



ABSEIL AND CANYONING LEADER GUIDELINES

The following information identifies suitable knowledge and skills for abseiling/canyon leaders, co-leaders and participants.

Overview

Canyoning involves the descent and/or ascent of geological formations created by a watercourse, using a range of techniques. The formations may be steep (or vertical), wet or dry, subject to sudden inundation, and may be rough in nature. Techniques utilised may include abseiling, bouldering, rock hopping, scrambling, swimming and bushwalking.

In order to ensure that activities are conducted in a safe manner, a number of specific skills and processes must be learned and practiced by leaders and participants. These guidelines identify these skills and techniques and provide training tips.

Recommended abseiling skills of a co-leader

- Basic knowledge of the equipment used in abseiling.
- Safety check an abseiler before they go over the edge.
- Bottom and top belay.
- Use bottom belay to lower to the ground an abseiler who has lost control.
- Chain and coil a rope.
- Tie the following knots, and know their application: Tape Knot, Figure of Eight Knot (single, double and rethreaded), Double Fishermans Knot, Canyon Overhand Knot, Classic Prusik, French Prusik, Munter Hitch and Stone knot.
- Effectively deploy chained and coiled rope.
- Check the abseil rope set up and anchor.
- Abseil on single and double ropes using different abseil devices at different locations.
- Judge the friction required of an abseil device for either single or double rope.
- Lock off and unlock from any abseil device while abseiling.
- Self belay.
- Help teach trainees how to abseil safely.
- Prusik at least 5 metres up and down a rope, and over an easy edge.
- Abseil over a tricky edge (grovel start).
- Prusik over a tricky edge.
- When abseiling first, clear any rope tangles while still connected in a safe manner to the rope.
- Self rescue – namely, clear a jam in the abseil device (by hair, rope or clothing) using their own means by way of prusik loops.
- Help rescue an abseiler who cannot self-rescue.

Recommended abseiling skills of the leader

Additional to co-leader requirements

- Appropriate knowledge of the equipment used for abseiling.
- Adequate understanding of Manufacturers Rated Strength and appropriate Safety Factor¹ in order to determine the Safe Working Load (SWL)² for that piece of equipment.
- Choose a safe abseil site.
- Choose single & multi point anchors, rig and if required equalise anchor points.
- Protect abseil rope from abrasion.
- Check complete abseil system before it is used (including the fall line of rope).
- Ensure the co-leader double checks the abseil set up.
- Demonstrate ability to teach a group of trainees how to abseil safely.
- Ascend a rope.
- Cross a knot abseiling.
- Cross a knot ascending.
- Ability to transfer from one rope to another.
- Rescue an abseiler jammed on a rope by using a rope lowering method.
- Rescue an abseiler jammed on a rope by using a rope raising method.

Single rope abseil system

For certain canyons (for example, where there is high water flow or long drops where it is efficient to have two persons abseiling at the same time), the ability to set up, use and retrieve a single rope abseil system.

All abseilers will be familiar with abseiling on a single rope.

- Judge when single rope abseils system is appropriate.
- Judge when a lowering system should be rigged into this type of system.
- Ideally, the co-leader as well as the leader should have the ability to set up a single rope abseil system that uses a knot (such as the Stone knot) to prevent the rope movement when only one rope is loaded.
- Ability to rig the system with a rescue lower and be confident in using it.
- Retrievable (Releasable) abseil anchor systems are not included in these guidelines

¹ Safety Factor: For rope and tape, 10 would be considered adequate, as it covers loss of strength due to any knot, as well as an allowance for wear and tear. For metal items 5 would be considered adequate to cover wear and tear.

² SWL is sometimes referred to as Working Load Limit (WLL).

RECOMMENDED CANYONING SKILLS FOR ONE DAY TRIPS

Abseil leader skill level judgement

The leader's technical skills and experience should be appropriate to the technical difficulty of the intended canyon trip and be able to deal with any reasonably expected risks that may be encountered. However, not all the recommended abseil skill set may be required for certain canyons. For example, where there is a canyon with only a couple of easy short abseils, the risk of requiring knot crossing skills is so low that they would not be required. Therefore, the leader should use their judgement to determine which of the abseiling skills may not be required or could be modified for their intended trip.

Participant

Additional to the relevant abseil requirements:

- Ability to abseil into a pool and remove abseil device from ropes while treading water.
- Ability to travel safely through the canyon using the buddy system.

Co-leader

Additional to participant requirements:

- Knowledge of canyon hazards such as cold water, chock-stones, duck unders, log jams, rock fall, slippery surfaces, tunnels, vertical drops and water jumps.
- Ability to bottom belay in a deep pool if required.
- Ability to uncoil the rope/s taking care not to tangle and connect into the anchor.
- Good rope deployment skills are required to reduce tangle problems from tree branches or rock cracks.
- Ability to check the entire abseil system.
- Awareness of harness hang syndrome

Leader

Additional to co-leader requirements:

- Assess the technical issues (such as what length rope(s) and tape are required) and time requirement's during the planning of the trip.
- For abseil pitches that may have difficult top/bottom communications (even with a whistle) , consider if UHF radios (that can be waterproofed) should be used.
- Assess suitability of people wishing to participate.
- Ability to navigate to, through and out of a canyon.
- Ability to determine when it is safe to enter a canyon, such as using a weather application on a mobile smart device (if in range) to view the weather radar before entering the system.
- Ability to assess water levels.
- Ability to ensure the group stays safe, using the buddy system and maintains contact throughout.

CBC Canyoning Guidelines - Mar 2020

- Ability to assess possible anchor points to determine the preferred one for being adequate for the pitch.
- Assess the pitch length requirements.
- Assess any existing anchor slings for condition and determine if a new sling is required.
- Assess when double or single rope systems should be deployed
- Know when knots in rope tails are required (and when not).
- Ability to conduct a rope pull down test. If required, how to correct if rope friction is too high.
- If leap frogging is to be used, consider the order the leaders with ropes and tape will descend.
- Ability to understand the issues with rope pull down.
- Ability to deal with any canyon incident and know when emergency services should be contacted (by mobile phone or PLB³).

Advanced canyon trips

For advanced canyon trips that involve multiple long abseils in waterfalls (such as Kanangra trips),

- All abseilers are confident in self-rescue.
- Preferred that the Co-leader (as well as the leader) can cross a knot

³ Personal Locator Beacon