

## Valley Adventure Centre – Aerial Trekking & Powerfan (including Rookie Trekking) Risk Assessment

<b>Risk Assessment for:</b> Aerial Trekking & Power Fan	<b>Assessor(s):</b> Ben Girdwood	<b>Date:</b> 06/01/2023
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<b>Overview of activity/ location/ equipment/ conditions assessed:</b>	Aerial Trekking is a high ropes activity over 2 levels (3m and 8m) with 15 elements/ obstacles on each level. Participants are attached to a continuous belay cable to allow movement over the elements. There is no requirement to unclip from the wire at any time whilst doing the activity. The Powerfan is a high adrenaline activity involving a 12m vertical descent from a tower at up to 35km per hour before being brought to a controlled stop at ground level. The Rookie Trekking is a ropes course 1m off the ground. The 1m level is also a continuous belay system that consists of 12 elements and finishes with a mini zip wire.
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Generic or specific assessment:		Specific		
Serial	Hazard(s) identified	Persons affected	Existing Controls	Additional Controls
1	Induction/ Safety Brief	All staff and public	All staff and public must attend a safety brief prior to using the Aerial Trekking and Powerfan or Rookie Trekking.	<b>A Safety Brief is attached</b>
2	Slips, trips, falls and personal injury	All staff and public	Obstacles and elements are inspected prior to use for function and damage.  Stringent safety checks are made monthly.  At the time of booking participants are informed about wearing suitable clothing and footwear for the session.	
3	Young persons and vulnerable adults	All staff and public	Ensure that young persons and vulnerable adults receive an induction talk and safety brief.	Young persons and vulnerable adults will tend to forget the safety instructions and rules when they are excited. It is

			<p>It is vitally important that they not only listen to but fully understand the safety instructions and rules.</p> <p>Ensure that young persons and vulnerable adults do not enter sessions where there are older or more experienced participants.</p> <p>No person will be allowed to take part unless they can demonstrate that they have fully understood the safety instructions and rules for the activity.</p> <p>Under 16's require a <b>'Consent Form'</b> signed by a parent or guardian or have a parent/guardian in attendance.</p> <p>The minimum age for the Aerial Trekking &amp; Powerfan activity is 7 years old. 7-9 year olds can only use Level 2 (8m) when accompanied by an able adult.</p> <p>Occasionally 6 year olds may be permitted to use the course (i.e. same school year 7<sup>th</sup> birthday parties) but they must be at least 120cm in height.</p> <p>In addition 5 and 6 year olds may be permitted to use the Powerfan at the discretion of the instructor.</p> <p>The minimum age for the Rookie Trekking is 5 years old. An adult must accompany children on the Rookie Trekking at all times from the ground.</p>	<p>essential to repeat the rules at frequent intervals.</p> <p>Enforcing a 120cm minimum height restriction on the Aerial Trekking, and a 90cm minimum height restriction on the Rookie Trekking ensures that participants are tall enough to operate the Saferoller trolleys and move freely around the course elements.</p>
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			<p>Occasionally, 4 year olds may be permitted to use the 1m level (i.e. same school year for 5<sup>th</sup> birthday parties) but they must be at least 90cm in height.</p> <p>All participants must read an Activity Disclaimer form, and the lead person must sign for their group.</p>	
4	Injury due to problems with health and/ or fitness	All staff and public	<p>This is both a physically demanding and mentally challenging activity.</p> <p>All users should be fit enough to undertake the activity and operate within their personal limits.</p> <p>Participants are advised to seek professional assistance if in doubt about the fitness level required for the activity.</p> <p>Participants with current injuries or undergoing medical treatment are discouraged from participating.</p>	
5	First aid and medical requirements	All staff and public	<p>Lead supervising staff have received first aid training.</p> <p>The Day Manager has a valid first aid award or has received specific training as an Appointed Person.</p> <p>First aid kits are available in the Tower and the Cabin.</p> <p>An accident reporting record is kept by the Centre Manager.</p> <p>Participants with additional medical requirements such as asthma, inhalers,</p>	<p>It may be impractical for participants to carry personal medications during activity. All personal medications should be immediately available in the 'Tower' or carried by a supervisor if requested.</p> <p>The activity may be stopped if personal medications are required.</p>

			diabetes etc should make themselves known to supervising staff so that appropriate measures may be taken to ensure the availability of personal medications if required.	
6	Alcohol and drug misuse	All staff and public	<p>All staff and public are particularly at risk when exposed to alcohol and/ or drug misuse.</p> <p>Members of the public who appear to be under the influence of alcohol and / or drugs will be asked to leave the site.</p>	<p>This is included in the safety brief.</p> <p><b>ALCOHOL, DRUG MISUSE AND OUTDOOR ACTIVITIES DO NOT MIX.</b></p>
7	Fire and Emergency	All staff and public	<p>The site is 'No Smoking'. Naked flames are not allowed on-site unless as part of the 'Bushcraft' sessions at a designated fire pit.</p> <p>Staff are inducted and trained to respond in the event of a fire.</p> <p>Contact the emergency services by calling 999 or 112 from the cabin or by mobile phone.</p> <p>There is a mobile reception for most networks on-site.</p>	<p>In the event of a Fire or Emergency all users will be escorted by an instructor to the Emergency Assembly Area which is located next to the water pumping station at the main gate entrance to the centre.</p>
8	Instructor supervision and assistance and evacuation or lowers of participants from the Aerial Trekking course and Rookie Trekking course.	All staff and public	<p>Every Aerial Trekking session normally has 2 Rescuers (or as a minimum 1 Rescuer with a further Rescuer on-site).</p> <p>Rescuers have been trained and assessed to evacuate participants and casualties from all areas of the Aerial Trekking course including unconscious casualties.</p>	<p>Rescuers can access the site from all areas and would be able to move participants to the safest area for rescue in the case of a single pole or cable collapse.</p> <p>Most rescues or lowers are completed within 5 – 15 minutes.</p> <p><b>* See <i>Passive and Active Rescue Procedures in the Aerial Trekking &amp; Powerfan Operating Procedures.</i></b></p>

			<p>There are 3 'Rescue Bags' containing the correct evacuation equipment for rescues and lowers from height.</p> <p>Participants are under supervision at all times by a minimum of 2 staff (one instructor, one assistant instructor) in the Tower and on the ground.</p> <p>They can provide vocal support and instructions to participants as well as assist, help or physically intervene where necessary.</p> <p>Instructors are to be trained by an ERCA trainer and signed off by them. Assistant instructors are trained in house by the Lead Instructor, Centre Manager or Operations Manager.</p> <p>Assistants must attend sufficient training sessions, and be assessed as competent, before assisting on any session.</p> <p>Every Rookie Trekking session will have a minimum of one instructor or Assistant Instructor on the ground supervising and assisting the children on the elements and mini zip wire.</p> <p>The rescue procedure for the Rookie Trekking is to either help the child to a platform, unclip them from the system, then help them safely to the ground or unclip them while on an element and lower them safely to the ground.</p>	
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9	Injury when using the Powerfan incorrectly	All staff and public	<p>All participants wait at the top of the Tower behind a safety chain, which is operated by the instructor.</p> <p>The instructor will check the function and operation of the Powerfan prior to use.</p> <p>Participants are attached to the Powerfan by the front attachment point.</p> <p>Participants are then allowed onto the platform and briefed by the instructor on how to step from the Tower.</p> <p>The instructor checks and re-adjusts harnesses as required.</p> <p>The instructor controls the participants leaving the platform to minimise the chance of jumping rather than stepping and making sure the rope is coiled and has no slack in the system.</p> <p>Participants are instructed to bend their knees on landing, and a second instructor is at the bottom of the Powerfan to assist with landing.</p>	<p>The connector between Powerfan rope and harness is by an absorbing sling (CAMP), one triple locking karabiner (Petzl OK TL) and one screw-gate and clip karabiner (DMM Belay Master). The Absorber will deploy in the event of a shock load to the system due to a jump or the Powerfan seizing during descent.</p> <p>The Zip-line Rescue Bag can be used to rescue or lower from the Zip-line and the Powerfan. The Rescue Bag should be located at the top of the Tower and includes rescue items to allow the instructor to abseil and attach the participant to the abseil rope and back-up rope before being lowered with the instructor to the ground.</p> <p><b>* See Passive and Active Rescue Procedures in the Aerial Trekking &amp; Powerfan Operating Procedures.</b></p>
10	Staff and Public entering the activity area during a session	All staff and public	<p>Ensure any gates are closed.</p> <p>Accompanying adults or children entering the activity area to take photos or offer encouragement are asked to wear a helmet at all times.</p> <p>Public are politely asked to move back onto the main track.</p>	

			Any adults assisting the children on the Rookie Trekking are required to wear a helmet at all times.	
11	Injury due to ground and/ or weather conditions	All staff and public	<p>All staff and public are to wear suitable and supportive footwear for use during outdoor activities.</p> <p>The Aerial Trekking, Rookie Trekking and Powerfan are inspected prior to and during activity.</p> <p>The activity may go ahead in most conditions. Rain and high winds above <b>continuous South Westly Force 6 can stop the activity at the lead instructor's discretion. SW Force 7 will stop the activity. Any direction F8 will stop the activity.</b> Approaching (10miles+) lightning storms shall be monitored, if trending into the sea channel between Jersey and France activities will go to alert, if storm strikes within 5miles of Jersey this will stop ALL activities.</p> <p>Participants are made aware of the implications when conditions are icy, windy or wet and asked to move slower and with more care.</p>	<p>A dynamic risk assessment is made before and during sessions. Participants are briefed on weather conditions as required. The activity can be adjusted as conditions dictate i.e. only use level 1 if windy.</p> <p>Activity will be stopped if necessary.</p> <p>Participants are allowed to reschedule activity if the forecast is for very inclement weather or high winds.</p>
12	Injury from inadequate personal clothing and/ or footwear	All staff and public	Participants are advised to remove rings and jewellery and are advised to wear sturdy, close-toed footwear. Hair tied back and no objects in pockets.	Spare hair bands should be kept in the Office for use by participants.
13	Injury from static and moving equipment	All staff and public	The Aerial Trekking, Rookie Trekking and Powerfan equipment is to be inspected and maintained. Individual elements on the Aerial and Rookie Trekking are to be in good condition and inspected for	The additional safety measures apply at all times other than rescue situations. Only 1 person on an element or obstacle at any time.

			<p>splinters, loose wires, fittings etc. The Powerfan unit has its own *test and inspection instructions.</p> <p><b><i>*A copy of which is included in the Aerial Trekking &amp; Powerfan Operating Procedures.</i></b></p>	<p>Only 3 persons on a platform at any time.</p>
14	Issue of personal PPE equipment	All staff and public	<p>Ensure all PPE equipment is clean, fits properly and conforms to safety regulations. NEVER issue any worn or defective equipment.</p> <p>Stress the importance of <b>'looking after equipment'</b>.</p> <p>Size and adjust harnesses and helmets to correct fit.</p> <p>Readjust as necessary during activity especially after weighting the harness.</p> <p>All Aerial Trekking and Rookie Trekking lanyards are inspected prior to use and before and after attaching participants to the belay system.</p> <p>Harnesses are checked and adjusted as necessary prior to using the Powerfan and when moving between levels on the Aerial Trekking and Rookie Trekking.</p>	
15	Injury to head and body	All staff and public	<p>The helmet will protect participants in the event of a slip or fall and will also protect from 'in activity bumps' on elements and obstacles.</p>	



			Safety lanyards are adjusted to a length that stops the participants taking a longer than fall than necessary, and secured with an overhand knot. <i>Adjustable lanyards use a Figure 8 climbing knot to attach karabiners.</i>	
16	Injury to hands	All staff and public	<p>It is possible to suffer from rope or cable burn if slipping or falling from the course. This is minimised by briefing participants on the ideal method of not holding onto their rope.</p> <p>Participants are attached to the front of their harnesses, and are briefed on how to hold onto their rope if it is necessary to do so; the rope must remain between their arms, and can NEVER be wrapped around their wrist/arm or under their shoulder or arm behind them.</p> <p>Cables on elements are covered with plastic tubing to stop cable rub on the hands.</p> <p>Participants are instructed to keep hands away from all metal work (karabiners) and the belay cable, hold only the rope.</p>	
17	Injury through damaged or faulty equipment	All staff and public	Helmets and harnesses are inspected and fitted by instructors. Damaged or faulty equipment is withdrawn for further inspection by the Centre manager	The Centre manager inspects and repairs or removes items from service.
18	Falling from height	All staff and public	The entire ropes course is inspected visually prior to use and undergoes a complete 'nut and bolt' inspection monthly.	Participants should be able to pull themselves back onto the course in the event of a slip. ERCA instructors are trained and assessed to rescue participants from any part of the ropes course using short

			Instructors are fully trained and assessed in briefing participants around the course, inspecting lanyards and completing top to toe departure checks.	pulley hoists to regain participants back onto the course and also how to lower participants to the ground using recognised ERCA rescue procedures.  <b>* See Passive and Active Rescue Procedures in the Aerial Trekking &amp; Powerfan Operating Procedures.</b>
19	Effect on equipment due to poor storage conditions	All staff and public	PPE equipment is to be stored in a cool dry environment.	
20	Misuse of equipment	All staff and public	PPE equipment is to be stored correctly and not used other than on authorised training or sessions.	

Date of review:	Serial amended:	Reviewed by:	Date of review:	Serial amended:	Reviewed by:
Aug 12	N/A	Wilkes			
Apr 13	3, 8, 9, 12, 13, 15, 16, 18	Wilkes			
Jun 13	Assessor(s)	Corbett			
Jun 14	3, 7, 9, 12, 13, 15, 16	Corbett			
April 15	Title, Overview, 1, 3, 8, 10, 11, 13, 14, 16, 18	Corbett			
May 16	11 & General Review	Robinson			
Sep 17	17, 18	Wade			
Feb 18	General Review	Wade			
April 18	3,17	Colin			
Feb 19	General Review	Colin			
Jan20	8 & General Review	Colin			
April 21	General Review	Girdwood			
Jan 22	Review	Girdwood			
Jan 23	11 & Review	Girdwood			
