

## General Ropework Skills

- Run a trip brief, including acknowledgement of country, asking about medical conditions, gear checks, and expected obstacles and outline of the days activities
- Log trip intentions, assign safety contacts and report safety incidents through the club
  
- Plan a trip and know when to call off a trip (weather, time, etc.)
- Identify when to prevent a participant from participating due to safety concerns
- Demonstrate navigation skills required for trips (GPS, topos, trip notes)
- Practice and enforce general cliff safety, including being connected to safety within two body lengths distance from the cliff edge, helmet use, and calls such as “rock” and “rope”
- Identify common mistakes in relation to participant harnesses, helmets and knots, including correct sizing of harness and helmets, wrong knots, and not double threading buckles
- Demonstrate and inspect knots including Figure Eight, Figure Eight rethreaded, Figure Eight on a bight
- Demonstrate and inspect a Munter Hitch and Clove Hitch
- Demonstrate and inspect a Stopper Knot and Barrel Knot
- Demonstrate and inspect a Double Fisherman’s Bend, Tape/Water Knot, and European Death Knot
- Demonstrate and inspect an Alpine Butterfly and its use on isolating a section of rope
  
- Understand the kernmantle construction of a rope
- Identify static and dynamic ropes, and when to use each
- Coil a rope with an alpine and girth finish
- Explain the uses of different rope diameters (Accessory, prussik, climbing, canyoning and caving ropes)
- Identify unsafe/safe ropes with the pinch test, observing excessive sheath abrasion, and by seeing the core
- Practice the maintenance and storage of ropes including not standing on ropes and storing in temperature controlled, dry, dark, and non-chemical environments

# Canyoning Level 1 Skills

- Confident and competent in managing participants on trips
- Understand and practice whistle, verbal and hand signals for communication in abseiling and canyoning
- Understand and identify rope materials and their uses (nylon, polyester, dyneema, technora)
- Inspect and assess the safety of anchors, including the replacement of tape anchors (discolouration of tape, stability and strength of trees, abrasion of tape, strength of maillons, cracking and fissures surrounding bolts, replacing tape anchors)
- Inspect the rigging of other trip leaders, participants loading device to abseil, attaching to safety, ABCDE and weighing abseil strand checks
- Demonstrate coiling with a rope bag and helmet biner
- Demonstrate the rigging of double strand techniques for abseils with tape and bolt anchors
- Demonstrate the rigging of single strand techniques including releasable abseils with tape and bolt anchors, and the applications of each (MMO, Eight block, Biner Block)
- Understand the importance of end knots, including appropriate knots and when to use them
- Demonstrate setting rope length as both an anchor manager and first person down
- Practice and inspect loading up on three different descender categories (Eights and Modified Eights, Tubular Devices, Inline Devices)
- Demonstrate adding friction to a variety of abseil and canyoning devices
- Demonstrate tying off a variety of abseiling devices
- Practice with emergency descenders (Super munter, biner brake bar)
- Understand the importance and demonstrate the setting up of belays (top, bottom and third hand)
- Demonstrate three third hand techniques: Klemheist, French, Classic and understand their uses and associated hazards
- Demonstrate and understand the use of a prussik above and below the abseil device, and the use cases of each
- Identify when jumps are appropriate, including identifying appropriate take-off points, depths and heights
- Demonstrate appropriate jumping techniques into water (arms across chest, knees bend, L sits)
- Demonstrate self-rescue and is self-sufficient on a trip
- Confident and competent in managing participants on trips
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- Understand and identify rope materials and their uses (nylon, polyester, dyneema, technora)
- Inspect and assess the safety of anchors, including the replacement of tape anchors (discolouration of tape, stability and strength of trees, abrasion of tape, strength of maillons, cracking and fissures surrounding bolts, replacing tape anchors)
- Inspect the rigging of other trip leaders, participants loading device to abseil, attaching to safety, ABCDE and weighing abseil strand checks

- Demonstrate coiling with a rope bag and helmet biner
- Demonstrate the rigging of double strand techniques for abseils with tape and bolt anchors
- Demonstrate the rigging of single strand techniques including releasable abseils with tape and bolt anchors, and the applications of each (MMO, Eight block, Biner Block)
- Understand the importance of end knots, including appropriate knots and when to use them
- Demonstrate setting rope length as both an anchor manager and first person down
- Practice and inspect loading up on three different descender categories (Eights and Modified Eights, Tubular Devices, Inline Devices)
- Demonstrate adding friction to a variety of abseil and canyoning devices
- Demonstrate tying off a variety of abseiling devices
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- Demonstrate self-rescue and is self-sufficient on a trip

## Canyoning Level 2 Skills

- Demonstrate ascending ropes using prussiks, ensuring two points of contact with the rope
  - Demonstrate ascending ropes using mechanical ascenders, ensuring two points of contact with the rope
  - Demonstrate the lowering of appropriate loads on a releasable setups, including how to retie when loaded
  - Understand and implement progress capture devices on hauling setups (Microtraxion, tibloc, prussiks)
  - Demonstrate the conversion to a haul (using appropriate loads) starting from releasable setup and biner block setup.
  - Demonstrate setups for hauling (2:1 (Counterweight), 3:1, 4:1 (Pig Rig Haul), Complex hauling)
  - Understand the importance of efficiency on mechanical advantage (Biners vs Pulleys)
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- Make decisions about suitability of no belay
  - Demonstrate ascending past knots in free-hanging abseil
  - Demonstrate abseiling past knots in free-hanging abseil
  - Demonstrate lowering past a knot with an MMO and Eight block
  - Demonstrate meat anchors and know how to safely use them
  - Demonstrate the setup and retrieval of retrievable traverse lines (Self belay and Munter belay)
  - Identify aquatic hazards such as boils, hydraulics, siphons, sieves
  - Understand the importance of self-preservation in aquatic rescue (Throw bags, Buoyant object rescue)
  - Demonstrate rescue and traverse techniques such as tensioned line traverse and supported river crossing
  - Demonstrate ascending ropes using prussiks, ensuring two points of contact with the rope
  - Demonstrate ascending ropes using mechanical ascenders, ensuring two points of contact with the rope
  - Demonstrate the lowering of appropriate loads on a releasable setups, including how to retie when loaded
  - Understand and implement progress capture devices on hauling setups (Microtraxion, tibloc, prussiks)
  - Demonstrate the conversion to a haul (using appropriate loads) starting from releasable setup and biner block setup.
  - Demonstrate setups for hauling (2:1 (Counterweight), 3:1, 4:1 (Pig Rig Haul), Complex hauling)
  - Understand the importance of efficiency on mechanical advantage (Biners vs Pulleys)
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- Demonstrate rescue and traverse techniques such as tensioned line traverse and supported river crossing

## Climbing Level 1 Skills

- Confident and competent in managing participants on trips
  - Understand and be able to identify rope types and their uses (single, double, half)
  - Understand the importance of end knots, including appropriate knots and when to use them
  - Understand fall factors and its impact on rope longevity
  - Teach and identify mistakes when lead belaying with an ATC and GriGri (or similar) including avoiding tunnelling, keeping hand on the brake strand at all times, correctly giving slack, keeping fingers off the cam and hands below the device
  - Understand and practice climbing calls such as 'TAKE!', 'SLACK!', 'IN HARD!', 'LOWER!'
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- Teach the 5 step belaying process with an ATC and GriGri
  - Demonstrate and identify the importance of clipping (stick clip high first bolt, avoiding z-clipping and backclipping, when to clip high or clip at waist height, clipping technique with each hand and gate combination)
  - Demonstrate and identify the effects of rope drag
  - Demonstrate and identify the importance of avoiding foot faults
  - Understand and inspect different bolts such as U-bolts, carrot bolts with bolt plates, expansion bolts
  - Understand the importance of correct quickdraw orientation (spine facing direction of climb and dogbone stiff side to rope, loose side to rock)
  - Demonstrate and understand the correct technique for clipping a quickdraw to a carrot bolt and fixed hanger
  - Set up and inspect a top rope setup with a quad anchor ensuring screws on gates are facing down, gates are opposite and opposed, locking carabiners are used instead of quickdraws, and that the anchor is redundant and load is distributed
  - Demonstrate and teach the cleaning of a climb ensuring two points of contact at all times
  - Demonstrate tying off a variety of belay devices (ATC, Gri Gri)
  - Demonstrate self-rescue and is self-sufficient on a trip

## Climbing Level 2 Skills

- Inspect and assess the safety of anchors, including the replacement of tape anchors (discolouration of tape, stability and strength of trees, abrasion of tape, strength of mallions, cracking and fissures surrounding bolts, replacing tape anchors)
- Demonstrate ascending of ropes using prussiks ensuring two point of contact with rope
- Demonstrate ascending of ropes using mechanical ascenders ensuring two point of contact with rope
- Demonstrate bailing off a single bolt (rethreading bolt and bail maillon)
- Demonstrate cleaning a roof route
- Demonstrate escaping and transferring a belay
- Understand and implement progress capture devices on hauling setups (Microtraxion, tibloc, prussiks)
- Demonstrate setups for hauling (2:1 (Counterweight), 3:1, 4:1 (Pig Rig Haul), Complex hauling)
- Demonstrate the conversion to a haul (using appropriate loads) starting from releasable setup and static setups
- Understand the importance of efficiency on mechanical advantage (Biners vs Pulleys)
- Demonstrate and inspect tying a rethreaded Bowline knot

## Trad Climbing Additional Skills

- Understand the importance of SERENE principles when building and assessing trad anchors
- Identify and build suitable natural anchors including trees, chicken heads, etc.
- Demonstrate and understand the correct use of alpine draws and how to make them
  
- Identify good and poor placements of active and passive trad gear (Cams, Nuts, Hexes)
  
- Understand the importance of rope drag and its effect on loads placed on trad pieces during a fall
- Understand the importance of extending pieces in preventing “walking” of trad protection
- Understand the predicted loads placed on trad pieces during a fall, and the importance of correct direction of pull on trad pieces
- Understand the importance of checking and resetting trad pieces when seconding a climb



## Multipitch/Rap In Additional Skills

- Build different anchor configurations ensuring they follow the SERENE principle including self-equalising (quad anchor, sliding x) and isolated anchors
- Inspect the rigging of other trip leaders, participants loading device to abseil, attaching to safety, ABCDE and weighing abseil strand checks
- Demonstrate good rope management, including coiling ropes at hanging belays
- Make decisions on when to continue climbing or bail depending on environmental, physical and psychological factors
- Understand and practice whistle, verbal and hand signals for communication in abseiling
- Demonstrate setting up a top belay with an ATC Guide and GriGri, and understand the importance of redundancy at a belay
- Demonstrate the lowering of a top belay setup with an ATC Guide and GriGri
- Practice and inspect the loading up on different descender categories (GriGri, tubular devices)
- Demonstrate adding friction to a variety of abseil devices
- Practice with emergency descenders (Super munter, biner brake bar)
- Understand the importance and demonstrate setting up of belays (top, bottom and third hand)
- Demonstrate three third hand techniques: Klemheist, French, Classic and understand their uses and associated hazards
- Demonstrate and understand the use of a prussik above and below the abseil device, and the use cases of each
- Demonstrate the lowering of appropriate loads on a releasable abseil setups, including how to retie when loaded
- Demonstrate ascending past knots in a free-hanging abseil
- Demonstrate abseiling past knots in a free-hanging abseil
- Demonstrate the setup and retrieval of retrievable traverse lines (Self belay and Munter belay)

# Caving Level 1 Skills

- Confident and competent in managing participants on trips
- Understand the importance of cave preservation
- Read and interpret caving maps
- Identify foul air using a lighter, and identify ventilating and non-ventilating cave structures
- Understand and be able to identify rope materials and their uses (Nylon, polyester, dyneema, technora)
- Inspect and assess the safety of anchors, including the replacement of anchors (discolouration of tape, stability and strength of trees, abrasion of tape, strength of mallions, cracking and fissures surrounding bolts, replacing tape anchors)
- Demonstrate the rigging of static and releasable abseils with tape and bolt anchors, and the suitability of each in different situations (MMO, Eight block, Biner Block, Static Lines with figure eight, figure nine, and fusion knot)
- Inspect the rigging of other trip leaders, participants loading device to abseil, attaching to safety, ABCDE and weighing abseil strand checks
- Understand the importance of rope wear on edges, and the importance of using redirects, rebelay, and rope protection in minimising these effects
- Demonstrate tying and inspecting a Figure Nine, Double Figure Eight Loop (Bunny Ears), Fusion Knot, and Bowline
- Understand the importance of end knots, including appropriate knots and when to use them
- Understand and practice whistle, verbal and hand signals for communication in abseiling
- Understand the importance and demonstrate setting up of belays (top, bottom and third hand)
- Demonstrate three third hand techniques: Klemheist, French, Classic and understand their uses and associated hazards
- Demonstrate and understand the use of a prussik above and below the abseil device, and the use cases of each
- Practice and inspect the loading up on three different descender categories (Eights and Modified Eights, Tubular Devices, Inline Devices, caving descender (Petzl Stop, Rap Rack))
- Practice with emergency descenders (Super munter, biner brake bar)
- Demonstrate tying off a variety of abseiling devices
- Demonstrate adding friction to a variety of abseil devices
- Demonstrate ascending of ropes using prussiks ensuring two points of contact with rope
  
- Demonstrate ascending of ropes using mechanical ascenders ensuring two points of contact with rope
- Demonstrate crossing redirects and rebelay
- Understand and demonstrate the use, rigging, coiling and storing of cave ladders
- Understand and instruct on false floor and squeezing safety
- Demonstrate self-rescue and is self-sufficient on a trip

## Caving Level 2 Skills

- Demonstrate setups for hauling including 2:1 (Counterweight), 3:1, 4:1 (Pig Rig Haul), Complex hauling
- Understand the importance of efficiency on mechanical advantage, including biners vs pulleys
- Understand and implement progress capture devices on hauling setups, including Microtraxion, tibloc, prussiks
- Demonstrate the lowering of appropriate loads on a releasable setups, including how to retie when loaded
- Demonstrate the conversion to a haul (using appropriate loads) starting from static setups
- Demonstrate lowering past a knot with a releasable system
- Demonstrate abseiling past knots in free-hanging abseil
- Demonstrate tying redirects and rebelays
- Demonstrate the setup of traverse lines, including self belay, Munter belay