

Winter Safety Night



Winter safety, like all outdoor safety, is all about proper preparedness and knowledge for being in the wilderness. We hope these notes will help you focus on some key parts to wilderness travel in the winter. This is not a complete list, merely an addition to your current or new path in understanding the skills needed to enjoy the outdoors in winter.

Winter Conditions – as defined by the Outdoor Council of Canada

- The average temperature during your Event is forecasted or recorded as 5°C or lower.
- Most of the ground is covered in snow.
- Snow is forecasted or is falling during your Event.
- Long periods of moderate to heavy rain are forecasted or experienced during your Event and the temperatures are 10°C or lower.
- Strong winds are forecasted or felt for a sustained portion of your Event.
- Your Event takes place between October 1st and April 1st.

If 2 or more of these conditions are met = Winter conditions, regardless of the season

4 Categories

- **Skill Preparation** – what am I capable of with current wilderness training and comfort?
- **Equipment Preparation** – what can I do with the current equipment I have access to, and do I know how to use it comfortably?
- **Trip Preparation** – where can I go safely either alone or with a group for this activity?
- **Group Management** – do I know everyone in this group, and are we all in the same capability and comfort level to work as a team for this activity?

Skill Preparation

Being honest with yourself is HIGHLY IMPORTANT. You need to be realistic about three things:

- **Capability**
- **Comfort Level**
- **Wilderness training**

Capability

What are you physically able to do without overly stressing your body?

Are you physically fit enough for your chosen activity?

Do you have any medical or physical conditions that can inhibit you from doing this activity?

Comfort Level

What are you mentally and emotionally comfortable doing in a wilderness setting?

How do you handle stressful situations?

How do you handle being in new or uncomfortable situations?

***ON DAY OF** – How are you feeling in 3 categories (mental, emotional, physical)? If you are not feeling well, having **the ability to turn back is key!**

Wilderness Training

Professional wilderness training, as opposed to *informal mentoring* (which can be helpful to assist pro. training) is very important to have.

Recommended Winter/Wilderness Training:

*You do not need to have all of these courses, however courses in Blue are essentials

- Standard (helpful) or Wilderness First Aid (ideal) – Slipstream, Rocky Mtn Adv. Medicine
- Avalanche AST1 Course – Avalanche Canada, U of C
- Map and Compass Training – U of C
- Weather Training – Alpine Club of Canada
- Winter Preparedness Course – Norseman Outdoor Specialist ;)
- OCC Field Leader - Outdoor Council of Canada
- Basic Wilderness Survival & Bushcraft – U of C, Full Circle Adventures

Equipment Preparation

Appropriate equipment will dictate what activities you can do.

Even on a day trip, you MUST be self-reliant regarding gear in your pack - in case of an emergency.

Clothing layering system:

*Cotton is NEVER recommended – stays WET for long periods

* Start your day feeling COOL, then keep WARM during REST. Sweat is the enemy during the winter.

- Base layers (synthetic ideal) – Keeps you DRY
- Mid layers (fleece, wool, synthetic, etc.) – Keeps you WARM
- Outer layers (waterproof fabric NOT recommended, except in unique circumstances) – Keeps you PROTECTED from the elements.
- Outer warmth layers (down jackets) – Keeps you WARM when resting. Not recommended to move in.

Key pack items for general winter activities:

*ALL items in pack, should be protected from water. Dry bags, rain cover, and/or pack liners are useful

- Proper Daypack (26-36L)
- Ice spikes for Boots (NOT mountaineering crampons)
- Hiking or Winter Hiking Boots – torsionally stiff, full leather boots ideal
- Gloves and Toque (bring extra)
- Headlamp and spare batteries
- Sunglasses
- Sunscreen
- **First Aid Kit – ALWAYS (size is based on your medical training)**
- Map of the area
- Guidebook
- Water (insulated mug)
- Water purification
- Food (**bring extra, as you burn more calories in winter**)
- Firestarter – multiple lighters ideal
- Survival shelter – **space blanket does not count**
- Repair kit – for your general gear, AND gear specific to activity (ex: ski, snowshoe, climbing, etc.)

SPOT, InReach, etc. devices are recommended to have, in order to communicate in an emergency. You MUST know how to use properly beforehand, and the LIMITS of each product.

Knowing proper use, and caring for your equipment is key to enjoying your gear when in the field. Unfamiliar gear, or poor gear for the activity will cause unwanted hassle in the most awkward (or dangerous) of situations.



Trip Preparation

***Trip, Equipment and Skill Prep are closely tied. One will dictate the other two.**

- What limits do you have for **capability** and **comfort**? (**Skill Prep.**)
- What limits do you have for **equipment**, and **knowing proper use** of your equipment? (**Equipment Prep.**)

Key trip information you will need:

- Multiple weather forecasts – day of AND days after event (in case of emergency)
- Avalanche conditions – *Avalanche Canada*
- Will there be avalanche hazards where you are going?
- How far could you be from resources, if a situation arises? What and Where are the resources (ex: Police, Search and Rescue, Hospital)?
- Sources such as **HikingWithBarry.com** and **SkierBob.ca** are helpful for looking at trail details
- Sunrise and Sunset times

Group Management

Key items to note when working with a group:

- Do I know everyone in the group?
- Have we discussed the trip beforehand as a group?
- Do I know everyone's **capability** and **comfort** in a wilderness setting?
- **You MUST work at the pace of the slowest person**
- Does everyone know **where we are going on a map**?
- Does everyone know **when we are returning**?
- Critical items (keys, phone, etc.) have to be shared regarding location in backpack
- **Gear check** – even a verbal check with everyone before leaving, will help to determine everyone is carrying proper equipment for the trip.

The biggest issue with Group Management, is the diversity of people within a group. Egos, skill levels, vision for the trip; these all will affect the success of the trip.

General Guidelines for working in a group:

- **You MUST work at the pace of the slowest person**
- IF you are in a group that is new to each other, then do a **lower risk activity**
- **DO NOT SPLIT UP** – many Searches have been called due to this.
- Make sure everyone is clear about the activity
- IF one person is highly uncomfortable, **STOP and TALK** about it. If there is a REAL reason (as opposed to a PERCEIVED reason) related to **capability** and/or **comfort**, **then you collectively must turn back.**

PERCEIVED Reason – Fear regarding an avalanche across the valley

REAL Reason – Recent avalanche debris on the trail 300m away

Winter Guidelines and Hazards



Safety Plans are a MUST for any wilderness travel:

- Leave detailed information with multiple people at home
- Leaving time, return time, and a map or detailed description of the region are important
- Give people proper emergency contacts (ex: Kananaskis Search and Rescue, Canmore RCMP)
- IF carrying a SPOT, InReach, etc., set this device up properly before leaving

Winter Related Hazards

- Hypothermia
- Dehydration (overworking body OR lack of water access)
- Snowblindness – sunburn of the eye itself, leading to temporary blindness
- Icefall and Rockfall (increased freeze/thaw cycles in winter)
- Avalanches
- Frostbite
- Sunburn – increased risk during winter, as snow is highly reflective



Winter Preparedness Course

- Spend a day with a Professionally Certified Hiking Guide in the Canadian Rockies
- Snowshoeing or Winter Hiking depending on conditions
- Teaches topics covered in talk, in greater depth
- In-field specific training and technique
- Geared for beginner to intermediate outdoor skill levels
- Basic skills transferable for XC-Skiing, Snowshoeing, Winter Hiking, or even Ice Climbing