



Beaundesert Outdoor Adventures

Standard Operating Procedure (SOP) & Risk Assessment: Pioneering

Document ID: SOP-BOA-PIONEER-001

Effective Date: January 2026

Review Date: January 2027

1.0 Purpose

To outline the standardized and safe procedure for conducting Pioneering activities. Pioneering uses wooden spars and ropes to create structures, encouraging teamwork, communication, and the learning of practical skills such as knot tying and lashings.

2.0 Scope & Leadership Options

This activity can be run under two distinct leadership models:

- **Instructor-Led:** Supervised and led by Beaundesert In-House Trained staff.
- **Self-Led:** Supervised by competent visiting adults (e.g., Teachers, Scout Leaders). The visiting leader assumes responsibility for the group's safety and adherence to these rules.
- **Technical Advisor:** Martin Kirby (Operations Manager).

3.0 Location & Ratios

- **Location:** Pioneering takes place in designated areas, primarily the **Walled Garden**, which features a gentle grass slope ideal for rolling projects like the Flintstone Car.
- **Standard Ratio:** 1:12 (One Instructor/Leader to twelve participants).
- **Maximum Group Size:** 12 participants without additional adult supervision. 24 with extra supervision
- **The Pioneering Store is outside the walled garden area** – locked up next to the Estates office.





4.0 Equipment

- **Wooden Poles (Spars):** Various lengths.
- **Lashing Ropes:** Assorted lengths for tying knots and lashings.
- **Barrels/Drums:** Used as "wheels" or floats for specific projects.
- **Footwear/Clothing:** All participants must wear suitable enclosed footwear and appropriate attire for the nature of the activity.

5.0 Safety Briefing & Rules

Mandatory briefing before any lifting or building commences.

1. **Lifting Technique:** Heavy or bulky equipment must be lifted by two or more persons. Always use a straight back and bent knees.
2. **Awareness:** Take care when moving poles to avoid hitting others. Pay close attention if more than one person is working on the same pole to prevent trapped fingers or feet.
3. **Splinters & Rope Burn:** Slide ropes carefully rather than pulling quickly through hands, and handle poles carefully to avoid splinters.
4. **Height Rules:** Any participant climbing a structure above 1 metre in height must be fully briefed and active "spotters" must be used.

6.0 Session Procedure

6.1 Pre-Session Visual Checks (Instructor/Leader)

- **Poles:** Check the poles for cracks and splinters.
- **Ropes:** Ropes must be checked for damage, fraying, or core exposure which could lead to a break.
- **Environment:** Check the build area (e.g., the Walled Garden grass) for natural hazards, uneven ground, or slipperiness.

6.2 Introduction & Instruction

- **Knots & Lashings:** Teach the core skills needed for the project. The standard introduction should cover the **Clove Hitch** (to start and finish lashings) and the **Square Lashing** (to bind poles at 90 degrees).
- **Carrying poles:** Care must be taken when moving poles around the area. Young people should be advised to carry poles in pairs to minimise swinging around with poles.





6.3 Activity Phase: Project Building The instructor/leader must closely monitor the structural integrity of the build.

- **Project A: The "Fred Flintstone Car"**
 - *Concept:* A frame is built using spars and square lashings, resting on two barrels which act as wheels.
 - *Execution:* The car is rolled down the gentle slope of the Walled Garden grass.
 - *Specific Controls:* Participants must not ride the car if lashings are loose. Maintain clear space ahead of the car to prevent collisions. Watch for pinch points between the rolling barrels and the wooden spars.
- **Project B: A-Frames & Tripods**
 - *Concept:* Freestanding vertical structures.
 - *Specific Controls:* Ensure lashings are extremely tight to prevent the "legs" from splaying out and collapsing. Do not allow climbing unless the structure has been load-tested by the instructor and spotters are in place.

6.4 Session Conclusion & Dismantling

1. **Dismantling:** Un-tie all knots (do not cut ropes).
2. **Storage:** The poles must be stacked in their appropriate section of the store, sorted according to size. Ropes should be coiled and stored dry.
3. **Review:** Debrief the group on teamwork and new skills learned.

7.0 Emergency Procedure

1. **Collapse/Injury:** If a structure collapses or someone is injured, halt the activity immediately.
2. **First Aid:** Treat cuts, splinters, or bruises. Report any significant accidents to the Duty Manager.



8.0 Risk Assessment

Activity: Pioneering

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)
Back / Lifting injuries	Group & Instructor	<ul style="list-style-type: none"> • Correct lifting procedure: Heavy/bulky equipment to be lifted by 2 or more persons using a straight back and bent knees. 	Trivial
Head injuries from equipment	Group & Instructor	<ul style="list-style-type: none"> • Care when handling equipment. Ensure structure is secure before leaving it unattended to prevent collapse. 	Trivial
Trapped body parts (Fingers/Feet)	Group & Instructor	<ul style="list-style-type: none"> • Close attention required if more than one person is working on the same pole. • Flintstone Car: Keep hands clear of the pinch points between the rolling barrels and the lashing spars. 	Trivial
Splinters and rope burns	Group & Instructor	<ul style="list-style-type: none"> • Pre-use checks of poles to reduce splinter risk. Groups briefed on splinters and safe rope handling. 	Trivial
Structures collapsing / Falls from height	Group & Instructor	<ul style="list-style-type: none"> • Correct knots and lashings must be used. Limit loading on the structure. • Spotters must be used when any participant is off the ground (above 1 metre). 	Trivial
Slips, trips and falls with equipment	Group & Instructor	<ul style="list-style-type: none"> • Heavy equipment carried by 2+ people. • Build area checked for natural hazards. Suitable footwear required. 	Trivial
Loss of Control (Flintstone Car on slope)	Group	<ul style="list-style-type: none"> • The car is only used on the <i>gentle</i> slope of the Walled Garden. • Path must be clear of bystanders before the car is pushed/rolled. 	Tolerable



10.0 Document Control & Review History

Document Creation

Action	Name / Role	Date
Created By	Martin Kirby – Operations Manager	January 2026
Approved By	Martin Kirby, Luke Chance & Oliver Tombs (OM / SI / AOM)	January 2026
Technical Auth.	Martin Kirby (Operations Manager)	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	Document Created (V1.0). Updated to include specific project details (Flintstone Car, A-Frames) and Walled Garden location specifics.	January 2027

