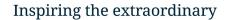


## Offsite and Travel (Emergency Plan and Risk Assessment)

**Emergency Plan** 

| Name                                       | Staff/Student Number           | Department/College                                | Destination Landline Contact<br>Number | Traveller's Mobile Number |  |  |  |
|--|--------------------------------|---|--|---------------------------|--|--|--|
| Fred Worrall                               | 70020144                       | Earth Sciences                                    | 0191 334 2300                          |                           |  |  |  |
| Ken McCaffrey                              | 70004578                       | Earth Sciences                                    | 0191 334 2300                          |                           |  |  |  |
| Gary Wilkinson                             | 3500357                        | Earth Sciences                                    | 0191 33402300                          |                           |  |  |  |
| Stefan Nielsen                             | 70042607                       | Earth Sciences                                    | 0191 334 2300                          |                           |  |  |  |
| Email Address                              | fred.worral@durham.ac.uk       | fred.worral@durham.ac.uk                          |  |                           |  |  |  |
| Primary address at<br>destination (host or | No overnight stays away from r | No overnight stays away from normal accommodation |  |                           |  |  |  |
| accommodation)                             |                                |   |  |                           |  |  |  |

| Destination emergency contact one (include name, job title, and all contact information) | Destination is in Durham Janice Oakes, Dept. of Earth Sciences, University of Durham, South Road, Durham, DH1 3LE, +44 (0191) 334 2300 janice.oakes@durham.ac.uk |                         | Destination emergency contact two (include name, job title, and all contact information) | Bob Holdsworth, Professor at Durham University Department of Earth Sciences +44 (0)191 33 42299 r.e.holdsworth@durham.ac.uk |
|--|--|-------------------------|--|---|
| Overseas Emergency   | Fire   | 999                     | Home Nation Embassy  | N/A   |
| Services   | Ambulance  | 999                     | (address, tel. and email)  |   |
|  | Police   | 999                     |  |   |
| Insurance details (telephone   |  | 2920 662425             | University Single Point of   | University Emergency (24 hours):  |
| number, policy number)   |  | L@global-response.co.uk | Contact  | +44 (0) 191 334 3333  |
|  | Reference:   | UMAL/050                |  | University Security Office (24 hours):  |
|  |  |                         |  | +44 (0) 191 334 2222  |
| Nearest Medical Help at  |  | ospital Of North Durham | Other University Contacts  | Mark Allen –  |
| Destination  | North Road, Durham, County Durham, DH1 5TW   |                         | (supervisor or line  | earthsci.hod@durham.ac.uk   |
| (medical centre or hospital  | 0800 783 5774  |                         | manager)   | Tel.  |
| address)   |  |                         | N  | (working and out of working hours)  |
| Next of kin/Who to inform  |  |                         | Next of kin/ Who to inform   |   |
| contact one (name, home and  |  |                         | contact two (name, home  |   |
| mobile numbers)  |  |                         | and mobile numbers   |   |





Agreed supervision arrangements (direct/indirect, agreed contact frequency and method)

Contact HoD via email when and where necessary – for example in the event of incident. Update provided via Janice Oakes where necessary.

## **Risk Assessment**





| Location(s): (where will the activity or task take  | Description of task or Activity: (to include enough information to establish the   |
|---|--|
| place?)   | foreseeable hazards)   |
| Low Burnhall Woodland Trust estate, South Rd, Durham DH1 3TX Detail of locations shown on attached maps | GEOL50215 & GEOL50130 – 2 Days will be spent in the field, 30 <sup>th</sup> April and 1 <sup>st</sup> May. Trip includes four staff. There are 11 students.  N This area next to the river is fenced off and is off limits to the students  Path with steps  River bank - has a clearly defined path to be used.  Slope Analysis Value Less than 20 degrees slope  |
|   | Slope analysis using 20 degrees for avoiding steep inclines.  Students will make their own way to meet at car park marked on attached map each morning at 9am. Support vehicle will be parked at the marked car park.  Students will be in maximum groups of 4 with a staff accompanying them at all times.  Students will collect spatial surveys of the Low Burnhall site in the orange/green area of attached map. Surveys include: drone flights, resitivity, and DEM. |



Students will not work near rivers or on slopes above 20 degrees and will only work within the access land shown on attached map.

30<sup>th</sup> April – meet at Low Burnhall – students gather data 1<sup>st</sup> May – group exercise – students gather data

Detail of area shown on attached map



Those at risk (people who could

How could they be harmed? (nature of injuries, damage that could result)

Uncontrolled risk level (level of risk without control)

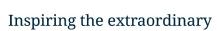
Required controls (how the risk can be removed or reduced by for example engineered methods, safe systems of work, training and/ or personal protective equipment)

Controlled risk level (level of risk remaining when



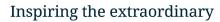


| Refer to the Risk<br>Identification Tool   | be<br>harmed)     |   |                      |  | controls are in place) |
|--|-------------------|---|----------------------|--|------------------------|
|  |                   |   | Transpoi             | rt and Travel  |                        |
| Traffic accident (passenger)   | Staff             | Death, broken bones,<br>bruises, physical injury  | High Risk<br>5 x 4   | Support vehicle drivers (Fred Worrall and Stefan Nielsen) have full clean driving license. Driving laws to be followed at all times. Seatbelts to be worn at all times.  Carry mobile phones in case of an emergency and carry power bank for mobile phone.  | Medium Risk<br>5 x 2   |
|  |                   |   |                      | Park in safe, legal position relative to other road users, and in designated off-road parking (see map above). Care taken when exiting and moving around the vehicle on foot and when working near or crossing roads.  |                        |
| Traffic accident (pedestrian)  | Staff<br>Students | Broken bones, cuts,<br>bruises, physical injury   | Medium Risk<br>4 x 3 | Hi-vis jackets to be worn at all times.  Participants to be aware of their surroundings and any other vehicles in the vicinity.  | Low Risk<br>3 x 2      |
|  |                   |   | Health & Safety /    | Emergency / Medical  |                        |
| Contagious illness<br>(chicken pox, flu,<br>measles, mumps<br>etc.)                                    | Staff<br>Students | Sickness, fatigue, pain,<br>nausea, dizziness,<br>itching etc.<br>Spreading the illness<br>around | Medium Risk<br>3 x 4 | If you have contracted any sort of infectious illness immediately prior to the fieldwork trip, you must stay home and not attend the fieldwork trip. To do so will put the entire cohort at risk of serious illness.   | Low Risk<br>3 x 2      |
| Personal physical health issues  | Staff<br>Students | Sickness, fatigue,<br>nausea, pain, dizziness<br>etc.   | Medium Risk<br>3 x 4 | All participants complete a health declaration form in advance of the fieldwork trip so any reasonable adjustments can be made to accommodate any physical health issues participants may have.  Bring any medication you may need to take while on the trip, and make sure it's with you at all times.    | Low Risk<br>3 x 2      |
|  |                   |   |                      | Staff members hold an up-to-date first aid qualification (either the 3 day first aid course, or the fieldwork first aid course). There will be a first aid kit available in case of emergency.   |                        |
| Personal mental<br>health conditions<br>e.g. anxiety,<br>borderline<br>personality<br>disorder, eating | Staff<br>Students | Emotional and mental<br>distress following a<br>triggering event                                  | Medium Risk<br>3 x 4 | All participants complete a health declaration form well in advance of the fieldwork trip so any reasonable adjustments can be made to accommodate any mental health issues participants may have.  Bring any medication you may need to take while on the trip, and make sure it's with you at all times. | Low Risk<br>3 x 2      |



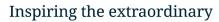


| sity              |   |   | 1 8   | chtraorann   |
|-------------------|---|---|---|--|
|                   |   |   | Staff have completed the mental health training modules on Oracle Learn in order to better support anyone experiencing mental and / or emotional distress.  |  |
|                   |   | Communicatio  | ns Infrastructure   |  |
| Staff<br>Students | Worsening medical situation   | Medium Risk<br>3 x 4  | Hire car on site at all times so that one member of staff can use it to evacuate injured parties to nearby medical aid if necessary.  All field staff have up to date first aid qualifications and will carry a university first aid kit.   | Low Risk<br>3 x 2  |
|                   |   |   | minor scrapes or injuries they may pick up while on the trip  |  |
|                   |   |   | Emergency plan has listed the nearest medical facility and this will be carried on the trip at all times.   |  |
|                   | ·   | Terrain   | / Location  |  |
| Staff<br>Students | Slips, trips, falls,<br>sprained ankle, broken<br>bones, cuts, bruises etc. | Medium Risk<br>3 x 4  | Walking boots and socks to be worn, which have been worn in prior to the trip. Pay attention to the ground you're walking on and avoid areas that may be particularly hazardous or difficult to navigate.   | Low Risk<br>3 x 2  |
|                   |   |   | All work will start after sunrise and cease before sunset   |  |
| Staff<br>Students | Drowning  | High Risk<br>4 x 4  | No work will be conducted along rivers – no sampling to be taken near rivers  | Low Risk<br>2 x 2  |
|                   | <u> </u>  | Cli   | mate  |  |
| Staff<br>Students | Dehydration, sunburn, sunstroke etc.  | Medium Risk<br>3 x 4  | Make sure all students carry a water bottle and extra water is carried by staff during day long activities.  Support vehicle also to have extra water and be within easy reach of the group at all times  | Low Risk<br>3 x 2  |
|                   |   |   | Participants to consider the weather each day and carry appropriate items e.g. suncream, hat, etc. Dress appropriately for the weather and activity.  |  |
| Staff             | Feeling cold, shivering,  | Medium Risk   | Participants to consider the weather each day and carry   | Low Risk   |
| Students          | hypothermia etc.  | 3 x 4   | Dress appropriately for the weather and activity. Wear layers and a waterproof.   | 3 x 2  |
|                   |   | Accom   | modation  |  |
|                   | Staff Students  Staff Students  Staff Students  Staff Students              | Staff Students  Staff Students  Staff Students  Slips, trips, falls, sprained ankle, broken bones, cuts, bruises etc.  Staff Students  Drowning  Staff Students  Dehydration, sunburn, sunstroke etc.  Staff Students  Feeling cold, shivering, | Staff Students  Worsening medical situation  Medium Risk 3 x 4  Staff Students  Slips, trips, falls, sprained ankle, broken bones, cuts, bruises etc.  Staff Students  Drowning  High Risk 4 x 4  Cli  Staff Students  Dehydration, sunburn, sunstroke etc.  Staff Students  Feeling cold, shivering, hypothermia etc.  Medium Risk 3 x 4 | Staff Students  Staff Drowning Staff Students  Staff Students  Staff Drowning Staff Students  Staff Students  Staff Students  Staff Drowning Staff Students  Staff Students  Staff Students  Staff Drowning Staff Students  Staff Students  Staff Students  Staff Dehydration, sunburn, sunstroke etc.  Staff Students  Staff Dehydration, sunburn, sunstroke etc.  Staff Students  Staff Students  Staff Students  Staff Students  Staff Dehydration, sunburn, sunstroke etc.  Medium Risk 3 x 4  Medium Risk 3 x 4  Staff Students Staff Students  Staff Stu |





|                              | -   |   |                      | n/a  |                      |
|------------------------------|---|---|----------------------|--|----------------------|
|                              |   | Welfare / Fie                           | ldwork Facilities (t | those away from accommodation)   |                      |
| Limited access to facilities | Staff<br>Students                               | Emotional distress                      | Medium Risk<br>3 x 4 | Rough timing of toilet breaks will be communicated with the students – this will be lunchtime unless required and toilets in Dept of Earth Sciences will be used. A vehicle is available to facilitate this.   | Low Risk<br>3 x 2    |
| Limited access to facilities | Staff<br>Students                               | Toxic shock syndrome                    | High Risk<br>4 x 4   | Rough timing of toilet breaks will be communicated with the students – this will be lunchtime unless required and toilets in Dept of Earth Sciences will be used. A vehicle is available to facilitate this.   | Medium Risk<br>4 x 2 |
|                              |   |   | Food                 | / Water  |                      |
| Allergies                    | Staff<br>Students                               | Anaphylaxis / death                     | High Risk<br>5 x 4   | Avoid consuming food you are allergic to. If you have a known allergy, carry medication with you at all times (antihistamines and at least two epi pens).  | Medium Risk<br>5 x 2 |
|                              |   |   |                      | All participants will have completed a health declaration form well in advance of the fieldwork trip so any food allergies have been declared and arrangements can be made to ensure these foods are absent.   |                      |
| Allergies                    | Staff<br>Students                               | Itching, tingling mouth, skin rash etc. | Medium Risk<br>3 x 4 | Avoid consuming food you are allergic to. If you have a known allergy, carry medication with you at all times e.g. antihistamines.  All participants will have completed a health declaration form well in advance of the fieldwork trip so any food allergies have been declared and arrangements can be made to ensure these foods are absent.   | Low Risk<br>3 x 2    |
| Poor food hygiene            | Staff<br>Students                               | Food poisoning                          | Medium Risk<br>4 x 3 | Make sure to wash your hands or use hand sanitiser before consuming food.  | Low Risk<br>3 x 2    |
|                              |   |   | Work P               | rocedures  |                      |
| Drone / UAV use              | Staff<br>Students<br>Non<br>involved<br>persons | Physical injury, bruises etc.           | Medium Risk<br>3 x 3 | Conduct pre-flight survey to identify areas of no-go/no flight and lines of sight. Ensure minimum separation distance as laid down by UAV guidelines. Suspend operations if member of the public encroaches into operational area.  Each drone has an operator ID and each flyer has flyer-ID in line with The Drone and Model Aircraft Code   UK Civil Aviation Authority (caa.co.uk)  Only those with a flyer-ID will be allowed to operate the drones and | Low Risk<br>2 x 2    |





|                                   | Jity              |                                 |                    | no students will be allowed to fly the drone.  |                      |
|-----------------------------------|-------------------|---------------------------------|--------------------|--|----------------------|
| Terrestrial Lidar<br>Equipment    | Staff<br>Students | Physical injury, bruises, etc.  | Medium Risk        | Make sure lidar box is carried by two persons (this will be a member of a staff and a student) at all times  | Low Risk             |
|                                   |                   |                                 | 2 x 4              | Trained staff will supervise student use at all times. Students warned during operation to stand 3 m back from lidar on tripod during data collection                | 2 x 2                |
|                                   |                   |                                 |                    | Students told not to look directly at the laser source during operation  |                      |
|                                   |                   |                                 | Flora / Fa         | nuna / Fungi   |                      |
| Bees, wasps etc.                  | Staff<br>Students | Anaphylaxis                     | High Risk          | If you have a severe allergy, carry medication with you at all times (antihistamines and at least two epi pens).   | Medium Risk          |
|                                   |                   |                                 | 5 x 4              | Remove the sting if still embedded in the skin by scraping it sideways with something hard, such as your fingernails. Avoid pinching as this could spread the venom. | 5 x 2                |
|                                   |                   |                                 |                    | Wash the affected area and apply a cold compress to the area for 10 minutes to reduce swelling. Apply a hydrocortisone based cream to reduce itching.                |                      |
| Bees, wasps etc.                  | Staff<br>Students | Stings, pain, redness, swelling | Medium Risk        | If you have a non-lethal allergy carry medication with you at all times (antihistamines).  | Low Risk             |
|                                   |                   |                                 | 2 x 4              | Remove the sting if still embedded in the skin by scraping it sideways with something hard, such as your fingernails. Avoid pinching as this could spread the venom. | 2 x 2                |
|                                   |                   |                                 |                    | Wash the affected area and apply a cold compress to the area for 10 minutes to reduce swelling. Apply a hydrocortisone based cream to reduce itching.                |                      |
| Cattle                            | Staff             | Trampling, broken               | Medium Risk        | Give livestock room and ensure they do not feel threatened by your   | Low Risk             |
|                                   | Students          | bones, bruises, cuts etc.       | 4 x 3              | behaviour, never venture through the middle of a herd or walk between mother and young.  | 3 x 2                |
| Ticks                             | Staff<br>Students | Lyme disease                    | High Risk<br>4 x 4 | Long trousers and long-sleeved shirts will be worn. We will check for ticks at the end of each day and treat as required.  | Medium Risk<br>4 x 2 |
|                                   |                   |                                 | Biol               | logical  |                      |
| Leptospirosis<br>(Weil's disease) | Staff             | High temperature, body          |                    | Keep away from potentially unhygienic areas in the field (e.g.   |                      |



## Inspiring the extraordinary

| Students   | aches, stomach pain,<br>headache, nausea,<br>diarrhea, yellowing of<br>skin | Medium Risk<br>3 x 4 | contaminated dirty streams or rubbish dumps)  Maintain good hygiene throughout. Wash or disinfect hands before eating and drinking, particularly important when working on or contaminated land/ waterways. Wash hands thoroughly at the end of the session. | Low Risk<br>3 x 2 |  |  |  |
|------------|---|----------------------|--|-------------------|--|--|--|
|            |   | Meci                 | hanical  |                   |  |  |  |
|            | n/a   |                      |  |                   |  |  |  |
| Recreation |   |                      |  |                   |  |  |  |
| n/a        |   |                      |  |                   |  |  |  |



| FCO and Drum Cussac Location Rating  | High       | Medium | Low | х |
|--|------------|--------|-----|---|
| Date FCO information accessed  | 21/02/2024 |        |     |   |
| Overall risk rating for the work (as below) (tick one) (this is the risk rating which should be entered on Viator) | High       | Medium | Low | х |

If the Overall risk rating is 'high', additional approval from the Faculty Executive Dean or Pro Vice Chancellor will be required prior to submission of a Viator Travel Request.

| High   | If the FCO advice is against all travel or all but essential travel, or the University rating derived from Drum Cussac is high, or any single risk associated with the activity cannot be mitigated to an acceptable level   |
|--------|--|
| Medium | If the FCO advice is follow FCO advice, or the University rating derived from Drum Cussac is medium, <i>or</i> any single risk associated with the activity is above that which may exist in the UK, but controls can be anticipated which will sufficiently mitigate the risk |
| Low    | If the FCO advice is no specific travel restrictions, or the University rating derived from Drum Cussac is low, <i>and</i> all risks can be controlled or eliminated to a level equivalent to that existing in the UK  |

| Internal Guidance/Linked Documents: |                  |              |                   |
|-------------------------------------|------------------|--------------|-------------------|
| Competence Requirements:            |                  |              |                   |
| Supervisor/Mar<br>Comment:          | nager Review and |              |                   |
| Assessment Pr                       | epared by        | Supervisor/M | anager Acceptance |
| Name:                               | Fred Worrall     | Name:        | Bob Holdsworth    |
| Signature:                          | Fred Worrell     | Signature:   | Bd. Htt.          |
| Date:                               | 21/2/24          | Date:        | 21/02.2024        |



This risk assessment should be read by those performing and supervising the work in conjunction with all relevant documentation including method statements and safe systems of work



## **Health and Safety Risk Matrix**

|                        |                      |   | Probability/ likelihood of risk realisation |  |  |   |  |
|------------------------|----------------------|---|---|--|--|---|--|
|                        |                      |   | Almost<br>Impossible<br>(1)                 | Not Likely<br>to occur<br>(2)  | Could<br>occur<br>(3)  | Known to<br>occur<br>(4)  | Common<br>occurrence<br>(5)                  |
|                        |                      | Health and<br>Safety  | of factors would be                         | A rare combination of<br>factors would be<br>required for risk to be<br>realised | Could happen when additional factors are present otherwise unlikely to occur | Not certain to happen<br>but an additional<br>factor may result in<br>risk being realised | Almost inevitable that risk will be realised |
| Potential Consequences | Severe<br>(5)        | One or more<br>fatalities.<br>Irreversible<br>health problems                   | 5   | 10   | 15   | 20  | 25   |
|                        | Major<br>(4)         | Partial or medium<br>term, disabilities<br>or major health<br>problems          | 4   | 8  | 12   | 16  | 20   |
|                        | Moderate<br>(3)      | Lost-time injuries<br>or potential<br>medium-term<br>health problems            | 3   | 6  | 9  | 12  | 15   |
|                        | Minor<br>(2)         | Minor, very short-<br>term health<br>concerns on<br>recordable injury<br>cases. | 2   | 4  | 6  | 8   | 10   |
|                        | Insignificant<br>(1) | Inherently safe,<br>unlikely to cause<br>health problems<br>or injuries         | 1   | 2  | 3  | 4   | 5  |

| Extreme risk | High risk | Medium risk | Low risk |
|--------------|-----------|-------------|----------|
|              |           |             |          |