

## Climbing (Roped) and Auto Belay Risk Assessment

- Activity** - Climbing (roped) and Auto Belay Activity session.
- What are the hazard (in addition to general RA)?**
- Items falling from height.
  - Injury while descending
- Who is at risk?**
- Staff, participants, and members of the public

What are the risks?	Existing Safety measure/control	Likelihood	Risk rating
Items Falling from height	<ul style="list-style-type: none"> <li>- Participants are asked to remove items from their pockets.</li> <li>- Dead wooding is carried out on an annual basis in accordance with the tree reports or as necessary.</li> <li>- There are regular operational inspections carried out by a competent person.</li> </ul>		
Injury while descending	<ul style="list-style-type: none"> <li>- Participants are briefed and given a clear demo on correct descent technique.</li> <li>- Participants are recommended to complete a practice lower from just above head level on their first climb.</li> <li>- Participants are told to use they feet to walk down the tower when descending.</li> </ul>		
Strangulation during lower on Auto belays	<ul style="list-style-type: none"> <li>- Helmets removed.</li> <li>- Hoods and any clothing or items which could create an entrapment risk are either removed or tucked away.</li> </ul>		

**Reference to other manuals assessments:** UK Youth Health and Safety policy

**Reviewed:** April 2023 by Head of Outdoor Learning Engagement and Delivery

**Approved by:** Assistant Director of Outdoor Learning

**Next review date:** April 2024

## General Risk Assessment for Off Ground activities

**Activity:** Climbing (Including Auto Belays), Abseiling, High Ropes (including tree climbing), Zip Wire, Tree Top Trail & Bouldering

**What are the hazards?**

- Participants at height
- Uneven ground
- Unauthorised use, malicious damage, and vandalism
- Accessing and setting up, de-rigging
- Items falling from height on to participants / instructors.
- Equipment failure
- Adverse weather including lightning / high winds and storms.
- Course / element failure

**Who is at risk?** Staff, participants, and members of the public.

What are the risks?	Existing safety measures/controls	Likelihood (RAG)	Risk rating (RAG)
Physical injuries, fractures, or death from falls from height.	<ul style="list-style-type: none"> <li>- All equipment is checked before use and regular inspections carried out by competent instructors.</li> <li>- Equipment is monitored and replaced according to the manufacturer’s recommendations.</li> <li>- Any equipment that is questionable is immediately taken out of action, put into the quarantine area and has a do not use label attached.</li> <li>- Off Ground activities are checked before use for malicious damage and vandalism/storm damage</li> <li>- Regular session monitoring by senior staff to ensure the SOPs are being adhered to.</li> <li>- Anyone within the activity area must be wearing a helmet except when they are under a shelter or in a clearly defined safe zone (see auto belay section for exception).</li> <li>- Suitable fences and lockable gates around the perimeter compound or the activity is left at height so it cannot be accessed by members of the public.</li> <li>- Signs warning against unauthorised access displayed.</li> <li>- The equipment shed is locked and alarmed at the end of the day.</li> <li>- All equipment is stored in the ropes shed at the</li> </ul>		

	<p>end of each day.</p> <ul style="list-style-type: none"> <li>- All instructors will have been trained, assessed, regularly monitored, and deemed competent to run sessions and will operate as per their training and SOP's.</li> <li>- All activities staff are first aid trained.</li> <li>- Only instructors can lower participants to the ground.</li> <li>- If the instructor is not directly tailing for the duration of the climb, back up knots must be tied in the dead rope.</li> <li>- Instructors should be aware of the continuous need to utilise C.L.A.P on all their sessions.</li> <li>- Whilst novice instructors are learning they require direct supervision from an experienced member of staff if they are accessing, setting systems up or running sessions.</li> </ul>		
<p>Items falling from height causing impact injuries</p>	<ul style="list-style-type: none"> <li>- Anyone within the activity area must be wearing a helmet except when they are under a shelter, in a clearly defined safe zone or taking part in an auto belay session.</li> <li>- Participants are asked to remove items from their pockets.</li> <li>- Dead wooding is carried out on an annual basis in accordance with the tree reports or as necessary.</li> <li>- There are regular operational inspections carried out by trained and competent staff.</li> <li>- Instructors set up and sign the Pre use check document in the HR shed to say they have checked the activity and surrounding area is safe to use for the day.</li> </ul>		
<p>Adverse weather conditions causing injury / illness such as lightning causing electrocution, wind and rain causing hypothermia and very hot days causing hyperthermia.</p>	<ul style="list-style-type: none"> <li>- Sessions are cancelled winds over 25mph (There is an anemometer available to check the wind strength located in the Activities office and a weather station on top of the main house)</li> <li>- Sessions are stopped in lightning storms for 30 minutes after the last strike.</li> <li>- Guests are recommended to wear appropriate clothing, carry water, and sun cream.</li> <li>- There are shelters available for both rain and sun.</li> <li>- If the weather conditions get too much for groups/individuals, the sessions can be cancelled/postponed.</li> <li>- Water is available free of charge from drinking taps around the grounds.</li> <li>- Instructors can stop a session if they feel the weather conditions are unsuitable and safety might be compromised.</li> </ul>		

	<ul style="list-style-type: none"> <li>- Instructors are trained to recognise signs of hypothermia/hyperthermia and what actions to take.</li> </ul>		
Equipment failure due to poor fitting, misuse, or damage.	<ul style="list-style-type: none"> <li>- Instructors undergo training and assessment in off ground activities which covers correct fitting of PPE.</li> <li>- Staff are monitored with observations and feedback is recorded and passed onto them.</li> <li>- PPE is checked along with the elements as part of the daily pre use checks.</li> <li>- All PPE is checked for correct fitting and size prior to leaving the kit up area. All PPE is checked for correct fitting and size prior to leaving the kit up area.</li> <li>- A complete system check takes place prior to all ascents/descents.</li> <li>- PPE is on a regular inspection regime in line with LOLER by a competent person</li> </ul>		
Entrapment of fingers, clothes, or hair.	<ul style="list-style-type: none"> <li>- As part of the kit up process, participants are advised to remove jewellery, tie long hair back and tuck any loose clothing in.</li> <li>- Participants are instructed to keep their hands at least one fist away from the belay device.</li> </ul>		
Unauthorised use of the activities	<ul style="list-style-type: none"> <li>- The climbing tower and HR compound are locked between sessions.</li> <li>- Tree Top trail entry net is raised and secured.</li> <li>- Signs warning against unauthorised access displayed.</li> <li>- Auto belays are retracted at the end of each day</li> </ul>		
Pressure sores from continual harness use and / or exhaustion from accessing.	<ul style="list-style-type: none"> <li>- Only to be conducted by instructors who are trained and assessed.</li> <li>- Equipment regularly checked (visual daily and a detailed regular inspection)</li> <li>- Minimum of two instructors present when accessing.</li> <li>- There will always be an instructor that is rescue trained working on site while high ropes/accessing is taking place.</li> <li>- Accessing will only be done in the full body access harness.</li> <li>- The Petzl podium seat is available for extra comfort when inspecting wires</li> </ul>		
Inversions compromising the security of the harness	<ul style="list-style-type: none"> <li>- On high activities where inversion is likely, a chest harness is used.</li> <li>- The chest harness is connected to the waist harness via the main belay rope. This is tied by the instructor and checked prior to each ascent.</li> <li>- All lowering off must be while participant is upright.</li> </ul>		

Rope burns from belaying	<ul style="list-style-type: none"> <li>- Petzl Rigs are used if participants are belaying.</li> <li>- Only the instructor can lower someone down from height.</li> <li>- If rope is wet or belayer struggling to keep control of lower, then the rope can be redirected through another karabiner to increase the friction.</li> </ul>		
Human error - Participants	<ul style="list-style-type: none"> <li>- Full co-operation from group leaders in group control and discipline</li> <li>- Ongoing assessment of the group's physical and mental ability during the session by instructors and session content adapted if required</li> </ul>		
Limited understanding due to additional support needs	<ul style="list-style-type: none"> <li>- Advanced notification and high-level supervision (provided by the groups own staff) required for all groups with substantial support needs.</li> <li>- For less substantial support needs, the level of supervision should be agreed before the session commences and monitored throughout.</li> <li>- Option for groups to hire additional instructors if deemed beneficial for lower ratio working.</li> </ul>		
Human error by instructor – misuse of equipment.	<ul style="list-style-type: none"> <li>- All staff are trained and assessed in the proper use of PPE and site-specific processes.</li> <li>- All staff monitored through formal observation and walkabouts.</li> <li>- Refresher training delivered annually and if any new equipment/processes are introduced.</li> <li>- Techniques are in place to reduce the risk of instructor error such as slow controlled descents only, no acrobatics such as inversion during descent.</li> </ul>		

Reference to other manuals assessments: UK Youth Health and Safety policy

Reviewed: April 2023 by Head of Outdoor Learning Engagement and Delivery

Approved by: Assistant Director of Outdoor Learning

Next review date: April 2024