|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk Assessment** | | | | |
| **Risk Assessment for the activity of** | **Southampton University Caving Club**  Caving, Socials, Meetings, Cash handling, Promotional stand e.g. Bunfight | | **Date**  02.06.21 | **Last review date**  23.04.20 |
| **Unit/Faculty/Directorate** | **SUSU [SUCC]** | **Assessor** | Thomas Green (Secretary) | |
| **Line Manager/Supervisor** | Amy Kelt (President) | **Signed off** |  | |

| ***PART A*** | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **(1) Risk identification** | | | **(2) Risk assessment** | | | | **(3) Risk management** | | | |
| **Hazard** | **Potential Consequences** | **Who might be harmed**  **(user; those nearby; those in the vicinity; members of the public)** | **Inherent** | | |  | **Residual** | | | **Further controls (use the risk hierarchy)** |
| **Likelihood** | **Impact** | **Score** | **Control measures (use the risk hierarchy)** | **Likelihood** | **Impact** | **Score** |
| **Caving trips** | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Becoming cold during trips where the caves are cold and/or from getting wet. | Can lead to exhaustion and hypothermia. | Cavers | 5 | 3 | 15 | * 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. * A list of appropriate clothing is found on the SUCC website, which is available to all members at <http://caving.susu.org/home>. Experienced members can refuse to take inappropriately dressed persons underground. * Taking extra clothing on a trip will be encouraged, particularly when undertaking low movement activities such as surveying. Specialist clothing may be required, such as wetsuits for swimming in out of depth water for long periods. * Group numbers will be appropriate to the nature of the cave and the numbers of experienced members. Dependent on the cave large group numbers can slow the trip down and cause members to become cold. | 2 | 2 | 4 | * 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. * Using appropriate precautions and mitigation measures such as survival bags/group shelters, food and extra clothing, reduces risk |
| Becoming fatigued/ exhausted and dehydrated. | 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 | Cavers | 5 | 3 | 15 | * 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 * If any caver is suffering severe exhaustion/fatigue then they are not to engage in any unassisted rope work. | 2 | 2 | 4 | * 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, cavers are less likely to become fatigued |
| Becoming separated and/or lost on the moor between cave and transport | Similar injuries/harm as hiking to include minor injuries from slips, trips and falls, hypothermia, dehydration and exhaustion. | Members | 5 | 4 | 20 | * Information on the location of the cave the route between the cave and transport will be obtained using the SUCC 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 SUCC 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 entire group, that will cover the both the caving trip and the route to and from the vehicles and the cave. | 3 | 2 | 6 | * 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 specialised mountaineering equipment, then a separate risk assessment will be carried out. These are rare and would be associated with an overseas expedition. |
| Becoming separated and/or lost in a complex underground system | As well as inducing stress and panic, serious injuries could result from hypothermia, exhaustion, dehydration and slips/trips and falls. | Cavers | 4 | 3 | 12 | * 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 SUCC 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. | 2 | 2 | 4 | * 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. |
| Deep water leading to drowning where cavers are exhausted or cannot swim | Serious injury or death | Cavers | 4 | 3 | 12 | * Information on the trip in question will be gathered from the SUCC 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. | 4 | 2 | 8 | * + Water bodies in caves often have guide ropes to ensure cavers do not get swept away by currents |
| Flooding | Trapped underground by rising water, fast flowing streams and drowning. | Cavers | 5 | 4 | 20 | * Prior knowledge of how the cave responds to rises in surface water levels will be gathered using the SUCC 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. * 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 | 5 | 2 | 10 | * + The potential risk is high due to the consequence scoring 5 where multiple deaths could occur.   + Deaths unlikely to occur whereby checking weather forecasts and current water levels will prevent personnel from entering flood prone caves. |
| 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. | Cavers | 4 | 3 | 12 | * Preparation of what to expect during trips using guidebooks and other SUCC 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. | 2 | 2 | 4 | * + 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. | Cavers | 5 | 3 | 15 | * 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 SUCC call out procedure will be followed. | 1 | 1 | 1 | * + 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. |
| Falling rocks landing on caver | Serious injury or death | Cavers | 5 | 4 | 20 | * Information on what the trip will entail will be gathered prior to undertaking the trip using the SUCC resources (guidebooks and experienced members). Technical aspects will be communicated to all team members, including the associated risks and how to manage these risks. * Careful rigging: Cavers are to wait well away from pitch heads and base of pitches to avoid knocking rocks down or having rocks landing on them. * Only one person on a loose section (such as a boulder choke) or pitch at a time. * 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. * Use of appropriate UIAA helmets. * 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. | 4 | 2 | 8 | * + A common incident in terms of small rocks.   + Well explored caves unlikely to have many loose rocks |
| Poor air quality | Lack of oxygen leading to dizziness, feeling sick, serious injury or death | Cavers | 5 | 2 | 10 | * Prior knowledge of the trip should be gained using SUCC resources, but even more importantly in this instance is the use of experienced member’s 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. | 2 | 2 | 4 | * 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. |
| Uneven terrain, sudden drops and falling off a free climb, leading to slips, trips and falls. | From minor injuries including scratches and bruises to serious injuries or death. | Cavers | 4 | 4 | 16 | * Information on what the trip will entail will be gathered using SUCC resources and the technical aspects of the trip will be communicated with all members of the caving team. * 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. * Where required the appropriate equipment will be used to overcome obstacles including a travelling rope. When free climbing is required the experienced members will considered the capabilities of the group and the difficulty of climb(s) in question. Where necessary travelling lines will be used. * All members will wear appropriate UIAA helmets. | 4 | 2 | 8 | * 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. 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. |
| Failure of in-situ gear | Broken/ fractured bones, knocked unconscious from fall, death.  Falling onto personnel below causing major injury.  Those at bottom of the pitch are trapped | Cavers | 4 | 3 | 12 | * 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, and Facebook page. * If in any doubt about the condition of in-situ gear, it should not be used and that section should be re-rigged using club gear or the trip abandoned. * The SUCC call out procedure will be followed and survival bags/group shelter will be carried should there be any need to wait for assistance. | 4 | 2 | 8 | * Always inspecting equipment prior to use will significantly reduce likelihood of failure. The Council of Southern * Caving Clubs (CSCC) are responsible for the installation and maintenance of anchors and are trained to do so. Any suspect gear should be reported to them immediately. |
| Falling from height due to improper use of equipment | Broken/ fractured bones, knocked unconscious from fall.  Falling onto personnel below causing major injury. | Cavers | 4 | 3 | 12 | * 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 | * All trip leaders and those supervising new members will have shown competence. |
| Falling from height due to failure of equipment | Broken/ fractured bones, knocked unconscious from fall.  Falling onto personnel below causing major injury. | Cavers | 4 | 3 | 12 | * Equipment will be checked on a regular basis to ensure all ropes, ladders, rigging and SRT equipment is safe to use. * 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. | 4 | 1 | 4 | * Regular checks of equipment will ensure that only equipment deemed to be safe is used for any caving activity. |
| Equipment falling from height | Equipment, in particular tackle sacks, being dropped from height and landing on personnel below. | Cavers | 4 | 4 | 16 | * 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. | 3 | 2 | 6 | * 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 | Cavers | 2 | 4 | 8 | * 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 | * 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). | Cavers | 3 | 4 | 12 | * 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 | * 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). |
| Residential-Food poisoning | Sickness and diarrhea from eating poorly prepared food. Allergic reactions | Members on trip | 3 | 3 | 9 | * 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 | * If in doubt about preparation, seek advice from a member with a Food Hygiene certificate. |
| Residential-Cuts/burns | Minor injuries obtained whilst preparing food. | Members on trip | 2 | 3 | 6 | * Ensure cooking area is not overcrowded. Care will be taken at all times. And appropriate protection will be used when handling hot items. | 2 | 4 | 4 | * Burns will be immediately run under cold water, and appropriate first aid applied. |
| Transport-travelling to cave/accommodation | Whiplash, major injury or death. | Members on trip, members of public | 5 | 3 | 15 | * 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. * 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. | 5 | 2 | 10 | * All members are expected to drive in accordance with UK and European laws including wearing seatbelts at all times. |
| **Socials** | | | | | | | | | | |
| Costumes/Fancy Dress | Props/costumes causing injury or offence | Members, Participants, Members of public | 2 | 2 | 4 | * Members of the society are responsible for their own possessions and the use of them. * Choose a theme unlikely to cause offence. Any participant wearing items deemed offensive will be asked to remove these. * Society to follow and share with members: Code of conduct/SUSU [Expect Respect policy](https://www.susu.org/downloads/SUSU-Expect-Respect-Policy.pdf) | 1 | 2 | 2 | * SUSU [Expect Respect policy](https://www.susu.org/downloads/SUSU-Expect-Respect-Policy.pdf) to be followed * Committee WIDE training * Welfare officers comfort any members offended by items |
| Alcohol consumption | Participants may become at risk as a result of alcohol consumption    Members of the public may act violently towards participants. | Members, Participants, Members of public | 2 | 5 | 10 | * Members are responsible for their individual safety and are expected to act accordingly * For socials at bars/pubs etc bouncers will be present at most venues. * Bar Security staff will need to be alerted when necessary and emergency services called as required. * Where possible the consumption of alcohol will take place at licensed premises/private residences. The conditions on the license will be adhered | 1 | 3 | 3 | * Follow [SUSU incident report policy](https://www.susu.org/groups/admin/howto/protectionaccident) * Call emergency services as required 111/999 * Committee WIDE training * Social secs and welfare officers comfort those who have consumed excessive alcohol |
| Travel | Vehicles collision -causing serious injury | Members, Participants, Members of public | 4 | 3 | 12 | * Members are responsible for their individual safety and are expected to act accordingly * Local venues known to UoS students chosen * Event organisers will be available to direct people between venues. * Attendees encouraged (but not expected) to look out for one another and check in throughout the event | 2 | 2 | 4 | * Where possible venues chosen for socials will be local/known to members and within a short distance from each other * Contact emergency services as required 111/999 * Incidents are to be reported on the as soon as possible ensuring the duty manager/health and safety officer have been informed. * Follow [SUSU incident report policy](https://www.susu.org/groups/admin/howto/protectionaccident) |
| **Meetings** | | | | | | | | | | |
| Inadequate meeting space-overcrowding, not inclusive to all members | Physical injury, distress, exclusion | Attendees | 1 | 3 | 3 | * Committee check on room pre-booking, checks on space, lighting, access, tech available * Ensure space meets needs of members e.g. considering location & accessibility of space | 1 | 3 | 3 | * Seek medical attention if problem arises * Postpone meetings where space cannot be found * Look at remote meeting options for members * Committee WIDE training |
| Activities involving electrical equipment e.g. laptops/computers/sound system | Risk of eye strain, injury, electric shock, hearing problems | Event organisers and attendees | 2 | 4 | 8 | * Ensure screen is set up to avoid glare and is at eye height where possible * Ensure no liquids are placed near electrical equipment * Ensure all leads are secured with cable ties/mats etc * Use sound system at suitable volumes as to not damage hearing or disturb public | 1 | 4 | 4 | * Request support and advice from SUSU IT/Tech teams e.g. via activities team * Seek medical attention as required |
| Medical emergency | Members may sustain injury /become unwell  Pre-existing medical conditions  Sickness  Distress | Attendees | 3 | 5 | 15 | * Advise participants; to bring their personal medication * Members/Committee to carry out first aid if necessary and only if qualified and confident to do so * Contact emergency services as required 111/999 * Contact SUSU Reception/Venue staff for first aid support | 3 | 5 | 15 | * Incidents are to be reported on the as soon as possible ensuring the duty manager/health and safety officer have been informed. * Follow [SUSU incident report policy](https://www.susu.org/groups/admin/howto/protectionaccident) |
| Insufficient Fire Safety awareness | If meeting takes place on campus and a fire alarm is triggered, people may not know where to go-  Crushing, falls, burns and smoke inhalation arising from induced panic, reduced space in buildings and external walkways, obstructed fire exits, build-up of flammable materials i.e. waste cardboard/boxes. | Attendees | 2 | 5 | 10 | * ensure that members know where the nearest fire exist are and the meeting place is outside, should it be needed * Build-up of rubbish is to be kept to a minimum. Excess build up is to be removed promptly and deposited in the designated areas. | 1 | 5 | 5 | * All incidents are to be reported as soon as possible ensuring the duty manager/health and safety officer have been informed. * Call emergency services and University Security: * Emergency contact number for Campus Security: * Tel: +44 (0)23 8059 3311. (Ext:3311). |
| **Cash handling** | | | | | | | | | | |
| Handling & Storing Money | * Theft of cash/card * Individuals being mugged/robbed * Loss/misplacement leading to financial loss | Members | 3 | 4 | 12 | * Majority of caving huts require cash payment for stay-cash payment to be made by treasurer asap from arrival at hut * All receipts kept in lockable box and all transfers tracked in logbook * Treasurer is tasked with storing cash in nominated safe location when banks not open. * Money to be kept in lockable box * Avoid giving cash to committee member if they will be travelling by foot alone (request taxis where possible/travel by car. Ensure cash is not visible/advertised when out in public). | 2 | 3 | 6 | In the event of theft committee members will:   * Notify bank to cancel card * Highlight the incident to any community police officers in the area/report to 111 * Report to SUSU Duty manager and [Complete a SUSU incident report](https://www.susu.org/groups/admin/howto/protectionaccident) |
| **Promotional stand e.g. Bunfight** | | | | | | | | | | |
| Obstructions.  Build-up of rubbish/debris. | Slips, trips and falls;  Risk of Minor Injuries: Grazes, cuts and bruising.  Major injury: Fractures | Attendees, members, students, staff | 3 | 3 | 9 | * No items to be on the floor at the front of the stall.  Rear/sides of stall to be kept tidy. | 2 | 3 | 6 |  |
| Overcrowding | Reduced space in walkways and entrances.  Risk of Students panicking because of tight spaces / confinement. Crushing against fixed structures from pushing and shoving. Aggressive behaviour. | Attendees, members, students, staff | 3 | 3 | 9 | * A maximum of 3 club representatives to be at the stall at any one time; * Representatives will not block walkways when engaging with attendees; Early access available to Enabling registered students. | 2 | 3 | 6 |  |
| Manual handling | Risk of Musculoskeletal injures, cuts, bruises and crushing. | Members | 3 | 4 | 12 | * Ensure that 2 people carry tables. * Work in teams when handling other large and bulky items. | 1 | 4 | 4 |  |