

	Title of risk assessment	<b>SUCKER CROSSBOW</b>	Current risk rating	<b>LOW</b>
	Site / Location / address	Lees Wood Scout & Guide Activity Centre Fir Tree Hill, Chandler's Cross, Rickmansworth WD3 4LY	Date of assessment	<b>22 Jan 2025</b>
People who have contributed to the detail of this risk assessment (continue on separate sheet if necessary): All those who may be affected including, where applicable, people supported have been consulted with during the completion of this document and arrangements.		Risk assessment reference number		<b>LW_A_014_SCB</b>

**Location**  
 This activity takes place on a purpose-built range that provides a safe enclosed area. The range is constructed to restrict the direction that the Crossbows can be aimed.

**Equipment**  
 It looks and feels like a real **Crossbow**, but shoots super safe **Sure shot sucker darts**. Ideal for the younger shooters but quite at home with all generations. The safety trigger ensures the bow can only shoot when loaded with a **Petron sucker dart**. With a front and rear sight, this bow is remarkably accurate. Equally suited for shooting indoors and outdoors. It is made from very strong plastic with a spring steel prod, yet it is lightweight. Very easy and quick to assemble with one fixing screw to secure the prod into place.

Name	Role / Position	Signature	Name	Role / Position	Signature	Short description of the task or activity
<b>Bruce Scott</b>	<b>Assistant Warden (Risk)</b>					<b>Specific Risk assessment:</b>  <b>Archery</b>  <b>This is an Instructor Led Activity</b>
<b>Ian Leach</b>	<b>Lees Wood Activity Centre Deputy Warden</b>					
<b>Graham Raven</b>	<b>Lees Wood Activity Centre Head Warden</b>					

For Information

Identify the hazards, who & what could be harmed and how				Assess the likelihood and risk					
Hazard	Who / What Could be harmed / damaged	Hazardous event	Reasonably foreseeable worse case injury	Existing controls: i.e. Safe systems of work, training, equipment instructions, support plans (be specific), other risk assessments i.e. COSHH, work at height, manual handling, etc.	Accidents, near-miss events, frequency of task/activity, gaps in existing controls, etc.	Likelihood (L) 1-5	Severity (S) 1-5	Risk Rating Score 1-25	
1	General lifting and carrying targets	Instructors / Campsite Crew	Incorrect lifting techniques	Cuts / abrasions, muscular skeletal and other physical injuries	<ul style="list-style-type: none"> <li>Manual handling minimised as far as possible, broken down into smaller loads / assistance sought, 2 Person lift.</li> <li>All to be made aware of correct lifting techniques to reduce risk of injury. Appropriate footwear worn</li> <li>Mobile lifting aids available (wheel barrows etc.)</li> <li>Good housekeeping and range layout. Floor surfaces unobstructed and slip free.</li> <li>Do not overstretch when using equipment.</li> <li>Targets secured to prevent toppling onto person retrieving equipment.</li> </ul>	None Recorded	3	3	9
2	Uneven Ground	Instructors / Campsite Crew / Participants	Slips, trips and falls on uneven surfaces	Cuts / abrasions, muscular skeletal and other physical injuries	<ul style="list-style-type: none"> <li>Full inspection of range prior to use. Debris / grass cuttings stemming from weather / maintenance to be cleared as quickly as possible.</li> <li>Make sure activity area does not become untidy. Check activity area before starting. Suitable warning signs in place.</li> <li>Suitable footwear to be worn. <b>Feet must be covered.</b></li> <li>Report any damage to range to enable inspection and repair.</li> <li>Safety line and throw line boards partially submerged in ground to remove trip hazard.</li> <li>No running allowed.</li> <li>There will always be a responsible adult member of the visiting group present to</li> </ul>	None Recorded	3	2	6

					<p>support the children/young people. This adult will be responsible for the behaviour of the group. This adult will ensure the instructor leading the session knows about any medical conditions or additional needs the group members may have.</p> <ul style="list-style-type: none"> <li>Instructors should not start the session until this adult is present. Visiting groups should provide first aid cover as they are responsible for the young people, however, Lees Wood will provide additional first aid cover on sessions run by Lees Wood instructors.</li> <li><b>NO RUNNING ON THE RANGE</b></li> </ul>				
3	Weather	Instructors / Campsite Crew / Participants	Extreme Weather (Heat, Cold, Wind, Lightening, Snow, torrential rain etc)	Sessions may have to be cancelled during periods of heavy rain and storms.	<ul style="list-style-type: none"> <li>Instructor to be aware. Appropriate clothing to be worn by all involved.</li> <li>It may be appropriate to stop activities due to some extreme weather or if the group is not appropriate clothed for the environment.</li> </ul>	None Recorded	3	1	3
4	Unfamiliarity of the equipment	Participants	Improper use of equipment	Cuts / abrasions, muscular skeletal and other physical injuries	<ul style="list-style-type: none"> <li>The instructor leading the session must be familiar with the equipment they are using.</li> <li>Lees Wood instructors are trained in the use of the equipment on the session.</li> <li>Demonstration to show correct use, body position and technique</li> </ul>	None Recorded	2	2	4

5	Defective Equipment Defective Equipment	Instructors / Campsite Crew / Participants	Damaged Bows / Arrows / Targets / Stands	Cuts / abrasions Impact injury	<ul style="list-style-type: none"> <li>• Condition of ALL equipment checked before &amp; after use.</li> <li>• Participants deemed competent to use. Equipment not left unattended.</li> <li>• Equipment is appropriate (being used for its intended purpose), restricted to authorised users and securely stored.</li> <li>• Report any damage of equipment to enable replacement.</li> <li>• Suitable footwear to be worn.</li> <li>• Periodical inspection with any damaged or suspect equipment retired and repaired or replaced.</li> <li>• Crossbows &amp; darts checked for burs and damage</li> <li>• Participants trained to only hold Bows and Arrows.</li> <li>• Use of Bow &amp; Arrows supervised by trained instructor</li> <li>• Participants shown how to retrieve an Arrows from the target.</li> </ul>	None Recorded	3	2	6
		Instructors / Campsite Crew / Participants	Entanglement	Cuts / abrasions Impact injury	<ul style="list-style-type: none"> <li>• Long hair must be tied back; jewellery should be removed or covered and loose clothing secured.</li> </ul>	None Recorded	2	1	2
6	Actions of group members	Instructors / Campsite Crew / Participants	Unauthorised entry into the activity/danger area	Cuts / abrasions, muscular skeletal and other physical injuries	<ul style="list-style-type: none"> <li>• Activity area cordoned off when in use ensuring no possible entry whilst activity is being carried out.</li> <li>• Waiting area is clearly marked. Area fenced off and group warned of any hazards.</li> <li>• Visual checks of area by instructor throughout the session.</li> </ul>	None Recorded	3	1	3
			Improper use of equipment		<ul style="list-style-type: none"> <li>• Members not using the equipment appropriately will be asked to leave the Range Instruction area.</li> </ul>	None Recorded	2	2	4
		Participant lack of knowledge	Risk of injury	<ul style="list-style-type: none"> <li>• Safety talk to be given by activity instructor before each session commences.</li> </ul>	None Recorded	1	2	2	

7	Arrows	Instructors / Campsite Crew / Participants	Projectiles flying through air	Cuts / abrasions, other physical injuries	<ul style="list-style-type: none"> <li>Briefing and supervision of participants to ensure safe proper use of the equipment.</li> </ul>	None Recorded	3	1	3
			Darts on Target	Cuts / abrasions, other physical injuries	<ul style="list-style-type: none"> <li>Correct method of retrieving darts demonstrated and monitored throughout session. <b>Target before floor!</b></li> </ul>	None Recorded	3	1	3
			Stray Darts	Cuts / abrasions, other physical injuries	<ul style="list-style-type: none"> <li>Correct method of retrieving Darts demonstrated and monitored throughout session. <b>Target before floor!</b></li> <li>Purpose built nets designed to meet and exceed all guidelines and recommendations for safety stops. Safe 'fallout' area behind targets to allow further decrease the risk of Stray arrows hitting people or property nearby.</li> <li>Visual inspection of nets before the start of any session.</li> <li>Briefing and supervision of participants to ensure safe proper use of the equipment.</li> </ul>	None Recorded	3	1	3
			Deflection	Cuts / abrasions, other physical injuries	<ul style="list-style-type: none"> <li>Clear Briefing/Instructions, full understanding.</li> <li>Ratio of 1:4 instructors to participants to be at the shooting line at a time, keeping area clears as possible.</li> <li>Range length to lower the risk of deflection injury.</li> </ul>	None Recorded	2	1	2
			Rebounding Darts	Cuts / abrasions, other physical injuries	<ul style="list-style-type: none"> <li>All group members instructed to stay behind the waiting line if not shooting</li> <li>Closed toed footwear to be worn.</li> </ul>	None Recorded	2	1	2
8	Incorrect equipment issued	Instructors / Campsite Crew / Participants	Overdrawing	Cuts / abrasions, other physical injuries	<ul style="list-style-type: none"> <li>All arrows are long enough for adults to use to prevent over drawing</li> <li>Good Instructor awareness.</li> </ul>	None Recorded	2	1	2
9	Incorrect use of equipment	Instructors / Campsite Crew / Participants	Inappropriate use.	Facial injuries, in particular eye injuries and/or fibreglass splinters	<ul style="list-style-type: none"> <li>No dry releasing of bow strings.</li> <li>Regular safety checks and maintenance of all archery equipment</li> <li>Clear instruction and demonstrations</li> <li>Good instructor awareness and</li> </ul>	None Recorded	2	1	2

					vigilance					
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10	Wildlife	Instructors / Campsite Crew / Participants	Animals straying onto range	Risk of injury to animals	<ul style="list-style-type: none"> <li>No food permitted in the range.</li> <li>Range checked before/during use.</li> <li>Activity temporarily closed until wildlife has moved on.</li> </ul>	None Recorded	2	1	2
11	Participants	Instructors / Campsite Crew / Participants	Horseplay	Risk of injury to participants	<ul style="list-style-type: none"> <li>Activity to be supervised by an instructor, leader or responsible adults. Session to be stopped if behaviour prevents the instructor effectively supervising the group</li> </ul>	None Recorded	2	1	2

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## Emergency Procedure

1. There must be a first aider and first aid kit present amongst the Activity Users, when this activity is in progress, and there must be a functioning mobile phone carried by Instructor/ Group leader.
2. If a serious injury occurs that requires help from the emergency services, the following procedure is to be followed:
  - a) The activity is to cease.
  - b) Initial triage of the casualty is to be carried out.
  - c) 999 called with a full description of location of incident/injury given.

Address: Lees Wood Scout & Guide Activity Centre, Fir Tree Hill,  
Chandler's Cross, Rickmansworth WD3 4LY

What3Words: **BOUNTY.HOLDS.LUNGS**

3. Participants are to be sent to an alternative site.
4. Camp Crew to be notified immediately.
5. Main gate to be manned to receive and give directions to emergency services.
6. Ensure that the equipment is not left unsupervised.
7. Warden to be informed.

## 8. Group to start InTouch procedures.

Additional arrangements required to reduce risk:									
No	Recommendations and actions required to reduce risk	Residual risk with additional controls			Deadline for action (Date)	Action to be completed by (name)	Monitoring arrangements Active and Reactive	Action Complete (date)	Comments / additional information
		S	L	R					

To add more rows to this section, place the cursor to the left of the line above until you see a + sign and 'click'

**Management ownership** - I confirm that this risk assessment is suitable and sufficient, and that I will ensure the implementation, monitoring and review of the arrangements as stated.

Managers Name	Graham Raven Head Warden Lees Wood	Manager's Signature	<i>G. RAVEN</i>	Date signed	31 Jan 2025	Next review due (based on risk level)	Feb 2026
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Reviewer Name	Role	Date of Review	Reason for Review	Signature	Next Review Date
		09 Feb 2025	Annual		Feb 2026


5 x 5 Risk Matrix								
Risk Rating Guidance	Likelihood (L)	5	5	10	15	20	25	Likelihood (L) x Severity (S) = Risk Rating (RR).
		4	4	8	12	16	20	
		3	3	6	9	12	15	
		2	2	4	6	8	10	
		1	1	2	3	4	5	
			1	2	3	4	5	
		Severity (S)						
Acceptability of Risk Guidance	High Risk: 15-25	High-risk activities should cease immediately. Further effective control measures to mitigate risks must be introduced.						
	Medium Risk: 8-12	Medium-risks are an acceptable level based on the reduced likelihood after sufficient control measures are implemented.						
	Low Risk: 1-6	Low-risks are largely acceptable. Where it is reasonable to do so, efforts should be made to reduce risks further.						
Guidance. When completing a risk assessment, you should:	<ol style="list-style-type: none"> <li>Identify the persons at risk and the significant hazards.</li> <li>Calculate an initial RR for the activity.</li> <li>Identify risk control measures that reduce the risks to an acceptable level.</li> <li>Calculate a revised RR - you should consider how much safer the task will be if the control measures are followed. Here, you should consider changing both the likelihood (L) and the severity (S) ratings.</li> </ol>							
	<b>Note.</b> Ideally, you should look to reduce the risks so that the task can be classified as "low-risk".							

Likelihood (L)	Definition	Points rating
Inevitable	If the work continues as it is, there is almost 100% certainty that an accident will happen, for examples: A broken stair or broken rung on a ladder, Bare, exposed electrical conductors, Unstable stacks of heavy boxes	5
Highly likely	Will happen more often than not. Additional factors could precipitate an incident but it is still likely to happen without this additional factor.	4
Possible	The accident may occur if additional factors precipitate it, but it is unlikely to happen without them.	3
Unlikely	This incident or illness might occur but the probability is low and the risk minimal.	2
Remote	There is really no risk present. Only under freak conditions could there be any possibility of an accident or illness. All reasonable precautions	1

Severity (S)	Definition	Points rating
Very high	Causing multiple deaths and widespread destruction e.g. fire, course/building collapse.	5
High	Causing death, serious injury or permanent disability to an individual.	4
Moderate	Temporary disability causing injury (to member of the public, contractor or employees) or disease capable of keeping an employee off work for seven days or more and reportable under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995).	3
Slight	Minor injury (to member of the public, contractor or employee), which would allow the individual to continue work after first aid treatment on site or at a local surgery. The duration of the stoppage or treatment is such that the normal flow of work is not seriously interrupted.	2
Nil	Very minor injury, bruise, graze, no risk of disease.	1

possibility	have been taken - This should be the normal state of the workplace.				
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**The Review Process. This risk assessment will be reviewed when it is suspected that the assessment is no longer valid or there has been a significant change. In addition, it will be reviewed annually.**

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# Crossbow (Middle) Range Layout

