

## General Risk Assessment for Off Ground activities

### Activity:



Climbing, Abseiling, High Ropes (including tree climbing), Zip Wire & Tree Top Trail (TTT)











### 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 at risk?

Staff, participants and members of the public.

What are the risks?	Existing safety measures/controls	Likelihood	Risk rating
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 qualified 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 bin, has a do not use label attached and then the CI or SI is informed.</li> <li>• Off Ground activities are checked every morning before use for malicious damage and vandalism/storm damage</li> <li>• Regular session monitoring by senior staff to ensure the SOP's are being adhered to.</li> <li>• Anyone within the activity area must be wearing a helmet except when they are under a shelter or a clearly defined safe zone.</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. Warning signs are on the fence about unauthorised access</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 end of each day</li> <li>• All instructors will have been trained, assessed 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 (Communication, Line of sight, Avoidance &amp; Position of most usefulness)</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>		

What are the risks?	Existing safety measures/controls	Likelihood	Risk rating
Items falling from height causing impact injuries	<ul style="list-style-type: none"> <li>• Anyone within the activity area must be wearing a helmet except when they are under a shelter or a clearly defined safe zone.</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 a competent person.</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>		
Adverse weather conditions causing injury / illness such as lightning causing electrocution, wind and rain causing hypothermia and very hot days causing hyperthermia.	<ul style="list-style-type: none"> <li>• Sessions are cancelled in Force 6 and stronger winds (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.</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, and the group sent off to get dry/ warm up or cool down.</li> <li>• Water is available free of charge from drinking fountains and standpipes around the grounds.</li> <li>• Instructors can stop a session if they feel the weather conditions are unsuitable and safety might be compromised.</li> <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 which are recorded in the HR shed.</li> <li>• All PPE should be checked for correct fitting prior to leaving the kit up area.</li> <li>• A complete system check takes place prior to all accents/descents</li> <li>• PPE is on a regular inspection regime which gets recorded on paper trail.</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>• Ladders are locked away so that elements cannot be accessed.</li> <li>• Jacobs ladder and play pen have the bottom rung removed between sessions so that it cannot be climbed.</li> </ul>		

What are the risks?	Existing safety measures/controls	Likelihood	Risk rating
	<ul style="list-style-type: none"> <li>Warning signs are attached to the fence saying "Keep out, authorised personnel only"</li> </ul>		
Pressure sores from continual harness use and / or exhaustion from accessing.	<ul style="list-style-type: none"> <li>Only instructors trained and assessed in accessing can do it.</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 has been provided for extra comfort when inspecting wires</li> </ul>		
Inversions compromising the security of the harness	<ul style="list-style-type: none"> <li>On all high activities, chest harnesses or full body harnesses are used which prevent unexpected inversions</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 harness buckles are also checked as they are put on and 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 or Gri Gri's are generally used if participants are belaying, however ATC's can be used if it is raining and the ropes are wet, provided the participants have training and practice on the ground before going to height.</li> <li>Only the instructor can lower someone down from height.</li> </ul>		
Human error	<ul style="list-style-type: none"> <li>Full co-operation from group leaders in group control and discipline</li> <li>Instructors are authorised to stop a session if participants are acting in a dangerous or irresponsible manner.</li> <li>Where possible instructors only work two of the same session in any one day.</li> <li>Regular session monitoring by senior staff to ensure the SOP's are being adhered to.</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> </ul>		

What are the risks?	Existing safety measures/controls	<i>Likelihood</i>	<i>Risk rating</i>
	<ul style="list-style-type: none"> <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 December 2020 by Chief Instructor

Approved by Director of Avon Tyrrell & Operations

Next review December 2022

## Zip Wire Risk Assessment



**Activity:** Zip Wire Activity Session









**What are the hazards?**

- Working at height
- Trips, slips and falls
- Proximity to water
- Participants at height
- Equipment failure
- Unauthorised use
- Human error
- Vehicle related injuries
- Branches etc. falling

**Who is at risk?**

Staff, participants and members of the public

What are the risks?	Existing safety measures/controls	Likelihood	Risk Rating
<p>Instructor accessing, Clients at height. Human error, Unauthorised use and Vandalism all leading to falls from height, equipment failure etc. resulting in physical injuries, fractures, death</p>	<ul style="list-style-type: none"> <li>• All instructors competent and qualified to deliver the activity once assessed by an external assessor and are familiar with emergency procedures.</li> <li>• Annual updates.</li> <li>• All zip wire staff are first aid trained.</li> <li>• All equipment is checked regularly in line with Avon Tyrrell's safety checking schedule.</li> <li>• All equipment will be visually checked prior to session commencement.</li> <li>• Annual inspection by professional outside company.</li> <li>• All equipment fitted to individual participants and checked prior to ascent including harnesses and helmets.</li> <li>• Safety systems in use for all aspects of the zip wire experience from ascent to descent.</li> <li>• Instructors will get their PPE checked by another qualified instructor before accessing.</li> <li>• Instructor safety is via Cabloc, cows tails and Grillon</li> <li>• Two instructors on all sessions with the instructor running the platform fully trained and assessed in rescue techniques.</li> <li>• First aid kit and radio at the activity base.</li> <li>• All equipment suited to the purpose</li> <li>• All equipment removed or secured when the activity base is not in use.</li> <li>• Ladder locked away when not in use.</li> <li>• Access staples start approximately nine feet up the tree, so access is extremely difficult without the ladder.</li> <li>• Staff monitored on formal observation sessions and also during informal walkabouts.</li> </ul>		

What are the risks?	Existing safety measures/controls	Likelihood	Risk Rating
	<ul style="list-style-type: none"> <li>Feedback given by appropriately qualified senior staff</li> <li>Staff trained internally on how to access the wire safely</li> </ul>		
Proximity to water - drowning and Weils disease	<ul style="list-style-type: none"> <li>Overwater rescues are highly unlikely but DSIs are trained to perform these and safety equipment to complete this rescue must be kept at the activity base when this activity is in use.</li> <li>Life rings and warning signs around the edge of the lake</li> <li>Group leaders must be present on every session and they must remain in charge of group control and discipline.</li> <li>Groups given a thorough briefing prior to the activity and possible dangers pointed out.</li> <li>Hand washing encouraged at the end of the session.</li> </ul>		
Entrapment in the ropes or hitting the landing platform at speed resulting in impact injuries	<ul style="list-style-type: none"> <li>Before participants are released from the belay system and pole a shout of "clear" must be made to the bottom instructor who is responsible for checking that the brakes are correctly set. Only once this command has been reciprocated is the person able to leave the pole and descend the zip wire.</li> <li>All instructors are assessed by external assessor and are familiar with emergency procedures.</li> </ul>		
Rope burn.	<ul style="list-style-type: none"> <li>Gloves to be available for instructors accessing/inspecting</li> <li>Instructor control and awareness.</li> <li>Only instructors are to be involved in the braking system</li> <li>Participants are never in control of their ropes, this is always done by the instructors.</li> </ul>		
Participants accessing the pole with improper fitting equipment	<ul style="list-style-type: none"> <li>Staff taught during ropes training how to fit equipment</li> <li>Instructor checks kit before starting the zip wire.</li> <li>Ongoing monitoring of staff</li> </ul>		

Reference to other manuals assessments:

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