

Leeds University Union Caving Society  
University of Leeds Speleological Association



# Caving Risk Assessment

*January 2019*

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## Foreword

This Risk Assessment has been developed for the activities undertaken by members of the University of Leeds Speleological Association (ULSA) and the Leeds University Union Caving Society (LUUCaS) whilst undertaking all aspects of ULSA caving trips. This includes all activities that are specifically organised by members of ULSA such as actual caving activities as well as transportation and residential activities (i.e. cooking). Therefore, for the purposes of this risk assessment, the range of activity has been broken down into the following groups:

- Training
- Caving
- Transportation
- Residential

It should be noted that LUUCaS members are also ULSA members under the ULSA Constitution and therefore, from this point forward, the pre-fix “ULSA” will be used to identify all members of ULSA and LUUCaS.

## Document Development and Distribution

Version	Authors	Distribution	Date	Notes
V1_2003	Sam Allshorn Jon Watt Jon Haynes	Leeds University Union ULSA Virtual Library	2003	N/A
V2_2014	Matthew Day Holly Bradley	Leeds University Union ULSA Virtual Library	September 2014	N/A
V3_2019	Michael Brigham	Leeds University Union	22/01/19	Checked over and reformatted

## Introduction

The University of Leeds Speleological Association (ULSA), of which members of the Leeds University Union Caving Society (LUUCaS) are also members, provides training to all members to enable them to cave safely underground, and organises trips where members are able to go and put their skills into practice.

Training sessions include the delivery of technical caving techniques to include ladders and rope work, as well as providing an understanding of basic underground safety such as preventing hypothermia. These training sessions are held at the Edge Climbing Wall every Tuesday and Friday from 8pm to 10pm during term times and a separate risk assessment has been delivered to cover the risks associated with these activities.

ULSA partakes in caving activities across the British Isles and beyond, usually within Europe. This risk assessment identifies and assesses the risks that could occur whilst undertaking all aspects of caving within the European boundary, and other surface activities associated with the delivery of these trips (such as transportation). This assessment includes measures and precautions that will be implemented to make all aspects of ULSA caving trips as safe as possible. The principles of caving safely will be instilled to all members as part of all training sessions and caving trips to ensure all members cave safely through a mechanism that instinctive but also recognises responsibility at all levels of experience.

It is recommended that where an ULSA caving trip takes place outside of Europe then a separate risk assessment is carried out to identify and address risks that may not be included here.

This document does not provide any form of instruction of how to carry out these activities and is not designed to do so.

For the purposes of this risk assessment the term 'ULSA resources' has been used to describe sources of information that should be used when organising caving trips or to further members' knowledge or skills. These ULSA resources include the ULSA library (Edward Boyle Level 8), ULSA virtual library found on the ULSA website, or through communicating with experienced members by the ULSA mailing list, ULSA forum or directly to members using the ULSA address book on the ULSA website.

Where the term 'personnel' has been used, this refers to all parties involved in the activity.

'Experienced members' define those members who have been caving previously and can provide assistance to other members, whether physically during a trip or through provision of information about a particular trip or technique. This is further left undefined due to the inherent complications on defining how experienced a member is. For instance, one caver may have a lot of knowledge about a number of caves gained from guidebooks, which in itself is invaluable, but may not be a physically strong caver. Whereas another may be technically skilled with ropes and rescue techniques, but have limited understanding of the caves of South Wales. Neither members are inexperienced. It is an understanding of individuals' capabilities and short comings. ULSA is a strong club in this respect due to the number of experienced members that remain caving in the club after graduating and remain in contact with the club via the email groups.

When caving experienced members will ensure the safety of the whole team. However, all individuals are responsible for their own safety and will be expected to conduct all activities within the guidelines of this Risk Assessment and the Inductions. A level of common sense is expected of all participants and all individuals involved must deliver a duty of care to each other.

<sup>1</sup>Caving and Single Rope Techniques Training Risk Assessment, November 2018

<sup>2</sup><http://www.ulsa.org.uk/pubs/virtual/index.php>

## Risk Rating and Classification

This methodology takes into account the University of Leeds guidance on developing Risk Assessments: <http://www.leeds.ac.uk/safety/risk/guidance.htm>

For each risk identified, an assessment has been carried out to identify a Risk Score, which then relates to whether the risk is Low, Medium or High. The risk score is based on assessing the consequence of a risk against the probability of it occurring. The table below identifies the Consequence Levels used, a definition of each level and the associated score.

Consequence Scoring Guide		
Level	Definition of the hazard using the greatest potential consequence	Score
Nil	Very minor injuries not requiring first aid, such as bruises.	1
Slight	Minor injury which requires first aid, such as loss of blood from a cut.	2
Moderate	Injury is not life-threatening, however personnel requires a visit to hospital in addition to first aid.	3
High	Major injury which results in long-term damage or death.	4
Very High	Multiple deaths.	5

The table below identifies the Probability Level used, a description of the chance of each level occurring and the associated score.

Probability Scoring Guide		
Level	The chance of the hazard being involved in an occurrence, resulting in its greatest potential consequence	Score
Highly Unlikely	Does not occur in this type of activity. It would require an extraordinary unplanned, unforeseeable event(s) for any chance of occurrence.	1
Unlikely	This incident may occur.	2
Possible	An occurrence may occur if additional factors precipitate it, but it is unlikely to occur without them.	3
Highly Likely	An occurrence will happen, which may be affected by additional factors, but is still likely to occur without them.	4
Inevitable	Certainty that an incident will occur.	5

The Risk Score is calculated by multiplying the Consequence Score and the Probability Score together. The resulting Risk Score is then given a Risk Rating of Low, Medium or High Risk, as shown by the table below.

Risk Score and Risk Rating Assessment									
<b>Consequence Score</b>	<b>5</b>	5	10	15	20	25		<b>Risk Score</b>	<b>Risk Rating</b>
	<b>4</b>	4	8	12	16	20		1 to 5	Acceptable
	<b>3</b>	3	6	9	12	15		6 to 10	Moderate
	<b>2</b>	2	4	6	8	10		11 to 15	High
	<b>1</b>	1	2	3	4	5		16 to 25	Unacceptable
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>			
	<b>Probability Score</b>								

The risk assessment has been carried out using the method discussed above. Firstly an initial Risk Score is evaluated which considers the activities being carried out without any precautions or control measures in place to provide a worst case scenario. The precautions and control measures that will be implemented are then identified and the Risk Score is re-evaluated to demonstrate the importance and effectiveness of the precautions and control measures used.

Should the final Risk Rating for any risks be identified as High or Unacceptable, then the associated activity will not take place until appropriate precautions/control measures have been identified and implemented.

## Risk assessment

Risk	Description of Potential Harm or Injury	Pre-Mitigation Risk				Mitigation, Precautions and control Measures to Reduce the Potential Risk	Residual Risk				Comments
		Consequence	Probability	Risk Score	Potential Risk		Consequence	Probability	Risk Score	Potential Risk	
<b>Training</b>											
All training activities		See ULSA Caving and Single Rope Techniques Training Risk Assessment. This separate Risk Assessment covers all activities related to training at the Edge Climbing Wall.									
Risk	Description of Potential Harm or Injury	Pre-Mitigation Risk				Mitigation, Precautions and control Measures to Reduce the Potential Risk	Residual Risk				Comments
		Consequence	Probability	Risk Score	Potential Risk		Consequence	Probability	Risk Score	Potential Risk	
<b>Caving</b>											

<p>Becoming cold during trips where the caves are cold and/or from getting wet.</p>	<p>Can lead to exhaustion and hypothermia.</p>	<p>5</p>	<p>3</p>	<p>15</p>	<p style="text-align: center;"><b>High</b></p> <p>Experienced members will communicate the importance of keeping warm with their team through the use of appropriate clothing, movement and provision of sufficient food for the duration of the trip. Experienced members in each team will encourage their team members to keep moving and communicate the importance of letting each other know when they are getting cold and tired. A list of appropriate clothing is found in ULSA Caving Without Tears, which is available to all members via the ULSA virtual library. Experienced members can refuse to take inappropriately dressed persons underground. Taking extra clothing on a trip will be encouraged, particularly when undertaking low movement</p>	<p>5</p>	<p>2</p>	<p>10</p>	<p style="text-align: center;"><b>Moderate</b></p>	<p>The probability is lowered due to the provision of the control measures, however even with the precautions in place becoming cold can still occur, particularly in UK caves. However using appropriate precautions and mitigation measures such as survival bags/group shelters, food and extra clothing, reduces the consequence of an occurrence.</p>
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				<p>activities such as surveying.</p> <p>Specialist clothing may be required, such as wetsuits for swimming in out of depth water for long periods, which is detailed within Caving Without Tears.</p> <p>Personal survival bags and/or a group shelter will be carried and the ULSA call out procedure will be followed..</p> <p>Group numbers will be appropriate to the nature of the cave and the numbers of experienced members.</p> <p>Dependent on the cave large group numbers can slow the trip down and cause members to become cold.</p>				
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<p>Becoming fatigued/ exhausted and dehydrated.</p>	<p>Too exhausted to exit the cave, as well as inability to keep warm leading to hypothermia. Becoming stuck on a rope due to exhaustion leading to sit harness syndrome</p>	<p>5</p>	<p>3</p>	<p>15</p>	<p style="background-color: red; color: white; text-align: center;">High</p> <p>All cavers will carry a personal supply of food and water sufficient for the trip. The trip will move at a pace manageable for the slowest caver and within their capabilities. Rest stops will be provided throughout the trip. Before going underground the experienced members on the trip will communicate with the entire group the importance of speaking out when cold and/or tired and to turn the trip around if necessary. All members of the trip will help their team members and look out for signs of tiredness in their other team members. If any caver is suffering severe exhaustion/fatigue then they are not to engage in any unassisted rope work.</p>	<p>5</p>	<p>2</p>	<p>10</p>	<p style="background-color: orange; text-align: center;">Moderate</p>	<p>The probability is lowered due to the provision of the control measures. However even with the precautions in place becoming tired is still common when caving. Through sufficient food and water, group communication and vigilance throughout the trip by everyone in the team, the consequence of an occurrence will be reduced.</p>
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<p>Becoming separated and/or Lost on the moor between cave and transport</p>	<p>Similar injuries/harm as hiking to include minor injuries from slips, trips and falls, hypothermia, dehydration and exhaustion.</p>	<p>5</p>	<p>4</p>	<p>20</p>	<p style="text-align: center;">Unacceptable</p> <p>Information on the location of the cave the route between the cave and transport will be obtained using the ULSA resources. Where routes are long and or complicated or bad weather conditions are likely, then a map and compass will be used. (GPS are also useful if any members of the club have these). Whistles will be carried and the ULSA call out procedure followed. The weather forecast will be checked in the morning before the trip. If necessary the trip will be changed or abandoned. Walking to the cave will proceed at the pace of the slowest team member and the team will remain together at all times. Survival equipment will be carried, such as survival bags and/or group shelter. Sufficient food and water will be carried for the</p>	<p>5</p>	<p>2</p>	<p>10</p>	<p style="text-align: center;">Moderate</p>	<p>With the precautions in place serious injury is unlikely, however minor hiking injuries can happen but are not a regular occurrence. In most cases, clothing appropriate for caving will also be sufficient for the walk to and from the cave. There are occasions when cave entrances may be difficult to locate and in some instances the entrance may not be found. The caving team therefore need to exercise common sense when route finding by ensuring that they can retrace their steps to return to their vehicles. This assessment considers locating cave entrances at altitudes below 3000m. Where routes to caves could be more difficult, such as requiring the use of</p>
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					entire group, that will cover the both the caving trip and the route to and from the vehicles and the cave.				specialised mountaineering equipment, then a separate risk assessment will be carried out. These are rare and would be associated with an overseas expedition.
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<p>Becoming separated and/or lost in a complex underground system</p>	<p>As well as inducing stress and panic, serious injuries could result from hypothermia, exhaustion, dehydration and slips/trips and falls.</p>	<p>4</p>	<p>3</p>	<p>12</p>	<p>High</p> <p>Members should not cave individually and teams should constantly check that all members of the team are together. A designated member should be at the back of the group to round people up. To prevent against becoming lost the team members must make use of guidebooks, cave descriptions and surveys available via the ULSA resources. Use of common sense and acknowledging the routes taken during a trip so that the team can retrace their steps where necessary, is expected.</p>	<p>4</p>	<p>2</p>	<p>8</p>	<p>Moderate</p> <p>It should be noted that if a team does not know the way onwards, this does not mean that the team is lost. Many caving trips require more than one trip in order to find the route through the system. Cavers should exercise common sense when reading the descriptions and surveys and working out routes and remembering the way they have come. If in doubt members should take their time and turn around when necessary (such as when cold, or to meet call out procedure) than press on and risk becoming lost, exhausted, dehydrated, hypothermic and/or miss call out times.</p>
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<p>Out-of-depth water leading to drowning where cavers are exhausted or cannot swim.</p>	<p>Serious injury and death</p>	<p>4</p>	<p>3</p>	<p>12</p>	<p>High</p> <p>Information on the trip in question will be gathered from the ULSA resources. This information will be communicated to all team members to provide them with the opportunity to raise concerns and drop out if necessary. Experienced members will ensure all members can swim where there may be out of depth water. Appropriate clothing to be worn for wet trips, including wetsuits and use of buoyancy aids where required. When carrying tackle sacks and equipment through out-of-depth sections these will not be attached to cavers and will contain floats where possible.</p>	<p>4</p>	<p>2</p>	<p>8</p>	<p>Moderate</p>	<p>This type of incident has a high consequence, ultimately resulting in death however the precautions in place mean that it is unlikely to occur.</p>
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Flooding	Trapped underground by rising water, fast flowing streams and drowning.	5	4	20	<p style="text-align: center;">Unacceptable</p> <p>Prior knowledge of how the cave responds to rises in surface water levels will be gathered using the ULSA resources. Unless stated otherwise, it should be assumed that the cave may flood, particularly where a streamway is present. The weather reports will be checked on the morning of the caving trip, as well as taking into consideration the current surface water levels for that day. Even if there is no rain forecast for that day, existing high water levels will impact on the safety of the trip. Do not enter system if conditions are unfavourable. Prior to the trip commencing the experienced members will explain what the cave will entail including where swimming is necessary to ensure all members can swim.</p>	4	2	8	<p style="text-align: center;">Moderate</p>	The potential risk is high due to the consequence scoring 5 where multiple deaths could occur. However the precautions in place result in such deaths being unlikely to occur where by checking weather forecasts and current water levels will prevent personnel from entering flood prone caves.
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					Rigging of ropes and ladders will be as far away from waterfalls as possible. In the instance that water levels rise and cover ropes and ladders, cavers will not ascend/descend pitches until water levels recede.						
Becoming physically stuck in a constricted area	From minor injuries such as scratches and bruising to major injuries, including broken bones and dislocation, and in the extreme circumstances, restricted breathing and lack of oxygen having the potential to suffocate the caver.	4	3	12	High	Preparation of what to expect during trips using guidebooks and other ULSA resources. Ensure all members of the party are aware of the technical difficulties of the trip. Cavers should not force themselves through technical difficulties if they feel constricted. If a caver feels like they will become stuck then stop advancing to prevent further constriction.	4	2	8	Moderate	The overall consequence is lowered in the residual risk as cavers who feel physically stuck will stop moving forwards to prevent becoming further constricted. This is inherently natural as where cavers start to feel stuck they will back-up rather than proceed. This will also be advised by the experienced members on the trip. Therefore it is also unlikely that an occurrence will occur.

Light Failure	Results in the caver(s) not being able to see and unable to exit cave safely due to lack of light. Serious injury could occur if caver attempts to continue exiting cave, or hypothermia if caver needs to wait for assistance.	5	3	15	High	Spare batteries and spare lights to be carried in the group. Encourage individuals to purchase their own spare lighting. The only appropriate lighting source is one that leaves both hands free. Cavers should cave in teams and not individually. Appropriate clothing should be worn and survival bags or group shelter should be carried in case a long wait is needed. The ULSA call out procedure will be followed.	5	1	5	Acceptable	The consequence and probability is lowered here as it is highly unlikely, if caving as part of a team that all lights will fail. Furthermore setting a call out will ensure assistance is sent in the unlikely event that the entire team's lights fail.
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Falling rock landing on caver	Serious injury or death	5	4	20	<p style="text-align: center;">Unacceptable</p> <p>Information on what the trip will entail will be gathered prior to undertaking the trip using the ULSA resources (guidebooks and experienced members). Technical aspects will be communicated to all team members, including the associated risks and how to manage these risks. For loose rocks this includes:  x Careful rigging x  Cavers are to wait well away from pitch heads and base of pitches to avoid knocking rocks down or having rocks landing on them.  x Only one person on a loose section (such as a boulder choke) or pitch at a time. x Should any rocks fall down a pitch at any time then this is communicated rapidly by shouting 'below'. All cavers will be made aware of this call and when to use it.  x Use of appropriate UIAA helmets.</p>	5	2	10	<p style="text-align: center;">Moderate</p>	This incident may still occur, particularly in caves that have sections where there is loose rock. However understanding the risk and taking the precautions necessary will lessen the consequence as well as the likelihood of such an incident from occurring.
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					Furthermore, caving trips will be chosen based upon the capabilities and experience of the cavers on the trip. Caves with abundant loose rock tend to be deemed as more difficult trips, due to the inherent dangers associated and the need to cave carefully in these sections.				
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<p>Poor air quality</p>	<p>Lack of oxygen leading to dizziness, feeling sick, serious injury or death</p>	<p>5</p>	<p>2</p>	<p>10</p>	<p style="text-align: center;">Moderate</p> <p>Prior knowledge of the trip should be gained using ULSA resources, but even more importantly in this instance is the use of experienced members knowledge and keeping up to date with reports from magazines and forums where there may be warnings for specific caves. Through training, cavers will be made aware of areas where poor air quality is likely such as where there is a lack of flowing air including air bells between sumps and digging fronts. Symptoms relating to lack of oxygen should be understood by experienced members leading the trips and communicated to all those present on the trip. Cavers will turn back as soon as any symptoms appear.</p>	<p>5</p>	<p>2</p>	<p>10</p>	<p style="text-align: center;">Moderate</p> <p>Most caving trips will be to well ventilated caves. Caving trips with poor air quality are not common and are generally associated with a certain part of a cave, rather than the cave in its entirety. Cavers attempting such trips will be experienced and will have an understanding of where to expect such conditions, the symptoms and how to manage the risks. It is unlikely that cavers will undertake trips where escape from low air flow areas is not possible.</p>
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<p>Uneven terrain, sudden drops and falling off a free climb, leading to slips, trips and falls.</p>	<p>From minor injuries including scratches and bruises to serious injuries or death.</p>	<p>4</p>	<p>4</p>	<p>20</p>	<p style="text-align: center;">Unacceptable</p> <p>Information on what the trip will entail will be gathered using ULSA resources and the technical aspects of the trip will be communicated with all members of the caving team.</p> <p>The pace of the trip will be set by the slowest persons and any difficult obstacles will be approached carefully and slowly. Those members seeming to have problems overcoming obstacles will either be assisted by experienced members or through the use of appropriate equipment. If problem persists then the team will turn around.</p> <p>Where required the appropriate equipment will be used to overcome obstacles including a travelling rope.</p> <p>When free climbing is required the experienced members will be considered the capabilities of the group and the</p>	<p>4</p>	<p>2</p>	<p>8</p>	<p style="text-align: center;">Moderate</p>	<p>Free climbing up or down short climbs is common in caving, where the climb is considered easy and does not require the use of ropes or other equipment.</p> <p>Awareness of the capabilities of the whole group, taking care when climbing and providing assistance to those who need it will reduce the likelihood of an incident occurring.</p>
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					difficulty of climb(s) in question. Where necessary travelling lines will be used. All members will wear appropriate UIAA helmets.				
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Failure of insitu gear	Broken/ fractured bones, knocked unconscious from fall, death. Falling onto personnel below causing major injury. Those at bottom of the pitch are trapped	4	3	12	<div style="background-color: red; color: white; text-align: center; padding: 5px;">High</div> <p>Those with rigging experience will check anchors and in-situ rope prior to descending. If fixed aids are not safe they are not to be used. Keep up to date by checking forums etc, for warnings about fixed anchors (as well as other issues). Ensure club members are aware of any issues using the group emails, Facebook page and ULSA newsletter. If in any doubt about the condition of insitu gear, it should not be used and that section should be re-rigged using club gear or the trip abandoned. The ULSA call out procedure will be followed and survival bags/group shelter will be carried should there be any need to wait for assistance.</p>	4	2	8	<div style="background-color: yellow; text-align: center; padding: 5px;">Moderate</div>	Always inspecting equipment prior to use will significantly reduce likelihood of failure. The Council of Northern Caving Clubs (CNCC) are responsible for the installation and maintenance of anchors and are trained to do so. Any suspect gear should be reported to them immediately.
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Personnel falling from height due to incorrect use of equipment	Broken/fractured bones, knocked unconscious from fall. Falling onto personnel below causing major injury.	4	3	12	High	Inexperienced members will be supervised, and personnel will not use techniques underground until they have shown competence in using the specific technique during training sessions. Cavers will wait well away from the base of the pitch.	4	2	8	Moderate	All trip leaders and those supervising new members will have shown competence as detailed in the ULSA training guide.
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<p>Falling from height due to failure of equipment</p>	<p>Broken/ fractured bones, knocked unconscious from fall. Falling onto personnel below causing major injury.</p>	<p>4</p>	<p>3</p>	<p>12</p>	<p style="text-align: center;">High</p> <p>Equipment will be checked on a regular basis to ensure all ropes, ladders, rigging and SRT equipment is safe to use. This will be carried out using the ULSA Equipment Safety Check Guide. During trips those rigging and using equipment will also double check the equipment is safe to use prior to use. Experienced members will check the SRT equipment of the inexperienced members in their team. Trip leaders and those with their own equipment will be responsible for ensuring the safety of it. Personnel will be trained how to check equipment, and any defect should be immediately reported to the trip leader or tackle master. Cavers will wait well away from the base of the pitch.</p>	<p>4</p>	<p>1</p>	<p>4</p>	<p style="text-align: center;">Acceptable</p>	<p>Regular checks of equipment will ensure that only equipment deemed to be safe is used for any caving activity.</p>
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Equipment falling from height	Equipment, in particular tackle sacks, being dropped from height and landing on personnel below.	4	4	16	Unacceptable Cavers will wait well away from the base of pitches. Equipment will at all times be securely attached to harnesses prior to using the rope. Tackle sacks will be securely clipped to harnesses and hauling cords will be checked prior to use. Use of appropriate UIAA helmets, which will be fastened securely.	4	2	8	Moderate	Moving away from the top and bottom of pitches when not on the rope will prevent equipment being dropped on those below.
Trapping fingers, hair or clothing in equipment	Minor injury and inability to descend the ropes	2	4	8	Moderate Trip leaders will ensure all group members have their hair tied back. Members will be trained how to use equipment properly which will reduce the likelihood of trapping fingers into moving parts. At least one knife should be carried on all trips.	2	2	4	Acceptable	Even with the precautions in place, it is possible that hair can still become trapped, especially if long. Carrying knives will ensure all personnel can be freed and descend from the rope safely. As personnel gain experience they will be encouraged to carry a knife for this purpose.

Slips, trips and falls (not from height)	Minor injury resulting from tripping over equipment, ropes and rocks. Could have the potential for a visit to the hospital (i.e. broken/sprained ankle).	3	4	12	High	The trip will move at a speed appropriate to the terrain and the ability of the group, allowing cavers to be aware of their surroundings and obstacles to be safely negotiated. Groups will move with sufficient spacing so that a slip does not injure multiple persons, and hands will be kept free to break a fall.	3	2	6	Moderate	Slips, trips and falls are common in everyday life and the risk of occurrence cannot be reduced further. It is therefore important to carry group shelters and first aid kits to manage any occurrence and prevent a minor incident becoming serious (such as hypothermia from waiting for assistance).
Risk	Description of Potential Harm or Injury	Pre-Mitigation Risk				Mitigation, Precautions and control Measures to Reduce the Potential Risk	Residual Risk				Comments
		Consequence	Probability	Risk Score	Potential Risk		Consequence	Probability	Risk Score	Potential Risk	
<b>Transportation</b>											

Road Traffic Collision	Whiplash, major injury or death.	5	3	15	High	<p>Only vehicles that are legally road worthy will be used and only allow qualified drivers to drive. Be aware of road conditions and modify driving accordingly. Always obey the highway code.</p> <p>Do not drive when tired. This is of main concern after a long caving trip, where drivers may be tired after a long and active day. If tired drivers should consider staying at a nearby caving hut, or at least have rest stops.</p>	5	2	10	Moderate	All members are expected to drive in accordance with UK and European laws including wearing seatbelts at all times.
Risk	Description of Potential Harm or Injury	Pre-Mitigation Risk				Mitigation, Precautions and control Measures to Reduce the Potential Risk	Residual Risk				Comments
		Consequence	Probability	Risk Score	Potential Risk		Consequence	Probability	Risk Score	Potential Risk	
<b>Residential</b>											

Food Poisoning	Sickness and diarrhea from eating poorly prepared food. Allergic reactions.	3	3	9	Moderate	Wash hands immediately before preparing food. Always cook meats thoroughly. Ensure one member of the group has a Food Hygiene certificate. Personnel organising meals should ensure dietary requirements are sought before the trip. However, a level of common sense is expected from all members and those with allergies are also responsible for checking the meals before consuming and to bring medication to all trips.	3	2	6	Moderate	If in doubt about preparation, seek advice from a member with a Food Hygiene certificate.
Cuts/ Burns	Minor injuries obtained whilst preparing food.	2	3	6	Moderate	Ensure cooking area is not overcrowded. Care will be taken at all times. And appropriate protection will be used when handling hot items.	2	2	4	Acceptable	Burns will be immediately run under cold water, and appropriate first aid applied.

## Conclusions

All best efforts have been made to ensure that this risk assessment is comprehensive and accurate. It demonstrates that all risks associated with ULSA caving trips, including surface related risks as well as underground risks, are acceptable or moderate. This is achieved through the implementation of appropriate precautions and safety measures. To ensure these precautions and safety measures are implemented appropriately, the following reports and guides are available, and the procedures held within will be implemented as part of the training regime:

- EDGE Climbing Wall Induction
- ULSA Training Wall Induction
- ULSA Training Guide
- ULSA Training Log
- ULSA Caving Without Tears

## Recommendations

This risk assessment, as well as those documents listed above, are made available to all ULSA members via the ULSA virtual library and all members should read and be aware of their contents.

The risk assessment and all other documentation must be reviewed and updated on an annual basis, as a minimum.

## Committee approval

Document approved for publication by LUUCaS Committee

President: Adam Aldridge

Signed: 

Date: 22/01/19

Secretary: Michael Brigham

Signed: 

Date: 22/01/19

Treasurer: Brendan Hall

Signed: 

Date: 22/01/19