# Beaudesert Outdoor Adventures

## Standard Operating Procedure (SOP) & Risk Assessment:
## Climbing Activities – Walled Garden Bottom Ropes

**Document ID:** SOP-BOA-CLIMB-001

**Activity Group:** Climbing Wall, Crate Stacking, Eliminator, Jacobs Ladder, Monkey Trees

**Effective Date:** 5th January 2026

**Review Date:** January 2027

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### 1.0 Purpose

To outline the standardized and safe procedure for conducting Top Rope Climbing activities at Beaudesert Outdoor Adventures. This ensures a high-quality instructional experience while maintaining paramount safety standards in line with Technical Advisor (TA) guidance.

### 2.0 Scope

This SOP applies to all instructors and participants engaging in the specified climbing activities.

- **Authorization:** Instructors must be authorized annually by **Joby Davis (Technical Advisor)**.
- **Local Sign-off:** Additionally, instructors must be signed off locally by **Luke Chance, Martin Kirby, or Richard Irvine** before leading sessions.

### 3.0 Location & Ratios

#### 3.1 Locations

- **Walled Garden High Ropes Area:**
  - Monkey Trees 1
  - Crate Stacking
  - Eliminator
  - Jacobs Ladder

- **Bottom of Walled Garden (Outside):**
  - **Monkey Trees 2:** *Note: Located in a damp area. Additional checks required for slippery ladders/holds.*
- **Behind Cal Day Dining Room:**
  - **Mobile Climbing Wall:** Located in a designated locked and fenced area. This is a hydraulic trailer setup.

### 3.2 Ratios

- **Standard Ratio:** 1:12 (One Instructor to twelve participants).
- **Maximum Ratio:** 1:15 (With additional adult supervision and Senior Instructor approval).

## 4.0 Equipment & Rigging

### 4.1 Belay System

- **System:** Semi-direct belay using **Petzl "Rig"** devices attached to ground anchors.
- **Operation:** Instructors must **tail the dead rope** at all times while participants (bell-ringers) pull the slack.

### 4.2 Harnesses & Attachment

- **Option A (DMM Sit & Chest):** Used for High Ropes (Crate/Jacobs/Eliminator/Monkey Trees).
  - Requires **DMM Sit Harness + DMM Chest Harness + Bridge Sling**.
  - **Attachment:** Two carabiners required (Belay Master to harness loop + Second carabiner to chest/sling).
- **Option B (Full Body):** Petzl "Swan" (Guests) or Petzl "Simba" (Small children).
  - **Attachment:** Single **Belay Master** carabiner to the designated tie-in point.
- **Option C (Climbing Wall ONLY):**
  - **DMM Sit Harness Only**.
  - **Attachment:** Single **Belay Master** carabiner to the **Golden Loop**.

### 4.3 PPE

- **Helmets:** Mandatory for all participants and instructors within the **10m Activity Zone**. Spectators/Adults entering this zone to assist or take photos must also wear a helmet.

## 5.0 Safety Briefing & Rules

*Mandatory briefing before any equipment is handled.*

1. **Instructor Control:** The instructor manages the safety of the rigging. Do not touch carabiners once checked.
2. **Helmet Zone:** No one enters the 10m zone without a helmet.
3. **Belaying:**
   - "Bell Ringing" method is used.
   - Participants must not let go of the rope until instructed.
   - The instructor always holds the "tail" (brake hand).
4. **Commands:**
   - **"Climb When Ready"**
   - **"Coming Down"** (Wait for instructor confirmation).
   - **"STOP"** (All movement ceases).
5. **Checks:** The **C.H.E.C.K.** process must be strictly followed before every climb:
   - **C**lothing (No loose items/jewellery).
   - **H**arness (Tight and correct type).
   - **E**nvironment (Clear landing zone).
   - **C**onnections (Carabiners locked and orientated).
   - **K**nowledge (Belayer ready, Climber ready).

## 6.0 Session Procedure

### 6.1 Pre-Session Checks (Instructor)

- **Climbing Wall:** Ensure the wall is fully raised and locked. *Note: Raising/Lowering of the hydraulic wall must only be performed by the Senior Team (Martin Kirby, Luke Chance, Oliver Tombs).*
- **Monkey Trees 2:** Inspect specifically for moss/slime/dampness on rungs due to location.
- **Rigging:** Check all Petzl Rigs, ground anchors, and ropes for wear/function.
- **Please ensure when set up, Monkey Trees Ladders are not in place if leaving the area to limit access.** Similarly, When De-Rigging, the bottom log of Jacobs Ladder to be removed and stored on the chocks on the ground. The Rescue Ladder should be locked up and Monkey Trees Ladders Locked when unsupervised.

### 6.2 Introduction & Setup

1. **Fit Kit:** Issue helmets and appropriate harnesses (See Section 4.2).
2. **Briefing:** Explain the belay system (participant pulls, instructor tails).
3. **Demonstration:** Show how to lower safely (sit back in harness, feet wide).

### 6.3 Activity Management

- **Crate Stacking:** Ensure the stack is built securely. Do not allow participants to stand on the stack until the ground crew has checked the crates are “Locked” together. Lower crates safely where possible; do not push them over onto people. Clear the landing zone. It is prudent to ask “Builders” of the crate tower to stand on the sides of the crate tower where it is less likely to fall (Short edge of the crate) The tower is more likely to fall onto the longer side of the crate.
- Another consideration for Crate stacking is the participants ropes becoming tangled as they ascend the tower. Monitor this and direct participants to follow their ropes and untangle when necessary.
- Participants should not hold their own rope for support as this makes it impossible to “Take in” the slack. The participants should be directed to hold each other’s shoulders or if their partner is not ascending, the partner’s rope for support.
- **Eliminator/Jacobs Ladder:** Monitor for entanglement in wires/chains. Brief participants to avoid holding the metal cables.
- **Climbing Wall:** Monitor lowering speed carefully (hard concrete floor and close proximity to fencing).

### 6.4 Session Conclusion

1. **De-Rig:** Remove all hardware (Rigs/Carabiners) and store securely.
2. **Rope Care:** Check ropes for damage. Coils should be neat.
3. **Wall:** If the wall needs lowering, contact a member of the Senior Team.

## 7.0 Emergency Procedure

1. **Command:** "STOP".
2. **Action:** Instructor locks off the Petzl Rig (using the handle & appropriate tie-off as per training and assessment).
3. **Rescue:**
    - **Lowering:** In most cases, the instructor can lower a stuck participant using the Rig. It may need some “Soft Skills” and instruction / encouragement if a child is scared or uncompliant.
    - **Complex Rescue:** If a participant is entangled or incapacitated and cannot be lowered, call for the **Duty Manager / On-Call Rescue Instructor**. Another specific example is Monkey Trees 1 – if a child climbs on the large limb on the left hand tree and refuses to climb down, a rescue may be neccessary.
4. **Injury:** Administer First Aid. Contact Duty Manager.

## 8.0 Risk Assessment

**Activity:** Climbing Activities (Wall, Crates, Eliminator, Jacobs, Monkey Trees)

**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) |
|---|---|---|---|
| **Falls from Height (Belay Failure)** | Participants | • **System:** Semi-direct belay with Petzl Rig (auto-locking assist).<br>• **Control:** Instructor **must tail the dead rope** at all times.<br>• **Training:** All staff authorized by TA (Joby Davis) and signed off locally. | **Trivial** |
| **Harness Failure / User Error** | Participants | • **PPE:** Correct harness selection (Full body/Simba/Sit+Chest for High Ropes, Sit only for Wall).<br>• **Checks:** C.H.E.C.K. procedure before *every* climb.<br>• **Connectors:** Belay Master carabiners used as main connnector (cannot cross-load). | **Trivial** |
| **Falling Objects (Crates/Debris)** | Participants, Spectators | • **Zone:** Mandatory Helmet Zone (10m radius).<br>• **Crate Stacking:** Tower built carefully; ground crew briefed not to stand directly under the lean.<br>• **Monkey Trees 2:** Area checked for falling branches (tree location). | **Tolerable** |

| What are the hazards? | Who might be harmed? | Controls: What are you doing to control hazards? | Risk Rating (with controls) |
|---|---|---|---|
| **Hydraulic Wall Failure** | Staff, Participants | • **Operation:** Only Senior Team (MK, LC, OT) authorized to raise/lower the hydraulic trailer.<br><br>• **Inspection:** Visual check of tower for movement and feet, as well as being vertical, before session. | **Trivial** |
| **Slips/Falls (Monkey Trees 2)** | Participants | • **Environment:** MT2 is in a damp, shaded area.<br><br>• **Check:** Instructor physically checks rungs of ladders for slime/moss pre-session. Activity suspended if unsafe. | **Tolerable** |
| **Entanglement (Eliminator/Jacobs)** | Participants | • **Briefing:** Clear instruction on where to hold (avoiding cables/chains).<br><br>• **Supervision:** Instructor vigilant to prevent limbs passing through gaps in elements. | **Trivial** |
| **Ground Anchor Failure** | Participants | • **Inspection:** Ground anchors inspected annually by SI/ERCA inspector.<br><br>• **Visual:** Instructor checks anchor integrity daily. | **Trivial** |