Adventure Activities Licensing Authority
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Date: **February 2016**
Subject: **Combined Water Rock Activities – A Safety Checklist**

Issue: Combined Water/Rock Activities (CWRA or CWR Activities) are activities where hazards associated with a rock environment may at times combine or alternate with those of a water environment.

Guidance specific to Coasteering (based in part on the issues identified here) can be found at: www.nationalcoasteeringcharter.org.uk

Scope and range of the activities

1. Combined Water/Rock Activities (CWRA or CWR Activities) are activities here hazards associated with a rock environment may at times combine or alternate with those of a water environment. It represents a spectrum of activities some of which are mostly rock activities and some of which are mostly water activities and includes, but may not be limited to the following. To make matters more complicated many of the following names are used by different people to mean quite different activities;
   - sea level traversing (to most people is primarily a dry rock-climbing activity);
   - gorge walks or scrambles (can be wet or dry or alternating the two, involving the ascent or descent of a water course);
   - ghyll scrambles (another name for gorge walks or scrambles);
   - river walks (usually non-technical in nature);
   - adventure walks or scrambles (covers a multitude of variations);
   - canyoning (usually wet, it traditionally involves the descent of a steep water course and sometimes involves technical rope work);
   - adventure swimming (another name for coasteering or a non-technical variation of canyoning);
   - river running (deliberately swimming down white water rapids);
   - coasteering (usually a wet activity often involving swimming and/or jumping from a height into water as an integral part);
   - coastal exploration (anything from a beach ramble to coasteering);
   - activities at the water margins.

   Each activity is potentially serious in that apparently innocuous incidents or accidents can have serious or compounding consequences.

2. Caving activities also regularly combine the elements of rock activities and water activities. The principles underlying this safety check list would apply equally to caving and potholing. However, there are well established

training and qualification schemes for these activities. See: www.british-caving.org.uk

3. Some of the variations are well established and are considered by one or more National Governing Body (NGB's) or similar. Mountain Training UK (MTUK), British Canoeing (BC), British Caving Association (BCA) and the National Coasteering Charter (NCC) have perhaps the closest connections although there is also an overlap with the work of the Royal Life Saving Society (RLSS), the Surf Life Saving Association of Great Britain and others.

4. The main hazards include, but may not be limited to:

   (a) Impact with something solid, (e.g.);
   - rock falling from above;
   - falling or slipping on to rock, etc. below;
   - jumping/ falling onto submerged rock;
   - jumping from a height into water;
   - being swept or smashed against something solid.

   (b) Drowning, (e.g.);
   - falling into water;
   - entrapment under water;
   - repeated submersion in stopper waves or sea swell;
   - suddenly rising water e.g. 'freak waves', flash floods, dam releases;
   - slowly rising water e.g. trapped by rising tides or rising river levels;
   - being swept away;
   - sudden immersion (dry drowning etc.).

   (c) Hypothermia, (e.g.);
   - inadequate personal clothing or equipment during or after getting wet;
   - submersion hypothermia e.g. being swept out to sea.

Control Measures

5. Control measures could be thought of in three contexts:
   - where there is no (realistically) foreseeable possibility of a participant ending up in the water;
   - where participants *may* end up in the water;
   - where participants *will* end up in the water.

6. It would be appropriate, in cases where participants *may* end up in the water, to apply the control measures as though participants *will* end up in the water.

7. Because of the large number of variations of activities and the wide range of local conditions and site specific hazards it is unlikely that one universal set of guidelines is going to be successful. Each provider will need to

determine their own position. However, in the preparation of specific guidelines providers may find it useful to assure themselves that the following issues have at least been considered. It should be very apparent that not all issues will apply to any one venue, or any one provider.

Issues

8. The list of issues which providers may choose to consider includes, but may not be limited to:
   - benefits - an identification of the benefits of a particular venue with regards to the age and ability of the group, weather conditions, etc. will allow the activity provider to determine which, and how much risk is appropriate. For example, the benefits of *some* venues for *some* groups may be insufficient to justify the risks;
   - an identification of associated risks;
   - an assessment of the hazards and risks specific to each venue. This may be no more than an identification of the crux areas, potentially serious sections, known accident black spots, the likelihood of (say) the river to surge, local communication or rescue difficulties and the possible presence of harmful plants such as Giant Hogweed;
   - hazards downstream or nearby will need to be taken into account, e.g. weirs, strainers, waterfalls, rock pools and tidal streams.

9. Identification of appropriate leader competence - a system of identifying and verifying the required competence of leaders and assistants is required. Each venue and the way it is used should dictate the required competencies and these should include getting to and from the activity site (which may involve potentially hazardous, loose or slippery terrain) as well as any problems in conducting the activity. There may be a single NGB award or a combination of more than one which adequately provides the necessary competencies. Alternatively training and assessment by one or more suitably experienced and qualified person(s) may be appropriate. It may be necessary to determine 'suitable' from first principles.

10. Instructor induction - an induction process is likely to be required, i.e. accompanying someone who knows what they are doing, and learning from them. This would need to address, amongst other things, a) how to get the most benefit out of the venue/activity and b) the control measures for the hazards and risks identified above. It must be clear c) who is to conduct this induction, what it covers, what form it takes, etc. Finally d) an induction checklist will help to ensure consistency. (A synopsis of issues addressed in a), b), c) and d) could constitute a 'benefit / risk assessment'.) This is the point where providers can begin to develop ‘local knowledge’ in new staff. Local knowledge is likely to be one of the major safety factors in the delivery of these activities.

11. Monitoring - once staff are competent the employer needs to monitor them from time to time. This will involve going and watching them work; it cannot be substituted with a paper trail. The main benefits are to:
    - ensure things are still happening as envisaged;

- ensure practices and policies remain relevant;
- identify further training needs, if necessary;
- ensure management are aware of what is actually being delivered in practice.

12. Instructor Training - this may be in addition to Instructor Induction. Providers should ensure that instructors are equipped with the skills necessary to deal with any reasonably foreseeable and relevant occurrences at the venues used. This will often include training at the venues themselves and ideally should include at least some practical incident and accident scenarios and responses. An induction day with a real group could be followed by a day of training where optional exit points etc. could be explored or practised.

13. Identification of group competence - increasingly these activities are being offered as 'one-off' activities to a wide range of groups, from primary schools to corporate groups. A policy of identifying the competence, experience, special needs, physical and medical condition of the participants is advised. Particular attention may be needed to try to establish the water confidence and swimming ability of participants before undertaking activities which may result in them finishing up in deep, or moving water. As a result of identifying group competence it would be equally acceptable to either:
    (a) select the venue on the basis of the client group; *or*
    (b) select the client group on the basis of the venue.

14. Acknowledgement of risk - a policy on informing the participants of the nature and extent of risks, and what to expect from the activity is encouraged. This is particularly important where the participants may have no concept or prior knowledge of this type of activity. It may be unreasonable to expect a commercial provider to detail the hazards in their primary advertising. It may be reasonable, for example, to leave this information until the point of booking or even (in some cases) to the point of departure. The identification of risks should be clear, and allow realistic and uninhibited options to any participants who, as a result, wish to decline the activity.

15. Identification of venue options - it may be beneficial to have alternative venues or alternative start or finish points. In some cases the degree of difficulty or the duration of the trip or both can be determined by varying these. On the day, the most appropriate venue or variation on the venue could be used depending on factors such as the weather conditions, nature, experience and expectations of the group, the number and experience of staff available.

16. Alternative exits - some venues have a number of possible entry and exit points. Knowledge of the existence of these as escape routes and familiarity with the practicalities of using a range of these may have clear benefits, particularly if it becomes necessary or desirable to cut a trip

short. Some consideration should be given to any extra equipment which may be required for particular exits, ascents or indeed a retreat.

17. Grading Systems - some providers establish their own grading system to facilitate issues of venue selection etc. Some examples already exist. There may be some benefit in at least differentiating between 'wet' and 'dry' venues, 'technical' and' non-technical' venues, and escapable and inescapable venues.

18. Jumping into Water - on arrival at a planned jumping location it is advisable, particularly after flooding or for a new venue (or if in the sea, at a new stage of the tide) to carry out a reconnaissance. Depending on the location and proposed activity this could include, for example:

    a) Going down to water level to examine the exit from the water. It may be appropriate to practice the exit, to ensure that participants will be able to get out. Determine whether someone should be located there to assist with exiting, and whether they should have equipment (e.g. throw rope, pole or life belt/ring, etc.) to reach or throw to a swimmer in difficulty;
    b) Wade in and, if necessary, duck-dive to check the bottom for obstructions, depth, current, etc. It may be appropriate to be attached to a throw line etc. for this, although not if there is a strong current. A snorkel search might be considered at some venues;
    c) There may be considerable advantages if the participants also wade in as a trial, particularly if the activity will involve jumping in from a height. The shock of sudden immersion in cold water can be totally overwhelming;
    d) Careful consideration must be given to the height of the jump. It is recommended that if possible, participants start with lower jumps and are only allowed to progress to higher jumps if their technique is acceptable;
    e) Ledges and projections, etc.: If it is necessary to jump outwards in order to clear ledges and projections, or simply to reach the water, it is recommended that participants start with jumps which do not require this, so as to build up technique and confidence; and that they are not allowed to progress to the other jump until both are acceptable. Some ledges or projections may render the jump unsuitable for some or all participants.
    f) At the take off point for the jump, leaders should assess the possibility of being pulled off the ledge by a participant. They may find it necessary to secure themselves. This allows the leader to approach the edge to give assistance or support.

19. The unexpected 'panicker' - sometimes even strong swimmers will panic when they fall or jump into deep, cold water. They may not be able to help themselves and their violent actions can sometimes make rescue of them very difficult. It is good practice to anticipate this by:

    a) carrying out realistic scenario based training (in a controlled environment) on the importance and practicalities of reaching, throwing and wading rescues, particularly of struggling 'casualties'. In some situations a canoeing throw-bag may be appropriate, although its use would need to be practiced;

b) positioning a competent person where they can affect a rescue, preferably by reaching, throwing or wading;
c) have something immediately to hand with which to reach or throw to *any* point where participants may end up and still be in deep water.

20. Wild swimming - we all know that 'having a dip' in a mountain stream (as part of a hill-walk perhaps) is appealing to young and old alike. Whilst the very spontaneity of the activity in itself can be one of the hazards, with a little caution and fore-thought these hazards can generally be safely managed.

21. 'Wild swimming' in this context refers to planned or spontaneous swimming in streams, ponds, pools, etc. where any participant can be reliably rescued by any one of many non-swimming rescues (e.g. talk, reach, throw, wade, etc.). There are more to these techniques than just common sense. Even group management at the water margins is a skill which can be trained (and assessed) by someone with considerable expertise in this environment, although not necessarily any specific qualifications (swift-water rescue, life-saving, lifeguard qualifications, will all be relevant, but none fully cover the hazards in wild swimming which can be varied and site-specific).

22. The session should be as organized as any other 'adventure activity', with briefings and explanations. This offers a great opportunity to teach youngsters sensible risk awareness and risk management in a well-controlled environment.

23. Other topics in these notes will be relevant to the development of good 'personal safety awareness'; particularly 'pool jumping' and 'the unexpected panicker'. Similarly, sections such as the identification and management of hazards, leader competence and induction, group competence, and so forth, will help to develop a safe and systematic approach to one of outdoors' most wonderful adventure activities.

24. Forecast of conditions - a policy for obtaining and interpreting weather forecasts, water levels, sea state etc. is generally needed. It must be clear who is to do this, when it is to be done, and what action they will take for a range of possible forecasts. These could include, but may not be limited to, modification of the venue, change of venue, cancellation and/or return of payment. If the addition of an assistant instructor is the response then there must be a mechanism where-by a suitable person can be deployed in the given time span, etc.

25. Cut-off criteria - Each venue may require "cut-off" conditions or levels identifiable by leaders and/or management. Fluctuating and rising water levels will be particularly significant. Again the considerations of who, when and 'what do they do about it' apply here.

26. Plan B - Accidents have happened in the past when groups did not have an alternative plan in mind – something to do if the original plan of action

becomes impossible or ill-advised. *Not* having such a plan B can and has, resulted in the group going ahead even though they knew the conditions were far from ideal.

27. Identification of appropriate clothing and equipment -
    - personal - this may vary from day to day, and venue to venue. It will need to be clear who decides what is necessary for a particular group on a particular day e.g. choice of clothes and shoes and spare clothes;
    - group equipment - in a similar way it will be necessary for someone to identify what group equipment is necessary on a particular trip (including rescue or emergency items such as group shelters, throwlines, etc.) since this may also vary;
    - safety equipment. If a buoyancy aid is not used, greater care must be given to the eventuality of 'the unexpected panicker' (see section 19 above). A helmet may be appropriate in some narrow gorges for example.

    It will also need to be clear who checks it, when and where they do this, and what they do if it is not correct or acceptable.

28. Ratios - it will generally be appropriate to have a policy on ratios, maximum group size, use of assistants, etc. This should take account of group management difficulties associated with only having one instructor, which can arise at some venues. Similarly some providers find it useful to have two separate groups operating at the same venue and available to give mutual support if required.

29. Briefings - there will generally need to be a policy on the existence, content and presentation of a safety briefing. Participants should be advised on what they can do to help ensure their own safety. It may not be appropriate for instructors to deliver all relevant instructions in one briefing. Verbal communication at some venues can be very difficult. Providers should decide whether a system of hand signal is necessary and introduce this at an appropriate point.

30. Technical Advice - if the activity falls beyond the experience of management it would be advisable to get advice from one or more appropriately experienced and qualified person or persons. It may be necessary to determine 'appropriate' from first principles by considering the requirements of a particular venue. For example appropriate Technical Advisor(s) could be holders of the Mountain Instructor Certificate (MIC), Mountain Instructor Award (MIA), British Mountain Guide (BMG), Cave Instructor Certificate (CIC), one of the British Canoeing sea kayaking, surfing or white water rescue awards, Swift-water Rescue Technician, Surfing awards or other rescue experience and/or qualifications. The National Coasteering Charter's Guide's syllabus may be helpful. The choice will depend on the characteristics of the venue and the very specialised expertise of the individual.

31. In either event the Technical Advisor(s) should be able to offer useful, constructive advice on the activity including, amongst other things, staff competence, operating procedures, equipment, ratios, use of assistants, etc. as well as providing training and assessment.

32. The Licensing Service will generally require a Technical Advisor to compile a portfolio of relevant experience and past and current related qualifications.

33. First aid - specialised first aid, lifesaving and/or rescue skills may be necessary. Some of the lifesaving and rescue skills may be NGB based or developed through in-house training and assessment. It may be appropriate to include scenario-based training at the venues to be used in order to identify the problems as well as the solutions which particular venues may present. First aid considerations will generally include a procedure for rewarming cold participants and should take into consideration the nature of the venue, transport arrangements etc.

34. Appropriate first aid equipment will need to be carried in the group. At some venues it may be appropriate to have additional equipment (like spare clothes and hot drinks) available in, for example, a nearby vehicle.

35. Emergency action plans;
    - to guide staff at base - it is likely that this will need to be site specific. Who contacts whom? When and how does an over-due group become a 'stand-by for action'? When and how does it become 'action required' and what action, and by whom? Etc.;
    - to guide leaders in the field. Since a rapid response to a complex situation may be required the emergency action plan may well be used to guide an instructor's training.

36. Coast Guard – for coastal activities consideration should be given whether to notify the Coast Guard or similar emergency services. If so, it must be made clear what the emergency service and the provider are expected to do thereafter.

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