

# Backcountry Skiing & Splitboarding

## Activity Standard

### Activity Description

This activity provides structured opportunities for CMC members to engage in backcountry skiing and splitboarding in alpine environments. Trips range from beginner-friendly terrain to advanced, technical descents. All trips and field days for courses emphasize safe travel techniques, appropriate terrain selection based on conditions, group management, and responsible backcountry practices. Participants develop skills in winter travel, avalanche awareness, and technical downhill skiing/riding in varied backcountry conditions.

### Definitions

Backcountry	All areas that are outside of commercial avalanche control, such as highways and inbounds at lift served ski areas
In Bounds	Areas that are inside commercial avalanche control, such as lift served ski areas
Alpine Terrain	Open terrain above treeline, subject to wind, exposure
Backcountry Skiing / Split boarding	Trips that include skiing down slopes that require the use of parallel or telemark turns for descent

### Snow Conditions Descriptions:

Rating	Description
Packed Trail	Established winter trails, well-traveled and compacted
Fresh Snow	Requires trail breaking through uncompacted snow
Rolling	Varied terrain with moderate ups and downs
Steep	Significant elevation changes requiring advanced technique

## Difficulty Ratings

Rating	Slope	Description
Easy	Beginner slopes at ski area	Skiers should be able to ski proficiently on beginner slopes at downhill ski areas. Skiers can make a solid stem turn and traverse via kick turns off-trail on untracked slopes.
Moderate	Up to 25 degrees	Meet easy requirements and be able to: ski moderate terrain (slopes up to 25 degrees with trees and other obstacles) at a reasonable speed without frequent falls.
Challenging	Steeper than 25 degrees	Meet moderate requirements and be able to: ski difficult terrain (slopes steeper than 25 degrees), make linked turns in difficult terrain, and ski treed slopes, gullies, couloirs.
Difficult	Steeper than 25 degrees and out of bounds	Meet challenging requirements and have: considerable experience in route finding and trail breaking. Completed Basic Mountaineering School and avalanche training.

## Pace Ratings

**Pace will vary based on conditions and terrain.**

Rating	Description
Casual	Munter < 4 / <1.5 miles per hour or less than 1000 ft elevation gain
Moderate	Munter ~ 4 / 1.5-2 miles per hour or between 1000-1500 ft elevation gain
Brisk	Munter > 4 / >2 miles per hour w/ 1000-2500 ft elevation
Fast	Munter > 7.5 / >3 miles per hour w/ 1000-2500 ft elevation gain

\*Here's how you can use the Munter Method to figure out your time:

1. **Measure the Distance and Elevation Change:** First, find out the total distance of your trip in kilometers. Also, note the total uphill elevation change in meters.

2. **Calculate the Munter Units:** For every kilometer you plan to travel, count it as one Munter unit. For every 100 meters you go uphill, count that as one Munter unit too.
3. **Multiply by the Munter Rate:** Typically, one Munter unit takes about one hour to hike. Multiply the total Munter units by one hour to get your estimated hiking time.
4. Additional resource:  
<https://backcountryaccess.com/en-us/blog/p/how-to-calculate-backcountry-touring-time-based-distance-elevation-gain>

## Avalanche Terrain Complexity

Rating	Description
Avoid Avalanche Terrain	Travel on slopes under 25 degrees. Non-avalanche prone terrain means terrain with stable snowpack; slope angles not in the 25-45 degree range; that does not include terrain traps (e.g., stream beds, gullies, steep road cuts) or snow pillows, roll-overs, cornices and subtle micro-terrain features; and that does not have avalanche prone terrain above the selected route.
Simple	Exposure to low angle or primarily forested terrain. Some forest openings may involve the runout zones of infrequent avalanches. Isolated steep sections have many options to reduce or eliminate exposure. No glacier travel.
Challenging	Exposure to well-defined avalanche paths, starting zones, or terrain traps. Options exist to reduce or eliminate exposure with careful route finding. Glacier travel is straightforward but crevasse hazards may exist.
Complex	Exposure to multiple overlapping avalanche paths or large expanses of steep, open terrain. Multiple avalanche starting zones and terrain traps. Minimal options to reduce exposure. Complicated glacier travel with extensive crevasse bands or icefalls.

## Equipment Recommendations:

### For All Participants:

- Alpine touring skis with appropriate bindings; splitboard with appropriate hardware; or telemark skis with appropriate bindings, poles
- Full climbing skins
- Backpack (sufficient for carrying personal gear and rescue equipment internal to pack and readily accessible)
- Appropriate winter clothing (layered system)
- Helmet and eye protection (required for descent)
- Food and water for planned duration plus emergency reserve
- Ski poles (adjustable recommended)

If trip enters Avalanche Terrain of slopes > 25 degrees and/or is a multi-day trip:

- Avalanche transceiver (digital, 3-antenna required)
- Avalanche probe (minimum 240cm)
- Avalanche shovel (metal blade)
- Ice axe
- Emergency shelter
- Navigation tools (map, compass, GPS if appropriate)
- Emergency communication device - PLB or cell phone if in service
- Headlamp with spare batteries

### Additional Leader Equipment:

- First aid supplies appropriate for winter conditions
  - Consider a group emergency shelter
  - Extra layers (can be distributed among group for weight distribution)
- Other speciality winter gear as required by trip classification and duration
  - Shovel, beacon, probe
  - Stove and fire starter
  - Insulated pad
- Navigation tools and Communication devices (radios and/or satellite messenger)
- Repair kit appropriate for equipment
- Snow assessment tools

## Recommended Skills

- Ski Skills may include and are not limited to:
  - Diagonal stride
  - Herringbone (for traversing or ascent)
  - Snowplow
- Leaders and participants should consider taking Winter Camping School, Winter Wilderness Survival School, or a similar course to develop winter wilderness skills
- Winter travel safety (included in Avalanche Terrain Avoidance or higher) including but not limited to:
  - Identification of avalanche hazards
  - Proper route selection
  - Group management associated with decision making in avalanche terrain
  - Emergency preparedness for winter conditions

## Roles and Requirements

Role	Responsibilities	Skills / Course Badge Required
Participant	Sign up for trips and courses appropriate to their level	Avalanche terrain avoidance preferred
Leader	Post trips and courses appropriate to their level and experience  Maintain current knowledge in Avalanche safety	Trip Leader Badge Ski Trip Leader Badge WFA or higher AIARE or higher
Mentor	Up to date knowledge of Activity standard  Maintain current knowledge in Avalanche safety  Mentor status within Group	Trip Leader Badge  Ski Trip Leader Badge WFA or higher AIARE or higher Mentor Leader Badge
Instructor	<i>Not updated as of 10/30/2025</i>	<i>Not updated as of 10/30/2025</i>

# Leadership Requirements

## Basic Requirements

- CMC Trip Leader Certification
- Avalanche Education
  - In-bound terrain / Easy Trip Difficulty - ATA
  - Simple Terrain / Moderate Trip Difficulty - AIARE or AAI Level 1
  - Challenging-Complex Terrain / Difficult Trip Difficulty - AIARE or AAI Level 2
- Wilderness First Aid or higher medical training

## Recommended Technical Skills

- Intermediate to advanced downhill skiing/snowboarding ability (trip-dependent)
- Ability to perform uphill travel with appropriate equipment
- Avalanche safety knowledge appropriate to trip level
- Navigation skills in winter mountain environments
- Equipment management and transition skills

## Recommended Physical Fitness

- Ability to travel uphill with full pack for extended periods (4+ hours)
- Capacity to carry emergency equipment and personal gear (25-35 lbs)
- Stamina to complete full-day mountain travel in winter conditions
- Ability to perform self-rescue and assist in group rescue if needed

## Recommended Training / Experience

- See difficulty ratings above

## Notes and Special Considerations

### Leader-to-Participant Ratio:

- Beginner terrain: 1:7 maximum
- Intermediate terrain: 1:6 maximum
- Advanced terrain: 1:5 maximum
- Technical terrain: 1:4 maximum

### CANCELLATION OR EARLY TURNAROUND PARAMETERS

- Avalanche danger inappropriate for planned objective and no suitable alternative routes are available to reduce risk to an appropriate level
- Avalanche danger in the field is increasing or not consistent with the forecast planned for
- Forecast or current severe weather conditions incompatible with the parameters of the trip (extreme cold, high winds)
- Insufficient snow coverage for safe travel
- Access issues to planned trip areas
- Inadequate participant preparation or equipment
- Snow conditions will result in ski difficulty greater than group is prepared for

## Revision History

Version	Date	Author	Changes
1.0	6/9/2025	Graham Ottley	Initial document
2.0	9/23/2025	Volunteer Committee	Added suggestions and reviewed the initial document. Added comments to <a href="#">Feedback R1: Backcountry Skiing ...</a> as well.
3.0	10/21/2025 and 10/30/2025	Volunteer Committee and revisions made	Comments Remaining:

		by Ashley Kramer	<p><b>General - Candace Winckle:</b> It would be helpful for leaders posting these trips if the sections in this standard matched the fields in the trip posting. The trip posting has sections for difficulty, required Equipment, mileage, elevation gain and pace. Other items that pertain specifically to this standard could be covered in Leader's notes.</p> <p><b>Jeff Schreier - Difficulty Ratings:</b> My recommendation would be three categories: 1.) Ascent difficulty which can be a combo of distance and elevation as described. 2.) Technical climb skills: skins only; ski crampons likely needed; boot crampons, ice axe, and appropriate technique required; technical ice climbing or rappelling needed; etc. 3.) Ski Skills required: this is a combination of the slope challenge/angle and what decisions the group will make when faced with adverse snow conditions (what will the group do in the event of ice, windboard, suncrust, punchcrust etc..</p>
3.0	1/5/2026	State Council	State Council approved document