

Lessons Learned - from two managed caving incidents in Long Churn

Narrative

by the Lessons Learned Group

In May 2008, a group of young people and adults from an outdoor centre had to wait out a flash flood in Long Churn Cave, a popular 'beginners' cave system in the Yorkshire Dales. In October 2008 another group from another centre, quite some distance away, underwent the same ordeal in the same cave.

May 2008

On the first occasion thunderstorms had been forecast on two preceding days but had come to nothing. The weather forecast was similar on the morning of the day of the incident. The leader had been caving with another group elsewhere in the morning and chose to take this second group to Long Churn in the afternoon.

Unbeknown to the leader, the weather forecast had changed during the morning to give a severe weather warning for the Ingleborough area.

In the cave, the group were beginning their route out of the cave system and had been ascending Double Shuffle when noise upstream alerted the leader. They decided to retreat past Plank Pool and it was while they were doing this that a foot high wall of water came down what is normally a dry 'fossil' passage. The leader knew the cave system well and the group was able to get to a link passage where they waited away from the flood. In this passage water was estimated to be 45cms deep; in the main 'fossil' passage the water was a 55cm deep torrent. The leader checked on an alternative route out but saw that this was impossible.



Alum Pot



Middle Entrance Upstream

The Cave Rescue Organisation (CRO) had been called out to some walkers on the Ingleborough summit ridge who were scared by the severe thunderstorm and amount of water around them. These walkers were led off the hill. Rain hit the area around 14:45 hrs with some large hail and around 45 minutes of torrential rain. About 15:30 hrs a large number of surface streams and large land slips were visible in the catchment area of the Alum Pot and Long Churn cave systems. A pulse hit Dr Bannisters an hour after first rain, with peak cave at around 16:40 hrs. The Cave Rescue Organisation (CRO) was alerted that a minibus was still at the normal parking place (in dry conditions) and went up to the cave system to effect a rescue. They waited some time until the flood subsided before entering the cave and finding the group safe and well in the link passage.

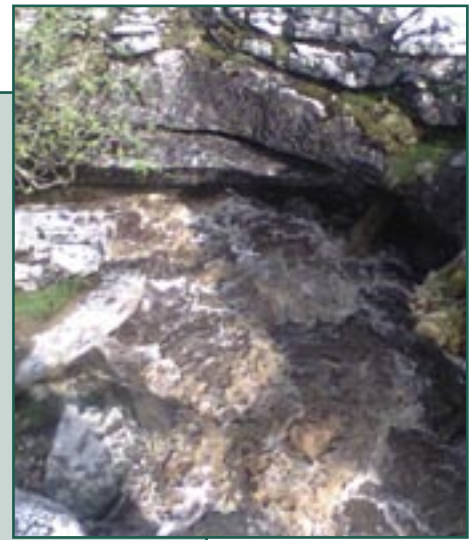
October 2008

In the second incident a weather forecast had been obtained in the morning, and its impact assessed throughout the journey to the Dales, based on what could be seen and the leader's knowledge of Long Churn. At the entrance the decision was finally to proceed.

The outcome of the second incident was almost identical to that of the first, although on the second occasion the leader opted to leave the group in order to try to find an alternative exit. Having failed to do so the leader was unable to return to the group. Again, only when the water level in the cave fell sufficiently were all concerned able to accompany the Rescue Team to the surface, safe and well.

Lessons Learned

1. It is good practice, in any activity, to monitor weather conditions over the days (and, in some cases, weeks) leading up to the event. This can be included in the educational experience for the participants – as part of their planning – and enables a picture of developing conditions to be seen. In some cases programme modification may result.
2. The importance of monitoring the weather forecast at key stages during the day, whenever possible, and especially during potential storm forecasts, cannot be over-emphasised. If travelling to the cave from a distance, or if out for the day and caving in the afternoon, there will be benefit in having some mechanism for checking weather forecast updates locally or for phoning back to the base/centre. Returning to base at lunch time also provides an important opportunity to re-check on weather forecast updates before caving in the afternoon.
3. Lead staff should know the flooding mechanisms and potential severity of floods in all caves used. That is, know which parts flood first, what the first signs will be, and what is likely to happen next. If in any doubt leaders should clearly err on the side of caution.
4. Lead staff should know the cave systems well, to ensure knowledge of 'safe' areas and alternative exits in the event of flooding. Knowledge of which parts of the cave system would be difficult to exit in the event of flooding is also crucially important.
5. Late-back procedures should be standard for this sort of activity, although in both cases here Cave Rescue was notified by other means. In cases of a prolonged delay before returning to base a 'safely out' call to base would cause the procedure to kick in more quickly.
6. A prepared and practised action plan in the event of flooding, based at least in part on 1. and 2. above, may prove invaluable.
7. Clothing worn by the group, such as one-piece fleece suits under proper caving overalls will make unplanned delays underground more tolerable.
8. Always have a plan B rather than reduce safety margins by entering caves with young people in marginal or potential flood conditions. ■



Upper Entrance



Tide Mark



View Towards Caves

The Lessons Learned Group is a small group of professionals and enthusiasts in adventure activities, brought together by a common aim to incorporate any lessons that can be learned from accidents into ongoing good practice.

Our intention is to present an objective summary of an incident together with possible lessons. We do not aim to allocate blame or responsibility and our report represents the views of the individual members of LLG and not of any official body.

Information not currently available to us may render our comments inaccurate and the lessons identified may or may not have influenced the actual outcome. Any report published has been agreed by at least four individuals within the Group as meeting these aims.

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