering:**

**Don’t Know How to Get Involved**

There are two factors that can limit a person’s involvement. First, some may not know how to contact your organization and second, some may not know how they personally can help or benefit the organization.

Create a recruiting message that always includes a variety of easy ways for potential volunteers to contact your organization. Be sure to include an address, e-mail and a phone number. Don’t miss an opportunity to extend a warm invitation to your organization by including promotion in the media, mailings, websites, community presentations and events. List the variety of volunteer tasks available and let them know that training is available. Stress that your organization is flexible and that you will take any hours that they are able to offer.

**No One Asked Me**

Personal contact is often vital when recruiting volunteers. Some people are reluctant to sign up to help out when they don’t know anyone. A personal invitation lets the person know that their help is really needed and wanted and gives them someone they know when they show up for the first time to help.

**The Volunteer’s First Experience**

This is definitely the most important part of the recruiting process. Once you’ve convinced someone to volunteer with your organization, you need to make sure they feel that their talents and skills are needed and wanted. There’s nothing worse than a new volunteer showing up to help and being told, “we don’t have anything for you to do right now” or “come back another time/day – we’ve got this covered.” Chances are that you won’t see them again.

Find out what a new volunteer excels at and what they don’t like to do to make sure they are matched up with the best possible task. The following chart can be helpful for an organization to learn about the interests of new volunteers.
Name: John Doe

<table>
<thead>
<tr>
<th>Gifts</th>
<th>Quests</th>
<th>No-No’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special skills, talents, interests you like to use</td>
<td>Areas you would like to learn more about</td>
<td>Please don’t ask!</td>
</tr>
<tr>
<td>1. typing</td>
<td>1. computers</td>
<td>• canvassing for funds</td>
</tr>
<tr>
<td>2. talking to people</td>
<td>2. history of organization</td>
<td>• public speaking</td>
</tr>
<tr>
<td>3. writing</td>
<td>3. chairing a committee</td>
<td></td>
</tr>
<tr>
<td>4. working with youth</td>
<td>4. bookkeeping</td>
<td></td>
</tr>
<tr>
<td>5. administrative duties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. square dancing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Things you do well and enjoy doing. Don’t hesitate to list something. You’d be surprised how your talents can be utilized.

List areas of interest you may not have the skills to perform but you would enjoy learning about

Anything you really don’t want to do

A satisfied volunteer will

• do a good job for the organization
• have only good things to say about your organization
• give your organization a good reputation
• recruit volunteers by word and example
• be committed and enthusiastic

Remember - there is no such thing as a bad volunteer. Just the right person in the wrong job!

Where is Snowmobiling Popular?

Check out the “Internet” Trail to see what you can find out about snowmobile clubs in other provinces within Canada, in the United States and around the world.

What other provinces/countries have snowmobile clubs? How many members do they have? Are they bigger or smaller than the OFSC? Which country has the most snowmobilers? Are their trail systems and clubs operated and maintained by volunteers? Any other interesting facts about any of these snowmobile clubs? Record your findings in your record book.
Activity #1

Dream Snowmobile Vacation!

Have each member (or if you have a large group, have members work in groups of 2) write out where they would go on their Dream Snowmobile Vacation, using the OFSC Trail Guide. Have them consider things like why they would choose this location, what they think the cost might be, what they think they might see on the vacation, how long they will be gone on the vacation, etc.

Have each individual (or group of 2) present their Dream Snowmobile Vacation to the rest of the group.

Activity #2

Winter Quest!

If possible, take members to a nearby conservation area, park or country setting. Make sure you are not trespassing! The Winter Quest allows members to become familiar with the outdoors in the winter in their area. Divide members into groups of 2 or 3. Make sure each group has pencils, clipboards, paper and their Winter Quest Sheet. Give a time limit (30 minutes is suggested) to find the items listed on their Winter Quest Sheet. Be sure to remind members that they are to look for the items and write down what they see (each answer can only be used once) but are not to touch or bring any items back with them. They are to leave the area exactly as they found it.

Worksheet can be found in the Record Book.

When members return, compare the answers they found on their Winter Quest.
MEETING 5  MAKING SMART CHOICES - SAFETY FIRST

Objectives:
- Learn the rules and regulations for snowmobiling in Ontario.
- Learn what to do in an emergency situation.
- Learn what an emergency/survival kit should contain.

Roll Calls
- Name one thing you can do to be prepared for a snowmobiling trip.
- Name one item you think should be in an Emergency/Survival Kit.
- Have you ever been in an emergency situation and what did you do?

Sample Meeting Agenda – 2 hrs. 20 minutes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, Call to Order &amp; Pledge</td>
<td></td>
<td>10 min</td>
</tr>
<tr>
<td>Roll Call</td>
<td></td>
<td>5 min</td>
</tr>
<tr>
<td>Parliamentary Procedure</td>
<td>Minutes &amp; Business</td>
<td>10 min</td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>Discuss the laws associated with snowmobiling in Ontario.</td>
<td>30 min</td>
</tr>
<tr>
<td>Public Speaking/Judging Activity</td>
<td>Activity #1 Stranded! (Teambuilding Exercise)</td>
<td>20 min</td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td>Discuss ways of making smart choices and being prepared for snowmobiling excursions, including what to do in an emergency and what items should be in an emergency/survival kit.</td>
<td>40 min</td>
</tr>
<tr>
<td>Activity Relating to Topic</td>
<td>Activity #2 Fill Your Emergency Kit! Word Search (found in Record Book)</td>
<td>15 min</td>
</tr>
<tr>
<td>Wrap up, Adjournment &amp; Social Time!</td>
<td></td>
<td>10 min</td>
</tr>
<tr>
<td>At Home Challenge</td>
<td>Choose one of the At Home activities to complete.</td>
<td></td>
</tr>
</tbody>
</table>
Topic Information

*Make it a Safe Ride!*

Whether you are a beginner or you have snowmobiled for years, knowledge of how to operate your vehicle safely is imperative to ensure an enjoyable ride both on and off the trail. Getting proper training and being prepared are essential in order to take advantage of the benefits this winter activity has to offer.

**Know the Rules!**

*Protect your head*

Helmets are mandatory! Everyone who drives or rides on a snowmobile requires a helmet that meets the same standards approved for motorcycle helmets. Everyone who rides a cutter, sled or similar device towed by a snowmobile must also wear a helmet. Face shields on helmets protect the face and eyes from twigs, biting winds and foreign matter.

Snowmobile goggles will protect the eyes but have little protection for the rest of the face. Grey or green lenses are preferable for bright, sunny days. Yellow shields are used on dull days and in the late afternoon to reveal dangerous depressions in the snow that might not be seen without them.

**Speed Limits**

Obey speed limits and road/trail signs and always drive within your ability.

*Maximum*
- 50km/hour on snowmobile trails
- 20km/hour on roads where the speed limit is 50km/hour or less
- 50km/hour on roads where the speed limit is over 50km/hour

These speed limits do not apply to a motorized snow vehicle operated by a police officer or conservation officer in the lawful performance of his or her duties.

Municipalities may decide to lower the speed limits within their jurisdiction and some municipalities may not permit snowmobiles on roadways in town. Check with your local municipality for speed limits in your area.

Reduce your speed when driving at night and watch out for fences, guide wires, and other objects that are more difficult to spot at night. Always ride to the conditions.
Carry Your Documents

Every operator of a motorized snow vehicle must carry the following at all times while operating a motorized snow vehicle and must produce them when asked by a police officer, S.T.O.P. officer or conservation officer:

- driver’s licence or motorized snow vehicle operator’s licence
- motorized snow vehicle’s registration/ownership
- validation sticker affixed to the registration decal
- proof of insurance, and
- OFSC trail permit (attached to snowmobile) if on an OFSC prescribed trail.

The only exception to this is when someone is operating a motorized snow vehicle on their own land.

Turn Your Lights On

The law requires lights on motorized snow vehicles to be turned on one-half hour before sunset to one-half hour after sunrise or when driving conditions are unfavourable. But it is good practice, for safety reasons, to have your lights on the entire time the snowmobile is in operation. New snowmobile headlights are always on.

Following Too Closely

It is an offence to follow another vehicle too closely. Ensure sufficient distance is maintained by using the two-second rule. Choose a fixed object that the snowmobile in front of you passes by. Count 1001, 1002. When you reach 1002 you should just be reaching the fixed object. Drop back if you are too close.

Incident Response and Reporting

Every person in charge of a motorized snow vehicle that is directly or indirectly involved in an accident shall report the accident to the nearest police officer if the accident results in personal injuries or in damage to property exceeding $400. The operators must provide the following to the police:

- the names and addresses of those involved
- the date and location of the accident
- the circumstances under which the accident occurred.
Snowmobiling While Impaired

*It is against the law to drive a snowmobile while impaired by alcohol or drugs!*

Under many conditions, snowmobiles are more difficult to control than cars and all the skills of the operator are needed to safely negotiate sharp turns, hard packed snow, steep hills and moguls. Some people think that alcohol warms the body but the reverse is true. Alcohol increases blood circulation and dissipates body heat.

If a snowmobile driver has a Blood Alcohol Concentration (BAC) level of 0.05 to 0.08, they could receive a roadside/trailside driver’s licence suspension of up to 30 days. That suspension would apply to the operation of any motor vehicles, so that means the snowmobile driver under suspension would NOT be able to drive a car either.

If a snowmobile driver has a BAC level of more than 0.08 or if the operator refuses to comply with alcohol or drug testing, their driver’s licence will be suspended immediately for 90 days and the police can lay an impaired driving charge under the Criminal Code of Canada. If an individual is convicted of impaired driving on a snowmobile he or she will lose their privilege of driving any motorized vehicle (including their car) for a minimum of one year.

For those under 22 years old, NO ALCOHOL is allowed. If alcohol is detected, his or her driver’s licence is immediately suspended.

Impaired doesn’t just include the use of alcohol. Driving while under the influence of drugs or being distracted while driving are also forms of impairment which can lead to deadly consequences.

Adopt a Zero Alcohol policy when either driving or riding! And, adopt a Zero Drug policy for life. Your decisions affect not only you but everyone around you!
FACT: Did You Know?

In 2009, 80.0% of fatally injured snowmobile drivers in Canada had been drinking. Of those 80% fatally injured, 85.4% had a BAC over the legal limit. Ontario did a little better in 2009 than the national average with 65% of fatal snowmobile accidents being alcohol-related but the statistics still aren’t great.

Twenty-three people in Ontario died in snowmobile accidents in 2009 and another 23 people in 2010 although only 30% of the snowmobile accidents in 2010 were alcohol-related.


Be Smart When Snowmobiling! Be Prepared!

Frozen Lakes and Rivers
Avoid driving on frozen lakes and rivers; no ice is completely safe. Many fatalities involve snowmobiles breaking through the ice or driving into open water. If it can’t be avoided check ice conditions before heading out as conditions can change in a matter of hours.

During extremes changes in temperature lake and river ice develop cracks. The weight of the snow causes the ice to sag forcing water up through the cracks and causing slush to form. The slush doesn’t freeze because of the insulating action of the snow and most slush patches won’t support the weight of a snowmobile.

Very cold weather will cause pressure to build up in lake and river ice causing it to heave. Pressure gaps are created that result in open expanses of water several metres in width. Often a warning sign of open water ahead is fog over the ice.

Dark and light patches in clear ice indicate very poor quality of ice and should be avoided. The only reliable ice is crystal clear ice that has a minimum thickness of 12.7cm (5 inches). Another hazard of travelling on large expanses of frozen water is the short time in which it is possible to lose all sense of direction, especially in a snowstorm or at night.

Be prepared by wearing a buoyant snowmobile suit and, for self rescue, by carrying ice picks and a throw rope with you.

If you have to travel across a frozen lake or river always travel on ice that is new, hard and clear. Never travel on ice that is slushy, weak, near moving water or has thawed and refrozen. Also, remember, you won’t be able to stop as quickly when travelling on ice.
If you do break through the ice, DON’T PANIC! Be prepared for the “gasp” reflex, an initial deep and sudden gasp caused by your body’s sudden reaction to the cold water called Cold Shock. This is followed by hyperventilation that can be as much as 600-1000% greater than normal breathing. Cold Shock will pass in about one minute. You must keep your airway clear or run the risk of drowning. Over approximately the next ten minutes you will lose the effective use of your fingers, arms and legs for any meaningful movement. During this time, concentrate on self-rescue by kicking hard into a horizontal position and swimming to the nearest edge. Place your hands and arms on unbroken ice while kicking hard to propel your body onto the ice, like a seal. Once you are out of the water, stay flat and roll away to stronger ice. When you’re on thicker, stronger ice, stand up, keep moving and find shelter fast.

**Wind and Cold**

Always wear layers of clothing. This enables you to add or remove clothing in order to adapt to changing conditions. Thermal layers will allow your body to retain heat while releasing moisture. The first layer should be merino wool or a synthetic fabric like polypropylene to wick moisture away from the skin. Cotton is a poor choice since it retains moisture. The second layer should be wool/fleece. Wool keeps body heat in and will not cause excessive perspiration. A windproof outer layer (snowmobile suit), warm mitts/gloves, warm boots and insulated helmet are recommended. Clothes should be comfortable and roomy for ease of movement.

Exposure to extreme cold can lead to frostbite and hypothermia. Body temperature can be affected by outside air temperature and wind speed. And, remember, alcohol can also lower your body temperature which, in turn, increases the risk of hypothermia. Always carry extra dry clothing with you.

Other tips to help keep you warm while snowmobiling include eating a hearty meal before riding so your body generates sufficient heat, staying hydrated by drinking lots of fluid, use heater accessories (electric vest, gloves and boot inserts) or chemical warmers, ride a heated sled with a high windshield, hand and thumb warmers, an electric seat and carry a thermos of coffee, tea or hot chocolate for trail breaks. Snack frequently to keep your body’s internal furnace stoked.
Riding Fatigue

The effects of the sun, wind and motion of the snowmobile can cause rider fatigue, especially on longer trips. When the human body is tired, concentration and judgement are impaired, leading to potentially dangerous situations. Trail hypnosis can also occur resulting from rider fatigue. To minimize the potential for fatigue and trail hypnosis and their effects do the following:

- **Dress for the weather** - the more energy your body has to exert trying to keep itself warm the quicker fatigue will set in.
- **Keep your body fueled and hydrated** - giving your body enough food and water is important, especially during outdoor activities.
- **Take breaks** - always remember to take breaks while riding. It is never a good idea to stay on your snowmobile for too long.

Night Riding

Riding at night can be fun but snowmobile trails and the surrounding area appear differently which increases the number of incidents that occur after dark. Visibility and the ability to spot hazards ahead are greatly reduced. It also reduces your ability to estimate distances. A few tips for night riding include:

- **Reduce your speed** – one of the biggest problems of night riding is outrunning or over-driving your headlights. Your headlights allow you to see approximately 60 metres in front of you under perfect conditions. Make sure you can stop within the length of your headlight beam.

- **Wear outer clothing with reflective trim on the arms, back and helmet.**

- **Be alert for animals** - many animals are nocturnal, and will be active and feeding during nighttime hours. Since snowmobile trails are packed down and easier to walk on than undisturbed snow, many nocturnal animals prefer to travel on snowmobiles trails and tend to constantly cross over snowmobile paths.
• Ensure all lights and reflectors are clean, free of snow and working properly.

• Always wear an unobstructed view snowmobile helmet and be careful in freezing rain because your face shield may freeze over.

• Be on the lookout for low-hanging tree limbs, guy wires, barbed wire fences and cable chain at road entrances.

• Watch for stopped snowmobiles. Remember that most snowmobile lights don’t work when the engine is stopped.

• Use caution when travelling near a roadway so that your headlights don’t confuse motorists.

• Never snowmobile at night alone. Always travel with one or more other snowmobiles and always report to someone where you are going, the route you are taking, a description of your snowmobile and the time when you will be back.

• Always carry a flare or flashlight for emergency signaling.

Road, Bridge and Rail Crossings

To drive along or across a highway or public roadway a person must be at least 16 years of age and must hold either a valid Driver’s License or an Ontario Motorized Snow Vehicles Operator’s License. Crossings can only be done at a 90 degree angle (right angle) to the road after coming to a complete stop. Remember, motor vehicles always have the right-of-way, not snowmobiles.

The surfaced roadways of most highway bridges and culverts are prohibited to motorized snow vehicle operators except where provincial and municipal laws permit motorized snow vehicles to use a roadway to cross a bridge or culvert. If the laws permit crossing, operators are to stay on the extreme right hand side and give all motor traffic the right-of-way.
Caution must also be exercised around railway crossings. Because of your helmet and the sound coming from your snowmobile, there's a good chance you won't be able to hear a train coming. Also, if there is poor visibility from snow dust or darkness, it is easy to miss seeing or hearing an oncoming train and be crossing the tracks just as the train comes through the crossing; you could even drive into the side of a train that looks like a giant white-out in front of you. And, some snowmobile operators attempt to race trains along railroad right-of-ways which is extremely dangerous and can sometimes prove fatal. Suction caused by the speeding train may draw the snowmobile and operator into the side of the train.

Be sure to slow down, know ahead of time if there are any railway crossings on the trail you're driving on, stop at every railway crossing, look both ways carefully and cross at a right (90 degree) angle. Remember to stop, look and listen!

**Know Where to Ride**

There are many areas you can ride your motorized snow vehicle including your own property, private trails belonging to organizations of which you are a member, private property with the owner’s permission and between the shoulder and fence line (not on the shoulder) along public roads. You may also drive in public parks and conservation areas except where prohibited. Local municipalities have the right to regulate or prohibit the operation of snowmobiles within their jurisdictions both on or off the roadway; be sure to check the rules outlined by the local municipality.

You cannot ride on certain high-speed roads including the 400 series highways, the Queen Elizabeth Way (QEW), the Ottawa Queensway, the Kitchener-Waterloo Expressway or any other expressway in Ontario. On any other roadway, you may not drive on the serviced (paved) portion or even on the plowed portion of the adjacent shoulder.

Be aware of environmentally sensitive areas and be a responsible rider!

**What To Do If Your Snowmobile Becomes Stuck**

Although operating in deeper snow away from the trails can be a lot of fun, you can run the risk of getting your snowmobile stuck. If your snowmobile becomes stuck, turn off the engine and calmly assess the situation. Do not fully apply the throttle in an attempt to get out. This might only make the situation worse.
If the machine becomes stuck facing up hill you can try the following steps to help become unstuck:

1. Turn off the ignition and set the parking brake (if equipped with one).
2. Pull the snowmobile around by the skis to have it face downhill.
3. Restart the engine and release the parking brake (if equipped with one).
4. Drive down the hill cautiously.

If the machine becomes stuck on level ground the following steps may help you get unstuck:

1. Turn off the ignition.
2. Stamp out a path in front of the skis for three metres or so.
3. Scoop out the snow from in front of the track.
4. Straddle the seat with body weight to the rear of the machine.
5. Restart the engine.
6. “Walk it out” with slow even throttle pressure.

To prevent a snowmobile from “settling” in deep snow when coming to a stop, first drive the snowmobile in a complete small circle. Then, bring the machine to a stop part way past the beginning of the circle.

**Use Hand Signals**

Use appropriate hand signals when driving with others before stopping, slowing down or turning. Exercise caution on corners and hills and always remain on the right-hand side of the trail. If you have forgotten your hand signals, re-visit meeting #3 for a quick review!

**Drive Defensively**

Engine noise and your helmet may impair your hearing when on the trail so be extra alert for danger. Your safety, and others, is in your own hands so watch out for a variety of conditions including the following:

- Obstacles hidden by the snow,
- Trees and branches on the trail,
- Trail grooming equipment,
- Oncoming snowmobiles,
- Other trail users (skiers, walkers) on “Shared use trails,”
- Wildlife,
- Trail washouts and flooding,
- Snow banks and moguls,
- Road and railway crossings,
- Unexpected corners, intersections and stops,
- Bridges, open water and unsafe ice, and
- Logging and farming operations.
Emergency/Survival Kits

A well-stocked first-aid kit is a necessity on every snowmobile trip no matter how long or short the trip will be. You don’t have to be far from your home to encounter problems that have the potential to quickly convert to life-or-death situations. Therefore, it is wise to be prepared. A well stocked emergency/survival kit might include:

- First aid kit,
- Trail map and compass,
- Matches or lighter in a waterproof container; candles or flares,
- Large metal cup,
- Knife, saw or axe,
- Folding shovel with pick,
- Flashlight,
- Whistle,
- De-icer,
- High energy food (such as nuts or granola bars),
- Throw rope (at least 15 to 20 metres long),
- Mechanical Kit (including spare spark plug and drive belt, extra ignition key, screwdriver, wrenches, hammer, pliers, electrical tape and owner’s manual),
- Light bulbs for all lights,
- Extra fuel,
- Survival blanket,
- Extra clothing,
- Snowshoes, and
- Cell phone.

Depending on the model of snowmobile, emergency kits can be stored mounted behind the seat or under the hood of the snowmobile.

First Aid Kit

Most of the time injuries while snowmobiling are not life threatening and can be treated on the trail or in the field. For minor cuts and abrasions a good first aid kit is an essential part of a snowmobiler’s emergency kit.
The following items should be in your first aid kit when going snowmobiling:
• Two pairs of latex (or other type) of gloves,
• Sterile dressings to stop bleeding,
• Cleansing agent or soap and antibiotic towelettes to disinfect,
• Antibiotic ointment to prevent infection,
• Adhesive bandages in a variety of sizes,
• An elastic bandage,
• Aspirin and non-aspirin pain relievers,
• Prescription medications you take every day (check expiration dates on medications),
• Eye-wash solution to flush the eyes or as a general decontaminant, and
• First aid handbook or guide.

The Keys to Safe and Responsible Operation of Your Snowmobile

As a safe and responsible operator, you should always be aware of your own abilities and limitations as well as the capabilities of your snowmobile. Make sure you know the following:
• Know Your Snowmobile  - Be familiar and comfortable with the snowmobile you will be operating.
• Obtain Training   - Knowledge and training in the handling and operation of a snowmobile is always an asset in promoting a safe ride.
• Be Prepared   - Ensure that you are properly trained and equipped to survive a night outside or to help others in need.
• Know the Laws  - Be aware of the rules and regulations for the province and the trails on which you will be riding.
• Ride within the Conditions  - Trails aren’t predictable like roads and can have sudden dips, rises and obstacles all of which are made worse by overcast days, changing weather conditions or driving at night. Always adjust your speed according to the conditions.
• Ride with Courtesy and Respect  - Remember you are not the only person enjoying the outdoors. Always be courteous and respectful to other outdoor enthusiasts and other snowmobilers. Ride with respect for the environment and make sure you leave the area as you found it – the only thing you should leave behind is your imprint in the snow.
• Always Use Sound Judgement  - Making careless decisions while operating your snowmobile can have potentially disastrous results. Assess all situations and actions in order to ensure your safety and the safety of everyone around you.
BEFORE THE NEXT MEETING

Try one of the following activities.

1. Make a list of items you would carry in your own emergency/survival kit if you were going on a winter excursion. Is there anything extra you would take that isn't listed in this member's manual? Record your list in your record book.

OR

2. Find out when the next Motorized Snow Vehicle Safety Training Course(s) is being offered in your area. This course is offered by the Ontario Federation of Snowmobile Clubs. Course dates can be found on their website at www.ofsc.on.ca Outline what this course entails and record in your record book.
If you are ever stranded while snowmobiling, having a source of high energy food available such as trail mix and granola bars is a necessity. Trail mix is a combination of dried fruit, grains, nuts and sometimes chocolate. It was developed as a snack food to be taken along on outdoor hikes or trail rides. Trail mix is considered an ideal snack food because it is tasty, lightweight, easy to store and nutritious. It provides a quick energy boost from the carbohydrates in the dried fruit and/or granola as well as sustained energy from the mono- and polyunsaturated fats in nuts.

The word gorp, a term for trail mix often used by hikers, may stand for “good old raisins and peanuts”, “granola, oats, raisins, and peanuts”, or “gobs of raw protein”. In New Zealand, trail mix is known as “scroggin” or “schmogle.”

Try one of these high energy recipes that you can make at home to take with you when you hit the trails. You could even bring some to the next meeting. Or, make more than one recipe and compare!

**Sweet and Salty Trail Mix**

- 250mL (1 cup) whole almonds
- 250mL (1 cup) unsalted peanuts
- 125mL (½ cup) shelled unsalted pumpkin seeds
- 50mL (¼ cup) unsalted sunflower seeds
- 45mL (3 tbsp.) maple syrup
- 5mL (1 tsp.) celery salt
- 2mL (½ tsp.) coarse sea salt
- 2mL (½ tsp.) ground cumin
- 1mL (¼ tsp.) ground cinnamon
- 125mL (½ cup) raisins
- 125mL (½ cup) dried cranberries

1. Preheat oven to 190oC (375ºF).
2. Line a baking tray with parchment paper.
3. Toss almonds, peanuts, pumpkin seeds and sunflower seeds with maple syrup, celery salt, sea salt, cumin and cinnamon.
4. Spread onto prepared baking tray and bake for 18 to 20 minutes, stirring once, until nuts are toasted.
5. While still warm stir in raisins and cranberries.
6. Let cool and store in an airtight container.
Movie Night Trail Mix

- 1 L (4 cups) toasted-oat cereal rounds
- 1 L (4 cups) wheat cereal squares
- 750mL (3 cups) unsalted popcorn
- 500mL (2 cups) pretzel sticks
- 500mL (2 cups) raisins
- 250mL (1 cup) salted peanuts

1. In large bowl, gently toss together toasted-oat cereal rounds, wheat cereal squares, popcorn, pretzel sticks, raisins and peanuts.
2. Store in airtight container at room temperature for up to 1 month.

Best Buddy Trail Mix

- 1L (4 cups) toasted-oat cereal rounds
- 1L (4 cups) wheat cereal squares
- 500mL (2 cups) crumbled wheat crackers, (such as Triscuit)
- 500mL (2 cups) unsalted cashews
- 500mL (2 cups) corn nuts
- 500mL (2 cups) pretzel sticks
- 15mL (1 tbsp.) dried Cajun spice

1. In large bowl, gently toss together toasted-oat cereal rounds, wheat cereal squares, crackers, cashews, corn nuts, pretzel sticks and dried Cajun spice.
2. Store in airtight container at room temperature for up to 1 month.

Pumpkin Seed Trail Mix Recipe

- 1L (4 cups) Raisin Bran Clusters Cereal
- 500mL (2 cups) small pretzel twists
- 250mL (1 cup) roasted salted hulled pumpkin seeds
- 250mL (1 cup) chopped dried apricots
- 50mL (1/4 cup) miniature candy-coated semisweet chocolate baking bits

1. Mix ingredients in large bowl or gallon-size resealable food-storage plastic bag.
2. Store mix tightly covered.
Nut Free Trail Mix

• 250mL (1 cup) sunflower seeds or roasted pumpkin seeds
• 250mL (1 cup) raisins
• 250mL (1 cup) nut-free granola
• 250mL (1 cup) dried fruit (such as apricots, cherries, or dates)
• 125mL (½ cup) nut-free chocolate chips

1. Combine all ingredients in an airtight container.

*Try your own recipe! Write your recipe in your Record Book.*
MEETING 5 - ACTIVITIES

Activity #1

Stranded! (Teambuilding Exercise)

Give the following instructions: “You will be stranded out on a snowmobile trail for an indefinite amount of time. You may only bring one item with you on your snowmobile trip and you only have a few minutes notice. What will you bring?

Have each member choose which object they would take with them. Have them share with the group what their object would be, why they chose it, why it’s important to them and what they plan to do with it.

After everyone has shared, divide the members into groups so they can figure out how they can improve their chances of survival by combining each member’s items in creative ways. Allow ten to fifteen minutes of group brainstorming, and then have each group present their ideas.

Activity #2

Fill In Your Emergency Kit! Word Search found in Record Book.
Objectives

- Learn about extreme activities involving snowmobiles.
- Learn respect for the environment while snowmobiling.
- Learn trail etiquette.

Roll Calls

- What's one new thing you discovered about snowmobiling during this project?
- Name one thing you can do while outside in the winter to benefit the environment?
- Name one benefit to snowmobiling in Ontario.

Sample Meeting Agenda – 2 hrs. 25 minutes

<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, Call to Order &amp; Pledge</td>
<td>10 min</td>
</tr>
<tr>
<td>Roll Call</td>
<td>5 min</td>
</tr>
<tr>
<td>Parliamentary Procedure</td>
<td></td>
</tr>
<tr>
<td>Minutes &amp; Business</td>
<td>10 min</td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td></td>
</tr>
<tr>
<td>Discuss what extreme sports are available for</td>
<td>20 min</td>
</tr>
<tr>
<td>snowmobile operators.</td>
<td></td>
</tr>
<tr>
<td>Activity Related to Topic</td>
<td></td>
</tr>
<tr>
<td>Activity #1 The Helmet Experiment (Worksheet</td>
<td>30 min</td>
</tr>
<tr>
<td>found in Record Book)</td>
<td></td>
</tr>
<tr>
<td>Topic Information Discussion</td>
<td></td>
</tr>
<tr>
<td>Review respect for the environment while</td>
<td>30 min</td>
</tr>
<tr>
<td>snowmobiling, trail etiquette and the</td>
<td></td>
</tr>
<tr>
<td>snowmobiler’s Code of Ethics. Discuss plans for</td>
<td></td>
</tr>
<tr>
<td>Achievement program.</td>
<td></td>
</tr>
<tr>
<td>Public Speaking/Judging Activity</td>
<td>30 min</td>
</tr>
<tr>
<td>Activity #2 Snowmobile Jeopardy!</td>
<td></td>
</tr>
<tr>
<td>Wrap up, Adjournment &amp; Social</td>
<td>10 min</td>
</tr>
<tr>
<td>Time!</td>
<td></td>
</tr>
<tr>
<td>At Home Challenge</td>
<td></td>
</tr>
<tr>
<td>Get ready for the Achievement Program!</td>
<td></td>
</tr>
</tbody>
</table>
Topic Information

Extreme Snowmobile Competitions

Snowmobiling is a wonderful activity to enjoy the trails outdoors and the beauty that Mother Nature offers in the winter season but there are also some extreme snowmobile competitions that some motorized snow vehicle operators like to participate in as well.

**NOTE:** if you are considering trying any “extreme” snowmobile activities, ONLY participate in organized events where safety precautions are a planned part of that sport. 4-H does not promote the participation of anyone in any extreme snowmobile activity. These activities are not permitted on OFSC Trails.

**Snowcross**

Snowcross has evolved from the early days of oval racing combined with the popular Motocross racing. The sport involves racing specialized high performance snowmobiles on natural or artificially made tracks consisting of tight turns, banked corners, steep jumps and obstacles. Riders race at speeds of up to 97km (60 miles) per hour. Jumps are up to nine meters (30 feet) tall, so riders can travel up to 40 metres (130 feet) before they touch the ground. According to the World Snowmobile Association, snowcross is the most popular form of snowmobile racing.

**Snowmobile Drag Racing**

This competition can be held in the winter on snow or in the summer on grass.

- **Snow Drag Racing** – Snow drag racing is a timed competition in which high performance snowmobiles compete two at a time to be the first to cross a set finish line. The snowmobiles start the race from a stopped position (also known as a standing start) and race in a straight line over a measured distance. The race track, known as a dragstrip, uses an electronic timing system to determine the winner.
- **Grass Drag Racing** - Snowmobile grass drags is the simplest type of sled racing to get into. There are classes in the race line up specifically suited for first time racers and stock sleds. A grass drag is a 166 metre (500 foot) straight line run.

**Vintage Snowmobile Racing**

This competition is similar to snowmobile drag racing only snowmobiles must be 25 years old or older to be eligible to compete. Almost all vintage snowmobile racing is done on snow and can be on a straight or oval track.
Hillcross

Similar to snowcross, hillcross pits snowmobiles head to head in an uphill battle with several different types of jumps, moguls, kickers, and huge air launches. These races are held either on a large hill or, more often, in the mountains.

Watercross Racing

Using the snowmobile with a few modifications for racing, competitors participate by hydroplaning the snowmobile across water. This sport is a cross between snowmobiling and jet-skiing and is possible because snowmobiles have wide tracks for traction and flotation in the snow. For this sport, the seat is taken off of the snowmobile and the operator stands while competing. This is a race with snowmobiles starting on land, entering the water at a high rate of speed and then racing across the water to see who can do it the fastest and make it to the other side without sinking. There are also races that feature jumps, flips, back-flips and barrel rolls that are exciting to watch. Watercross is hazardous due to the high speeds and the chance of striking something on the way to the water and is illegal in some areas. Insurance coverage on your snowmobile may null and void if competing in a watercross event.

Arctic Man Classic Race

The Arctic Man, held in April each year, is a race for teams of two skilled competitors that tests the strength of an athlete and the horsepower of a snowmobile. Courage and training are essential elements of this team of snowmobile and skier. The Arctic Man is one of the world’s toughest downhill ski races and an exciting snowmobile race all in one. The skier begins at a summit elevation of 17,400 metres (5,800 feet) and drops 5100 metres (1700 feet) in less than 3.2 km (2 miles) to the bottom of a narrow canyon where he meets up with his snowmobiling partner.

The snowmobiler meets the skier, on the go, with a tow rope and pulls the skier 3.6km (2 1/4 miles) uphill at top speeds of up to 138 km (86 miles) per hour. The skier and the snowmobile then separate and the skier goes over the side of the second mountain and drops another 3600 metres (1200 feet) to the finish line.
The World’s Longest Snowmobile Race – The Iron Dog

Held in February each year, the Iron Dog course is over 3200km (2,000 miles), starting in Big Lake to Nome (half-way point) and finishing in Fairbanks, Alaska, following the northern route of the Historic Iditarod Trail. Participants must traverse in some of Alaska’s most remote and rugged terrain while confronting some of the harshest winter conditions. Survival skills are essential, making it the World’s toughest snowmobile race. All teams are comprised of two persons and two snowmobiles for safety.

The Iron Dog offers a non-competitive Trail Class giving adventure seekers an opportunity to travel 1760km (1100 miles) on the Northern Route of Historic Iditarod Trail to Nome. These teams of two or more travel the same race trail as the Pro Class Teams.

Review!

Respecting Our Environment

Everyone has a responsibility to protect our environment and that includes motorized snow vehicle operators. Snowmobilers have a stake in the maintenance of a clean environment and safe and courteous riding practices will contribute to a clean environment. In one way or another, practically all of our actions have an effect on the environment.

- **Do not litter** - Never leave trash behind on the trails or outdoors. Carry out what you carry in.
- **Be careful when re-fueling** - Even small oil or gasoline spills have the ability to contaminate soil and groundwater.
- **Make sure there is adequate snow cover** - This will help to protect plants and grasses beneath your snowmobile.
- **Do not spin the snowmobile track** - Refrain from spinning the snowmobile track so that vegetation below the snow’s surface won’t be harmed.
- **Watch for small trees and bushes** - Avoid small trees and bushes sticking up through the snow so that their growth will be maintained.
- **Do not harass wildlife** - If you encounter wildlife proceed slowly or stop until they have left the trail or area. During the winter months animals need to conserve energy whenever possible due to the scarcity of food. Causing them to exert energy unnecessarily could be hazardous to the animal. Observe and photograph them from a distance.
- **Remain on designated trails** - The potential for negative environmental impact is always greater when traveling off-trail. In some areas, travelling off-trail is not allowed. Respect sensitive areas. There are lots of other places to ride, so avoid areas marked as environmentally sensitive or protected habitats.
- **Keep noise to a minimum** - Slower speed results in less noise. Always make sure the muffler on your snowmobile is in good condition to prevent noise pollution.
• **Maintain your snowmobile** - Keep the engine in top operating condition and maintain all vehicle components in good working order throughout the season.
• **Turn it off** - When the snowmobile is not in use stop the engine. Do not let it sit and idle.
• **Embrace new technologies** - Today’s clean and advanced technology snowmobiles run even more efficiently, effectively and much quieter than older models. They also benefit Mother Nature by significantly reducing emissions and virtually eliminate smoke and smell.

Be a responsible snowmobile operator!

**FUN FACT: Did You Know?**

Since 1992, the OFSC has invested $1.5 Million in projects to improve the environment and to assist Snowmobile Clubs in minimizing environmental impacts.

**Trail Etiquette**

As a snowmobiler you have a responsibility to ride in a manner that is both legal and respectful towards your fellow riders and the environment.

**Always**

• Keep to the right side of the trail.
• Operate in a safe and courteous manner.
• Give trail groomers the right of way.
• Reduce your speed when there is oncoming traffic.
• Give uphill riders right of way when you are traveling downhill.
• Slow down and give the right of way to any skiers, hikers, persons on snowshoes or dogsleds you might encounter.
• Always report illegal operation out on the trails.
• Slow down when passing a parked snowmobile on the trail.
• Practice Zero Alcohol and Drugs before and during your ride.

**Never**

• Never exceed the posted speed limits for an area.
• Never pull over on a turn or curve. If you need to stop along a trail, pull over to the right side of the trail on straight stretches only.
• Never leave your engine running if you need to stop for any length of time.
• Never ride on private property without permission.

The Canadian Council of Snowmobile Organizations (CCSO/CCOM) is committed to the conservation and preservation of Canada's natural environment. To that end, the Council has produced a Code of Ethics for Snowmobile operators to follow:
**Code of Ethics**  
*Canadian Council of Snowmobile Organizations*

“As a snowmobiler I understand and accept the risk associated with snowmobiling and I will take responsibility for my own actions.”

**As a responsible snowmobiler…**

- I will ride in a manner that is a credit to our recreation.
- I will influence other snowmobilers to adhere to this Code of Ethics.
- I will respect the rights of others including property owners and other outdoor enthusiasts.
- I will protect our natural environment.
- I will ride in a responsible manner and will use only marked trails, areas or roads open to snowmobiles.
- I will not harass or harm wildlife or the natural surroundings.
- I will minimize my impact on the environment.
- I will ride smart, be prepared and stay in control.
- I will check ice and weather conditions before riding.
- I will help those in distress.
- I will obey all laws and rules governing our recreation.
- I will promote proper snowmobile education and training.
- I will practice Zero Alcohol and Drugs with respect to impaired driving.
Activity #1
THE HELMET EXPERIMENT

**Purpose of the Experiment** - Identify why helmets are essential for prevention and protection in the areas of road and vehicle safety (e.g. snowmobiles, ATV's, farm equipment).

**Activity Outcomes:** Members will be able to conduct an experiment to find out how safe helmets are and explain why helmets are important.

**Items Needed for Experiment:** Egg cartons, eggs, paper towels, tape, plastic bag

**Suggestions for Instruction:**
- Explain to members that they are going to conduct an experiment to find out how safe helmets are.
- Ask members to work in pairs or in small groups of 3-5 people.
- Introduce Activity 11 Worksheet: The Helmet Experiment - Safety protection.
- Give each pair or small group: 2 eggs, 3 paper towels, some tape, and an egg carton.
- Ask members to:
  a) wrap one egg in 2 or 3 paper towels (represents the helmet) and then attach it inside the egg carton with tape (represents the helmet strap).
  b) place the second egg inside the egg carton unrestrained.
  c) tape the egg carton closed.
  d) place the egg carton inside a plastic bag before dropping.
- Ask members to predict what will happen to each egg in the carton.
- Ask each group to drop their eggs from shoulder height while the other members observe.
- Ask members to examine both their eggs and record the results of this experiment on the worksheet.
- Discuss the results.
- Ask members why helmets are important.

(Answer: Helmets protect the brain from the impact of a crash. Both the padding and a secure helmet strap protect the brain.) While a helmet won't protect from every possible injury that may occur, it will aid in decreasing the chance and severity of a head injury.
• Have a few snowmobile helmets at the meeting for members to look at.
• Ask a few volunteers to lightly tap themselves on different parts of their heads.
• Ask these same volunteers to place the helmets on their heads and try tapping themselves again on different parts of their heads.
• Ask these volunteers if they felt/noticed the difference.

(Answer: A blow to the head while wearing a helmet distributes the impact of the blow over a larger area of the head.)

**Activity #2**

_Snowmobile Jeopardy!_

(based on the TV game show)

If possible, draw the following game board on flip chart paper. One person (preferably a leader or senior member) acts as the host (they are Alex Trebek!) and one person acts as the score-keeper. Divide the members into two teams.

Have each team member choose an animal sound that they will make when they want to answer a question. Each person much choose a different animal sound so they can be uniquely identified. The host chooses the first category. The first two people on each team are the only two that can try to answer the question. If neither gets the answer correct, then the next two people on the team can try. The person answering a question correctly gets to choose the next category question for the next set of two people. This will hopefully help to include everyone in the game rather than just a couple of members on each team answering all of the questions.

Remember, in true Jeopardy style, the answers have to be in the form of a question!

Game Board to be posted for everyone to see.

<table>
<thead>
<tr>
<th>Acronyms</th>
<th>History</th>
<th>Ontario Trails</th>
<th>Safety</th>
<th>Snowmobile Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>$200</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
</tr>
<tr>
<td>$300</td>
<td>$300</td>
<td>$300</td>
<td>$300</td>
<td>$300</td>
</tr>
<tr>
<td>$400</td>
<td>$400</td>
<td>$400</td>
<td>$400</td>
<td>$400</td>
</tr>
<tr>
<td>$500</td>
<td>$500</td>
<td>$500</td>
<td>$500</td>
<td>$500</td>
</tr>
</tbody>
</table>
### Question & Answer Sheet for the game host

<table>
<thead>
<tr>
<th>Dollar Value</th>
<th>Acronyms</th>
<th>History</th>
<th>Ontario Trails</th>
<th>Safety</th>
<th>Snowmobile Parts &amp; Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$100</strong></td>
<td>OPP</td>
<td>The designer who is Joseph-Armand Bombardier?</td>
<td>The number of Districts that make up the OFSC. What is 16?</td>
<td>The speed limit on Ontario snowmobile trails. What is 50km/hr?</td>
<td>Gauge that indicates speed. What is a speedometer?</td>
</tr>
<tr>
<td></td>
<td><strong>$200</strong></td>
<td>OFSC</td>
<td>The number of snowmobile clubs in OFSC. What is 217?</td>
<td>The mandatory piece of snowmobile gear to wear. What is a helmet?</td>
<td>This can either be two stroke or four stroke. What is the engine?</td>
</tr>
<tr>
<td></td>
<td><strong>$300</strong></td>
<td>B.A.C.</td>
<td>The location of the head office of the OFSC. What is Barrie?</td>
<td>The essential kit needed for trail riding. What is an Emergency/Survival Kit?</td>
<td>Squeeze this to make the snowmobile move forward. What is the throttle?</td>
</tr>
<tr>
<td></td>
<td><strong>$400</strong></td>
<td>S.T.O.P.</td>
<td>The acceptable alcohol level for snowmobile operators under 22 years old. What is 0?</td>
<td>The proper angle to cross a railway crossing. What is a 90 degree angle? (or What is a right angle?)</td>
<td>Snowmobiles should receive this at the beginning of every season. What is a tune-up?</td>
</tr>
<tr>
<td></td>
<td><strong>$500</strong></td>
<td>CCSO</td>
<td>The person who received the first patent for a snow machine. Who is Carl J. Eliason?</td>
<td>The automatic reaction that happens to the body when it falls into ice cold water. What is the gasp reflex? (also called Cold Shock)</td>
<td>Length of time snowmobile should idle before taking off. What is 30 seconds?</td>
</tr>
</tbody>
</table>
EXTRA ACTIVITIES

**Activity #1**  
*Help the Snowmobiler find his Snowmobile*

(worksheet found in Record Book)

**Activity #2**  
*Judging Snowmobile Helmets*

Gather as many different styles and ages of snowmobile helmets as possible. Using the scorecard found in the Record Book, have the members judge the helmets.

**Activity #3**  
Snowmobile Safety

**Activity Outcomes:**
Members will be able to state the safety rules around riding snowmobiles.

**Suggestions for Instruction:**
- Using a show of hands, ask members: How many of you ride a snowmobile?
- Make a tally of members’ responses on the chalkboard.
- Brainstorm on flipchart paper the safety rules for riding a snowmobile that members already know.
- Record the snowmobile safety rules that students did not name on flipchart paper.

**Safety rules for riding snowmobiles:**
1. Ride with your parents or an authorized adult. Never ride alone.
2. Ride within your ability/skill and the limits of the machine.
3. Obey the rules.
4. Be careful crossing any roads and always cross at a right angle to traffic (if you are over 16 years old).
5. Use hand signals.
6. Use appropriate clothing and protective gear (e.g. helmet).
7. Use snowmobile trails whenever and wherever possible.
8. Stay on the right side of the trail.
Activity #4

*Impromptu Speeches*
Put a variety of small snowmobile related items (eg. map, spark plug, granola bar, wrench, operator’s license, flashlight, cell phone, camera, whistle, etc.) in a bag. Have members, one by one, choose an item and have them talk about it for 30 seconds as to why or why not that particular item is important while out snowmobiling.

Activity #5  -  Winter Theme Boggle!

*What's Needed to Play*
Make enough copies so that each member has their own sheet. Each player also needs a pen or pencil. You’ll also need a watch that can time for 2 minutes.

*How to Play Boggle*
Distribute 1 copy of one of the boggle game page (found in the Record Book) and a pencil to each member. Pass the page to each player up-side-down so that nobody has an advantage of seeing the page first. Start timing for 2 minutes and players will turn over their page and start looking for words.

Players can write down words they find in the grid that match the following rules:

- The letters in the words must be connected in the same order in the grid.
- The letters can be connected by an edge or a corner.
- The word doesn’t have to appear in a straight line. It can be tangled around.
- Each letter in the word must uniquely appear in the grid. For example, if the word is ERASE, the letter E must appear twice in the grid. The word can’t just loop back and re-use the same E.
- Words must be at least 3 letters long
- Words cannot be a proper noun, such as a name or place.
Scoring Your Boggle Game

In boggle, you only earn points if no one else has found a word that you have and that word is a valid word from the grid. In order to determine which words can score, someone will read their list of words. If any two players have that word, then the word must be crossed off each list. When the first player is finished with their list, then the next player reads through their list and players cross off duplicate words. This continues until everyone had read their list and has a list of unique words they have found. Here is how to score the words:

• Less than 3 letters = 0 pts (invalid boggle word)
• 3 letters = 1 pt
• 4 letters = 2 pts
• 5 letters = 3 pts
• 6 letters = 4 pts
• 7 letters = 6 pts
• 8 letters or more = 11 pts
• (optional scoring rule) Word matches theme = double the points for the word length

This last scoring rule is not part of the standard boggle rules. It is a special rule for our theme based boggle word game pages. For example, if the theme was Space and someone found the word meteor the word would be worth 6 points (6 letters = 3 points, then double for theme match). In order to receive the doubled word points, the group has to agree that the found word matches the theme.
GENERAL REQUIREMENTS FOR THE “Responsible Rider Snowmobile” PROJECT

A member will complete a project satisfactorily by:

• Participate in at least 2/3 of his/her own club meeting time. Clubs must have a minimum of 12 hours of meeting time.
• Complete the project requirement to the satisfaction of the club leaders.
• Take part in the project Achievement Program.
• Fill in and complete the Record Book.

JUNIOR PROJECTS

• In collaboration with the local OFSC club, association or district:
  ➢ Write a press release about the local snowmobile club in your area.
  ➢ Create a display promoting your local snowmobile club.
• Create a display about the benefits of snowmobiling in Ontario including smart choices for protecting the environment and the economic impact.
• Design a poster or an advertisement to promote snowmobiling (Group project).

SENIOR PROJECTS

• Interview an OPP officer and/or doctor or burse about snowmobile safety and statistics and write a press release for the newspaper promoting smart choices.
• Report on the snowmobile clubs available in your community (Group project).
• Create a cost comparison chart of different brands and types of snowmobiles.
• Create a video about safe snowmobiling or an environmentally friendly approach to snowmobiling and post on YouTube.