



Beaundesert Outdoor Adventures

Standard Operating Procedure (SOP) & Risk Assessment: Mini Crossbows

Document ID: SOP-BOA-MINIXBOW-001

Effective Date: 5th January 2026

Review Date: January 2027

1.0 Purpose

To outline the standardized, safe, and fun procedure for conducting a Mini Crossbows session at Beaundesert Outdoor Adventures. This activity is designed as a low-powered, accessible introduction to shooting sports for younger participants, using suction-cup darts.

2.0 Scope

This SOP applies to all instructors (In-House Trained) and participants engaging in Mini Crossbow activities.

- **Instructor Requirement:** Instructors must be in-house trained and assessed under a scheme approved by the Technical Adviser (Operations Manager).

3.0 Location & Ratios

3.1 Location

The activity takes place on Archery Range 1 (designated Mini Crossbows range).

- **Setup:**
 - **Firing Line:** A bench / Table is positioned **5 meters** away from the targets.
 - **Targets:** Plastic targets suitable for suction cup adhesion.
 - **Safety:** The range is designed so passers-by cannot accidentally walk into the firing zone.





3.2 Ratios

- **Standard Ratio:** 1:12 (One Instructor to twelve participants).
- **Maximum Group Size:** 12 participants without additional adult supervision.

4.0 Equipment

- **Crossbows:**
 - Small, bright orange plastic stocks with metal limbs
 - Low-powered design for younger participants.
- **Ammunition:**
 - Small "Bolts" or Darts with **suction cup tips**.
- **Targets:**
 - Smooth plastic targets Small or large bosses (to allow suckers to stick).

5.0 Safety Briefing & Range Rules

1. **Instructor Authority:** The instructor is in charge.
2. **Range Commands:**
 - **"STOP" or "FAST":** All shooting ceases immediately. Crossbows must be placed on the table/bench pointing downrange.
 - **Waiting Line:** Participants must remain behind this line while others are shooting.
 - **Collect:** Only walk forward to retrieve darts when instructed by the instructor.
3. **Handling:**
 - **Direction:** Loaded crossbows must *always* point downrange toward the target or the ground.
 - **Loading:** Only load and draw at the shooting line.
 - **Horseplay:** Strictly forbidden.
4. **Clothing:**
 - Long hair must be tied back and scarves removed (to prevent catching in the string).
5. **Movement:** No running on the range.

6.0 Session Procedure

6.1 Pre-Session Checks (Instructor)

- **Equipment:** Check strings on the bows for fraying. Check crossbow bodies for cracks.
- **Range:** Ensure the area is clear of items left by previous users (e.g., real arrows from archery sessions). (This should not be the case but check regardless)
- **Setup:** Ensure targets are stable and the bench is at the correct 5m distance.



6.2 Introduction & Demonstration

1. **Welcome:** Explain the activity is a taster for shooting sports.
2. **Safety Brief:** Explain the "Stop" command and the "Down Range" rule.
3. **Demonstration (IDEAS Model):**
 - **Stance:** Stand comfortably at the bench.
 - **Draw:** Pull the string back to the catch (instructor may need to assist very young participants).
 - **Load:** Place the suction dart in the groove – ensure it is all the way back in the slot and the string is in the correct slot also.
 - **Aim:** Align with the target (Shoulder as a rifle or hold at arm's length).
 - **Release:** Squeeze the trigger.

6.3 Activity Phases

- **Phase 1: Practice:**
 - Allow 2-4 participants to shoot at a time (depending on range width).
 - Instructor supervises closely to ensure bows are held shouldered correctly or at arm's length.
- **Phase 2: Scoring:**
 - Introduce scoring zones on the targets.
 - Suction cups sticking counts as a hit; bounce-offs may be counted at instructor discretion.
- **Phase 3: Collection:**
 - Instructor calls "Stop" and "Collect."
 - Participants walk forward to retrieve darts. Instructor supervises at the bosses²³.

7.0 Session Conclusion

1. **Pack Down:** Return crossbows and darts to storage.
2. **Review:** Debrief the group on their new skill (aiming/patience).

8.0 Emergency Procedure

1. **Command:** "STOP" or "FAST".
2. **Action:** Crossbows grounded on the bench.
3. **Injury:** Administer First Aid. Contact Duty Manager.

9.0 Risk Assessment

Activity: Mini Crossbows

Review Date: January 2027

Assessment by: Martin Kirby – Operations Manager

What are the hazards?	Who might be harmed?	Controls: What are you doing to control hazards?	Risk Rating (with controls)
Suckers rebounding	Participants, Bystanders	<ul style="list-style-type: none"> • Range Design: 5m distance prevents suckers from rebounding the full length of the range to the waiting line. • Low Power: Bows are designed for young people and have low kinetic energy. 	Trivial
Direct Shot (Hit by dart)	Participants, Bystanders	<ul style="list-style-type: none"> • Rule: "Always point downrange" strictly enforced . • Command: "STOP" command briefed to all. • Layout: Non-participants kept in a safe waiting area behind the firing line. 	Trivial
String Slap / Finger Injury	Participants	<ul style="list-style-type: none"> • Instruction: Participants shown to hold the crossbow shouldered or at arm's length as appropriate. • Clothing: Long hair tied back, scarves removed. 	Trivial
Slips, Trips & Falls	Participants	<ul style="list-style-type: none"> • Briefing: No running in the range. • Check: Instructor checks range for trip hazards or leftover equipment. 	Trivial



11.0 Document Control & Review History

Document Creation

Action	Name / Role	Date
Created By	Martin Kirby – Operations Manager	December 2025
Approved By	Martin Kirby, Luke Chance & Oliver Tombs (OM / SI / AOM)	January 2026

Review Log

This document is to be reviewed annually or following any significant incident or change to the activity.

Date of Review	Reviewed By	Comments / Changes Made	Next Review Due
January 2026	MKirby / OTombs / LChance	Document Created (V1.0). Updated location to Range 1. Specified plastic/suction cup equipment.	January 2027

