

### Risk Assessment: Air Rifle Shooting

<b>Location:</b>	Baby Moon Woodland	<b>Completed by:</b>	Morgan Lax	<b>Date:</b>	21 <sup>st</sup> March 2018	<b>Review Date:</b>	20 <sup>th</sup> March 2020
------------------	--------------------	----------------------	------------	--------------	-----------------------------	---------------------	-----------------------------

**Description of site / activity / tools:**

Shooting is a wide spread activity in the UK- it is used as a hobby, sporting activity as well as part of the country life. This iteration of shooting uses Air Rifles and is akin to taster or short proficiency programmes. The rifles used are .22 PCP and break barrel/spring powered .177. The rifles are only used at a specifically designed range in the Baby Moon woodland.

	Hazard	Harm	People at Risk	Existing Control Measure	Likelihood (1-3)	Severity (1-3)	Rating LxS (1-9)	New Control Measure Who? When?	Comments
1.	Prohibited person using a rifle	<ul style="list-style-type: none"> <li>• Breach of domestic law causing a person to be arrested/face legal action.</li> <li>• Legal action against Rewilding</li> <li>• Reputational risk</li> </ul>	Individual and Rewilding	<ul style="list-style-type: none"> <li>• Sect. 21 Firearms Act declaration included in general Participant Information Form</li> <li>• Specific Sect. 21 Firearms Act declaration created for rifle shooting activity sessions</li> <li>• Verbal declaration sought during introduction on a rifle session (this has been included in the <i>crib</i> sheet for the air rifle shooting activity sessions</li> <li>• Groups with a higher likelihood of people subject to Sect. 21 prohibitions informed when they enquire</li> </ul>	1	3	3		
2.	Breach of related firearms legislation	<ul style="list-style-type: none"> <li>• Breach of domestic law causing a person to be arrested/face legal action.</li> <li>• Legal action against Rewilding</li> <li>• Reputational risk</li> </ul>	Individual and Rewilding	<ul style="list-style-type: none"> <li>• Permission to shoot at Baby Moon obtained</li> <li>• No game will be shot (the game rights sit with a third party- not the land owner/occupier)</li> <li>• All rifles covered during transportation to the site, and from parking to the range</li> <li>• All participants, regardless of their age, will be supervised by a qualified person over the age of 21</li> <li>• All rifles have been purchased under the threshold for air rifles</li> <li>• The range is located in such a</li> </ul>	1	3	3	<ul style="list-style-type: none"> <li>• Permission being sought in writing</li> <li>• Rifle cabinet being purchased and will be secured to the material of the house</li> </ul>	<ul style="list-style-type: none"> <li>• Rifles may be used as a form of vermin control (pigeon, rabbit and rat)</li> </ul>

				<p>location where the land down range is owned by the same person- therefore a pellet crossing the boundary is not an offence</p> <ul style="list-style-type: none"> <li>• The target area is backed by a bank and as such the likelihood of a pellet leaving the range is highly unlikely</li> </ul>					
3.	Negligent discharge of rifle- shoot self	<ul style="list-style-type: none"> <li>• Pellet injury to lower limb</li> </ul>	Shooter	<ul style="list-style-type: none"> <li>• The aim of the session is to shoot safely- this is explained to the participants</li> <li>• The Two Principles of Safe Shooting introduced (this is included in the <i>crib card</i> for the activity)</li> <li>• The principle of the <i>Rifle Triangle</i> is applied in the practice of the range- the only time rifles, shooter and ammunition will be together is on the firing point at the bench</li> <li>• Early parts of the session are conducted from the bench, which means that the rifles are facing the targets and cannot be easily pointed to the ground. The benches have vertical dividers to prevent the rifles being moved to the left and right</li> <li>• Clear instructions, guidance and coaching given</li> <li>• Instructors police the safe use of the rifles</li> <li>• Only competent groups will be invited to shoot from a standing position</li> <li>• First aid kit available and instructor is a trained first aider</li> </ul>	1	4	4		<ul style="list-style-type: none"> <li>• The 'Two Principles of Safe Shooting' are: <ol style="list-style-type: none"> <li>1. Always treat a rifle as if it is loaded</li> <li>2. Never shoot at any living thing (only at a target)</li> </ol> </li> <li>• The principle of the Rifle Triangle are similar to the fire triangle- three things are needed- Rifle, Ammunition and Person</li> </ul>
4.	Negligent discharge- shoot another participant	<ul style="list-style-type: none"> <li>• Pellet injury</li> </ul>	Participants and Instructors	<ul style="list-style-type: none"> <li>• The aim of the session is to shoot safely- this is explained to the participants</li> <li>• The Two Principles of Safe Shooting introduced (this is included in the <i>crib card</i> for the activity)</li> <li>• The principle of the <i>Rifle Triangle</i> is applied in the practice of the range- the only time rifles, shooter and ammunition will be together is on the firing point at the bench</li> <li>• Early parts of the session are</li> </ul>	1	4	4		

				<p>conducted from the bench, which means that the rifles are facing the targets and cannot be easily pointed to the ground. The benches have vertical dividers to prevent the rifles being moved to the left and right</p> <ul style="list-style-type: none"> <li>• Clear instructions, guidance and coaching given</li> <li>• Instructors police the safe use of the rifles</li> <li>• Only competent groups will be invited to shoot from a standing position</li> <li>• First aid kit available and instructor is a trained first aider</li> </ul>					
5.	Another participant entering target area- being shot	<ul style="list-style-type: none"> <li>• Pellet injury</li> </ul>	Participants	<ul style="list-style-type: none"> <li>• "STOP" command explained and used if necessary</li> <li>• Waiting area explained and policed by instructors</li> <li>• Safe behaviour is explained during briefing</li> <li>• Physical barrier prevent easy access to the target area</li> <li>• First aid kit available and instructor is a trained first aider</li> </ul>	1	4	4		
6.	Member of the public entering range area- being shot	<ul style="list-style-type: none"> <li>• Pellet injury</li> </ul>	Member of the public	<ul style="list-style-type: none"> <li>• "STOP" command explained and used if necessary</li> <li>• Instructor remains alert to the possibility of people approaching the range during the activity</li> <li>• Range located in private woodland, no public access means that it is unlikely that a member of the public entering the range is highly unlikely</li> <li>• The area around the range is relatively open- as such this provides a good visible field for those approaching the range and the instructor using the range</li> <li>• The back drop/overshoot area is a steep bank meaning that it is highly unlikely that people would use the area to walk</li> <li>• The PCP rifles have silencers fitted- if needed these would be removed as an audible indication that shooting is</li> </ul>	1	4	4	<ul style="list-style-type: none"> <li>• The need for a physical barrier to prevent access to the range will be monitored</li> </ul>	

				occurring					
7.	Pellet leaving the range- member of the public being shot	<ul style="list-style-type: none"> <li>• Pellet injury</li> </ul>	Member of the public	<ul style="list-style-type: none"> <li>• Range located in private woodland, no public access means that it is unlikely that a member of the public entering the range is highly unlikely</li> <li>• The back drop/overshoot area is a steep bank meaning that it is highly unlikely that people would use the area to walk</li> <li>• The Two Principles of Safe Shooting introduced (this is included in the <i>crib card</i> for the activity)</li> <li>• The range layout means that targets are positioned in front of the bench in a lane layout. Plinking, knock-down and spinning targets are located in a similar configuration meaning cross shooting is reduced</li> <li>• Instructor monitors and reduces any cross shooting which will mean that a greater angle (from lane one bench to lane 4 target) is stopped</li> </ul>	1	4	4		
8.	Rifle discharged whilst being carried	<ul style="list-style-type: none"> <li>• Pellet injury</li> </ul>	Participants /Members of the Public and Instructors	<ul style="list-style-type: none"> <li>• Rifles always unloaded prior to being carried/transported</li> <li>• Rifles carried and transported in cases</li> <li>• Pellets/magazines kept separate</li> <li>• PCPs transported with the breach open</li> <li>• Spring rifles transported with the barrels open but not cocked</li> <li>• All rifles transported with safety catches applied</li> </ul>	1	4	4	<ul style="list-style-type: none"> <li>• Safety lines provided and can be used to demonstrate that the rifles are unloaded; however, these will potentially introduce moisture to the barrels of the rifles which in turn is difficult to deal with and protect against. On balance, the damage to the rifles and the utility of the safety lines is a decision of the instructor given the conditions and nature of the transport/location</li> </ul>	
9.	Pellet rebounding/ricocheting causing injury	<ul style="list-style-type: none"> <li>• Pellet injury</li> </ul>	Participants and Instructors	<ul style="list-style-type: none"> <li>• Eye protection provided and worn (this is policed by instructor)</li> <li>• All pellets are soft metal and will</li> </ul>	1	3	3	<ul style="list-style-type: none"> <li>• The nature of the knock down/spinning targets means that a larger</li> </ul>	

				collapse rather than rebound (hard metal or synthetic pellets are not used) <ul style="list-style-type: none"> <li>• Objects presenting a rebound risk removed from the target area</li> <li>• Tin cans used, but only with .22 PCP rifles (these have the power to penetrate, rather than rebound)</li> <li>• Closer targets are all paper</li> </ul>				calibre is needed. However, given extensive use and the nature of the targets, there has been no ricochets experienced	
10.	Using lead/poisonous ammunition	<ul style="list-style-type: none"> <li>• Poisoning/illness</li> </ul>	Participants	<ul style="list-style-type: none"> <li>• No eating on the range</li> <li>• Hands to be washed before eating (this is included on the <i>crib sheet</i>)</li> <li>• The majority of sessions will be <i>taster sessions</i> and as such people will only handle a minimal amount of the pellets</li> <li>• Cleaning of the range conducted by instructors wearing gloves and mask</li> </ul>	1	3	3		<ul style="list-style-type: none"> <li>• Hand washing facilities are available at Baby Moon</li> </ul>
11.	Introducing lead into the environment	<ul style="list-style-type: none"> <li>• Ground contamination</li> </ul>	Environment	<ul style="list-style-type: none"> <li>• Pellet catchers used and pellets recovered as far as possible some knock downs/spinners do not allow for this)</li> <li>• The frequency of shooting means that the amount of lead is limited</li> </ul>	1	2	2		<ul style="list-style-type: none"> <li>• Metal bucket available to collect spent pellets</li> </ul>
12.	Filling/charging PCP rifles	<ul style="list-style-type: none"> <li>• High pressure air injury to hands/eyes</li> </ul>	Participants and Instructors	<ul style="list-style-type: none"> <li>• Only instructors to recharge PCP rifles</li> <li>• Gloves to be worn</li> <li>• Eye protection to be worn</li> <li>• PCP rifles filled slowly to no more than 200 bar</li> </ul>	1	3	3		
13.	Use of a pressurised 'diver's' bottle	<ul style="list-style-type: none"> <li>• Explosion</li> <li>• Dieseling</li> <li>• Damaged valve causing uncontrolled discharge</li> </ul>	Participants, Members of the public and Instructors	<ul style="list-style-type: none"> <li>• Tank stored out of direct sun light and aware for heat sources</li> <li>• Care taken during transport and carrying to protect the valve</li> <li>• Only instructor to recharge PCP rifles</li> <li>• Valves and hoses of tank and rifle cylinder nor lubricated to avoid <i>dieseling</i></li> <li>• Bottle only used within <i>date</i></li> </ul>	1	4	4		The bottle was purchased in March 2018 and was new. Next service and test is due February 2023
14.	Hand caught/trapped in lever of break barrel rifle	<ul style="list-style-type: none"> <li>• Crush/trap injury</li> </ul>	Shooter	<ul style="list-style-type: none"> <li>• Demonstration of correct cocking/loading method provided</li> <li>• Participants monitored whilst cocking the rifles</li> <li>• The process ensures that participants' hands are not near the hinge of the rifle</li> </ul>	2	1	2		

15.	Releasing break barrel section before fully cocked	<ul style="list-style-type: none"> <li>• Bruise</li> </ul>	Shooter	<ul style="list-style-type: none"> <li>• Demonstration of correct cocking/loading method provided</li> <li>• Explanation given that the barrel/cocking movement must be locked in place with an audible <i>click</i> before releasing the tension on the barrel</li> </ul>	2	1	2		Two handed seat supported approach can be used if needed- this is a judgment from the instructor
16.	Releasing the trigger once the break barrel rifles are cocked but not locked	<ul style="list-style-type: none"> <li>• Bruise</li> </ul>	Shooter	<ul style="list-style-type: none"> <li>• The Two Principles of Safe Shooting introduced (this is included in the <i>crib card</i> for the activity). This means that the trigger should only be touched once ready to shoot</li> <li>• Demonstration of correct cocking/loading method provided</li> <li>• One hand retains hold of the barrel during loading- this prevents the barrel from causing injury as it is controlled, as well as ensuring the participants' hands are not near the trigger</li> </ul>	2	1	2		
17.	Horse play or inappropriate use of the rifle	<ul style="list-style-type: none"> <li>• General injury</li> </ul>	Participants and Instructors	<ul style="list-style-type: none"> <li>• Aim to have a safe session made clear at the start of the session</li> <li>• Instructor and visiting staff to monitor behaviour and apply sanctions as appropriate</li> <li>• If behaviour is presenting a safety risk, then the instructor reserves the options of abandoning the session, and/or removing participants as appropriate</li> </ul>	2	2	4		It is Rewilding's intention to promote positive behaviour and use outdoor learning as a means to assist participants with developing self-awareness and control
<b>Comments/Concerns:</b>					<b>Recommendations:</b>				
This risk assessment will be reviewed in the event of any incident or near miss in order to be fully informed for the future. It is not an exhaustive list, and is written with experience of FS and bushcraft activities in mind and the incidents (or lack of) that have been encounter in the preceding 2 years.					For bi-annual review- due March 2020				

