Ardmore House

BOULDERING
RISK OVERVIEW

Bouldering

Aim and benefits of Activity

Bouldering is the term used to describe an activity involving movement over rocky terrain, usually along a river's course.

The activity may be planned:

1. To ensure that participants remain dry - dry bouldering
2. To involve immersion as part of the activity - where the intention is to stay dry but recognising that immersion may result
3. To fully utilise the river whereby as much time is spent in the water swimming - wet bouldering.

The benefits include creating a sense of adventure and developing skills in balance, agility, judgement, mutual and team co-operation, personal and team responsibility, understanding and management of risk as well as overcoming personal challenge and a sense of increased self esteem.

Balancing the excitement, challenge and enjoyment that can be heightened by prevailing conditions and managing the risks is a very important element to this activity.

Hazards	Resulting harm	Who is at risk	Risk management measures
Wet slimy rocks Deep water Strength of current / river level Stoppers Shallow water Falling from a height on ledges/rocks Exposure to cold water and air. Entrapment Unstable boulders/material Limited access and egress Participant behaviour Reduced phone coverage	Broken bones Abrasions Cuts and lacerations Strains and sprains Concussion Drowning Hypothermia Crush injury Death	Students Staff Public	Competent, experienced and approved staff who have a working knowledge of any site-specific issues. Appropriate planning including rainfall forecasts. Suitable equipment for both students and staff including safety equipment **Appropriate bouldering management protocols when on site, including briefing, familiarisation, activity management and instructor position.**

Key Locations	**Associated specific hazards other than standard activity risks highlighted above**
Bloody Bridge	Significant numbers of other users Broken glass/debris Traffic on main road – this is managed through appropriate staff placement and communication to ensure that all participants are managed in the vicinity of the road safely. Sea conditions – In swells (Force 4+) from S through to E, the activity

	should only be started from the deep pool.
Spinkwee	Loose material high up on the gorge sides Damming of sections which if ever it was to burst would cause a significant outwash of water and debris. This is only likely after high rain when the river would be unusable. Strainers The Spinkwee is also prone to flash flooding due to Forestry drainage. Forestry operations High winds making access inaccessible through the forest. Lack of communication means in the gorge.

Maximum Operating Ratios

1:10 (including participating staff)

Appropriate operating Ratios are dependant on all of the factors outlined below, including experience and competence of staff. However the above ratio will, under no circumstances, be exceeded.

Conditions to be taken into account

- Air temperature, wind chill factor, and water temperature including time of year must be taken into account.
  - Each of these in themselves have the potential to create a dangerous environment, but the risks are greatly increased when considered in combination.
- **River state/water volume.**
  - **Under no circumstance should the leader use a site when the flow of a river is such that the increased water volume and rate of flow creates a situation where the safety of the group is in any doubt. During heavy rain the speed at which the river may rise must be considered by the leader on site as mountain streams can rise very rapidly and become in spate conditions during the period of an activity session.**
- Sea state:
  - When operating in the vicinity of the shoreline, the sea state should be such that it is inconceivable that the venue could be subject to encroachment by a rogue wave.
- Remoteness.
- The remoteness from access to a vehicle / road should be taken into consideration.

EQUIPMENT

Personal Equipment Used By Students

1 Clothing

- Insulating and windproof clothing should be worn as determined by the planned activity and taking account of environmental considerations. If undertaking wet or semi wet bouldering – then a wetsuit, as a minimum, is required.

2 Personal Floatation Aid

- Correctly sized and properly fitted.

3 Head Protection

- Correctly sized and properly fitted.

4 Footwear

- Appropriate footwear, which may include mountain boots, training shoes or Wellington boots, can be worn. Generally, the canyoning boots provided give the best grip on wet rock and are therefore favoured, if possible.

Personal Equipment Used by Instructors

1 Clothing

- The instructor should dress as determined by the planned activity taking account of environmental factors.

2 Head protection, buoyancy aid and appropriate footwear must be worn.

Safety Equipment Carried by Instructors

The following should be considered as a minimum requirement:

- First aid
- Adequate insulating clothing appropriate to the conditions
- Group shelter
- Throw-line/floating rope (Min 5m)
- Mobile phone
- Drybag for carrying medication

The following should be considered as useful additions:

- Knife
- Sling
- Warm drink (may be left at an easily accessible base e.g. bus)
- Sleeping bag - may be left at an easily accessible base e.g. bus.

When left at a venue without access to immediate transport, or when the venue is some distance from transport, a sleeping bag and group shelter should be carried unless exceptionally favourable weather conditions dictate otherwise.

GROUP MANAGEMENT

Physiological Considerations

- Young children have a lower threshold for tolerating cold, wet conditions than that of more physically developed older children.
- Young children being slightly built are more likely to struggle against the river when wading or when swimming.

1 Briefing the Group

- Outline the general nature of the activity and define any constraints including the following:
  - Keeping all equipment on
  - How to enter and exit the water safely
  - Agreed procedures

- Jumping procedures
- Importance of remaining in verbal/visual contact with the instructor
- Signals and the importance of that which means stop/wait.

- Outline the main hazards associated with the activity/venue and educate students on how the risk can be managed effectively.
- Agree with other members of staff his/her role, if required.

2 The Instructor's role

- Due to the ever-changing nature of the river environment, staff should test slides and jumps to demonstrate techniques required

3 The Instructor's position in relation to the Group

The position of the instructor in relation to the group is likely to vary according to the nature of the activity and the nature of the venue.

- When leading from the front, care must be taken to ensure contact with the back of the group is maintained.
- The instructor must be continually aware of potential hazards and must adopt a position in order to manage the risks appropriately.
- If there is any chance that injury would result from a slip or fall while negotiating a fall, rock step or traverse, the instructor should manage the group by taking up a position below or along side the difficulty which enables effective 'spotting' or assistance to be given.

4 The use of Slings & Ropes

- A hand-line may be rigged to assist the group in negotiating a difficult section. It is not a suitable alternative for 'spotting' or belaying where, in the event of a slip or fall, serious injury would result.
- The instructor should be aware that when pulling oneself up a rope the tendency for students is to lie back and that in the event of letting go it is likely that the person will land on his/her back.
- When a fall/rock step being ascended or descended cannot be effectively managed by 'spotting' a line should be attached to the participant by appropriate means and the ascent/descent secured by means of a suitable belay system with a UIAA rated rope.

5 Managing Jumps

- When undertaking any jumps, it is imperative that novice participants have a clear descent into the water and do not have to clear any significant obstacles/ledges.
- The depth of water below any jump should be checked first by the instructor to ensure that it is suitable.
- A clear explanation of a suitable method of entering the water at a given site must be provided when jumping.

6 Identifying Safe Assembly Points

In any situation where the instructor has to remain static to guard the group though a potential hazard, clear instruction must be given as to a safe assembly position before and after the hazard which should be within visual and verbal contact of the instructor.

7 Controlling the numbers exposed to risk

- The instructor should limit the number of students involved in negotiating a potentially hazardous section at any one time to ensure that, given the worst-case scenario, he/she will be able to retain control of the situation.
- While participants are undertaking jumps the instructor must ensure that the rest of the group are in a suitable "waiting zone" and are not placed in a vulnerable position where jostling for position could result in a fall.

8 The role of the accompanying members of staff (Not assistants)

- The accompanying members of staff must never be asked to undertake a role where an inappropriate action may endanger his/her safety or the safety of the group members.
- When a participating member of staff attempts to assist thereby creating a potentially hazardous situation, albeit in good faith, it is the responsibility of the leader/assistant to dissuade him/her from doing so.

General

If, after assessing the above issues, the instructor feels that the level of "risk" is too high, given unforeseen circumstances such as a higher than expected river level, then the instructor should either change the activity or the level of the activity should be moderated or the site abandoned.