

GUIDANCE ON SAFETY IN FIELDWORK

October 2011

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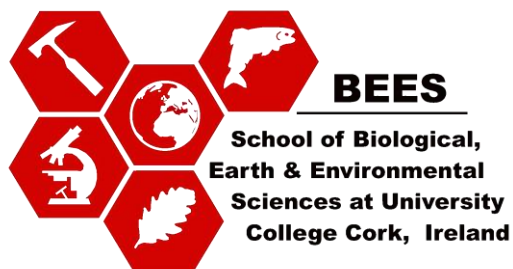
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Health and Safety Committee:

Chair: Dr. Barbara Doyle Prestwich

Head of School: Prof. John O'Halloran.

The author and committee gratefully acknowledge the following:

Health and Safety Guidance for the Placement of Higher Education Students, University Health and Safety Association (2009)

Draft Guidance on Safety in Fieldwork in the UK and Overseas, University Health and Safety Association (2010), available at

http://www.ucea.ac.uk/en/Employee_Relations/Health_and_Safety/

Code of conduct and safety instructions for students on fieldwork, University College Cork, Office of Corporate and Legal Affairs, <http://ocla.ucc.ie/Insurance/page.asp>, accessed June 2011

Information for undergraduate students on Fieldwork Safety Awareness for day excursions to seashores, salt marshes, woodlands and bogs. Modified from a larger document prepared by Mr J. Ring, Safety Officer, Health & Safety Office, National University of Ireland Cork, with minor additions by Dr. P. Whelan, Department of Plant Science, National University of Ireland Cork. Acknowledgements to Queen's University Belfast.

Safety Documents 1 & 2: Code of Conduct, Safety Instructions and Emergency Procedures – For students attending geological field classes & for students undertaking geological fieldwork alone or in small groups, Department of Geology, University College Cork.

And other internal safety documents from the School of Biological, Environmental and Earth Sciences, University College Cork.

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1. Introduction

This document outlines the policies, procedures, and good practice guidelines in place in the School of Biological, Earth and Environmental Sciences, University College Cork to enable staff, postgraduate and undergraduate students to undertake fieldwork safely, whether as part of curriculum based group field courses and/or individual/group research work.

It is informed by the UCC Code of Conduct and Safety Instructions for Students on Fieldwork (UCC, 2011) and the USHA Draft guidance on Safety in Fieldwork in the UK and Overseas (USHA, 2010).

It is legislated for by the Safety, Health and Welfare at Work Act, (2005), the purpose of which is to proactively protect the health and safety of employees involved in discharging their employment related activities and those who may somehow be impacted by work undertaken by employed persons, as far as is reasonably practicable (AFARP). This applies to any place where work is undertaken and therefore any fieldwork locations where fieldwork is undertaken for the School, whether UCC controls the environment or not. UCC as an employer, and School staff, as the employee representatives have a statutory duty, AFARP, to protect all third parties from the impact of work which the School, or person employed by them undertake at a place of work (SHWW Act duty). SHWW legislation applies to staff specifically. It does not apply to students, who, under the SHWW Act, are not considered employees of the university. Therefore application of field safety protocols are applied to students under the normal General Common law duties of care, and not through a statutory duty.

All fieldwork (as defined in section 2) carried out will be subject to a Risk Assessment and Approvals Procedure (RAAP) which is detailed in the following sections. It involves a stepwise process, from fieldwork planning, through hazard identification, risk profiling, risk assessment and approvals, followed by monitoring and review. Responsibilities for overall field work safety and components of the RAAP are detailed in section 3.

2. Definition of Fieldwork

The definition of fieldwork as outlined by the USHA (2010) is:

“Any work carried out by staff or students of the institution for the purposes of teaching, research, recruitment activities, attending conferences or otherwise representing the institution in places which may be distant from the institution. The institution retains responsibility for the safety of its staff and/or students and others exposed to their activities.”

Definition of fieldwork for the purposes of this document includes:

Any work carried out by staff or students of the institution, which takes place outside of the institution itself, for the purposes of teaching and/or research. Field work will include a diverse range of activities in the areas of biological, earth and environmental sciences in/on a range of natural, semi-natural and built terrestrial, freshwater aquatic, marine environments. This will range from observing, recording, surveying and site visits, to active collection/tagging/trapping/other of specimens. Fieldwork may involve individuals and/or groups travelling to/working in hazardous locations and carrying out hazardous activities. It may also include contact and interactions with relevant individuals/groups/institutions outside of this institution. Field work includes organisation, management of, and participation in group field trips, e.g. field courses arranged in fulfilment of the teaching curricula. Travel to field work locations is included in the risk assessment procedure. Overseas placements are excluded.

3. Responsibilities and Liability for Fieldwork Safety and Components of the RAA Procedure

Responsibility for overall safety on field work and for particular components of this process exists at the levels detailed below, within the health and safety policy/guidelines of the University and School.

- Head of School
- School Field Safety Committee
- Fieldwork leader/supervisor
- Individual researcher
- Field course participant

Head of School:

The Head of School has overall responsibility for the general health and safety of participants in fieldwork and overall authority to approve fieldwork. He/she must ensure that suitable management systems are in place for the safe conduct of fieldwork by staff and students of the School. This includes ensuring that risk assessment protocols are in place, organisation of the fieldwork meets School health & safety criteria, that any accidents that occur are reported, investigated and, if necessary, statutory notifications are made. The Head of School can delegate responsibilities for organising, leading, or authorising low risk field work to suitably experienced fieldwork leaders and supervisors as detailed below. In such cases the Head of School must be satisfied that the appointed person has the appropriate personal capabilities, is competent to lead especially under possible adverse conditions, has sufficient awareness of the legal obligations to those under supervision, and that there is clarity of required roles and responsibilities.

School Safety Committee:

The School Safety Committee, appointed by the Head of School, will consider field work proposals with risk levels of moderate and above. Members of the committee will be suitably qualified members of staff, with experience as fieldwork leaders and supervisors in the relevant disciplines. The School Safety Committee will be responsible for overseeing the Risk Assessment and Approvals Process.

Responsibility for approval of low risk fieldwork is delegated to Fieldwork Leaders/Supervisors as described below. Approval of fieldwork proposals with moderate risk levels will require approval by a single member of the committee. Proposals for fieldwork with above moderate risk levels (substantial to high) will require approval from three members of the committee. The Head of School will adjudicate in case of appeal and must sign off on all Risk Assessments. Members of the Committee, assigned by the Head of School, must be considered competent and experienced in the relevant area of field work activities, able to ensure that the risk assessment of the fieldwork is made, a safe system of work has been established, and that roles and responsibilities are clearly understood for any field work activities to be undertaken. They must be fully aware of School and University safety procedures and confirm in writing to that effect.

Fieldwork Leader(s), supervisor(s):

Fieldwork leaders/supervisors are responsible for planning fieldwork at broad and detailed levels. This may include responsibility for planning fieldwork for and/or with individuals and groups of staff/students for individual research projects, and/or field course planning for undergraduates/postgraduates in fulfilment of curricula. In both cases the Fieldwork leader(s) have responsibility for overall supervision of fieldwork. They must be familiar with the relevant health and safety criteria, and ensure that appreciation of safety measures is passed down the chain of command to all leaders and participants. They have explicit responsibility for the total number and identities of fieldwork participants, and must ensure that this information is passed on to sub-group leaders in relevant cases. They must allocate a clear command structure and may allocate specific supervisory duties to competent leaders where groups are divided into sub-groups on fieldwork, and or where external experts/leaders/instructors are part of the excursion e.g. Boat Skipper /Diving Organiser etc. All parties must be fully aware of their responsibilities at all times. They must include an assessment of fieldwork health and safety costs (training, equipment etc.) in the planning stages, and ensure adequate provision thereof. They must ensure that safety precautions are observed for the duration of the fieldwork, and especially in situations of high risk fieldwork. They must ensure that the level of supervision is adequate for the number of participants and level of activities underway, and should make necessary adjustments to itineraries and/or activities

where necessary in the interests of safety. Overall the safety of the expedition remains with the Fieldwork Leader and they must be explicitly empowered to discharge these responsibilities and to implement the contingency plans if necessary. Fieldwork leaders must be considered competent and experienced in the relevant area of field work activities, able to ensure that the risk assessment of the fieldwork is made, a safe system of work has been established, and that roles and responsibilities are clearly understood for any field work activities to be undertaken. They must be fully aware of School and University safety procedures and confirm in writing to that effect.

Individual researchers:

It is the responsibility of individual researchers undertaking solo travel or self managed field work to take reasonable care in their activities. In practice the individual assumes most of the responsibilities of the Fieldwork Leader. Individuals must carry out a risk assessment of such activities and declare in advance to fieldwork leaders/supervisors/ and/or school potentially hazardous activities which may arise, according to the risk level and relevant protocol as described further below. The University advises that students do not engage in fieldwork activities alone. Where unsupervised fieldwork is carried out, as in the case of final year students who may be carrying out independent data gathering, it is essential that all safety advice, procedures and guidelines are given to the student, both orally and in written form. Postgraduate fieldwork should also be regarded as unsupervised fieldwork and the responsibility for safety advice would devolve on the supervisor.

Participants on field courses:

It is the responsibility of all participants on field work courses to be aware of, and observe, both University and School guidelines on codes of conduct and safety on fieldwork. University guidelines are available at <http://ocla.ucc.ie/Insurance/page.asp>. School guidelines are detailed in this manual. Fieldwork Leaders and supervisors roles will be explained, and detailed information and instruction provided to participants for all field courses in advance. Participants must heed and observe any such information and instruction, and bring any questions or problems to the attention of the supervisor/Fieldwork Leader as soon as possible. It is the responsibility of participants to take reasonable care for the health and safety of both themselves and others. Completion of a confidential fieldwork form will be required of all field

course participants in advance of going on fieldwork, requiring details including next of kin, general practitioner, particular health issues that might be problematic in the field, etc. (see Appendix 6). Failure to do so or failure to comply with codes of conduct and supervisory instructions may result in exclusion from field courses, particular fieldwork activities, and/or further disciplinary action. Field course participants should be aware that, unless specifically stated by course leaders, all field courses begin from the moment of departure from the School and end only upon arrival back at the School or when set down at a destination specified by the student and agreed with the leaders. During residential field courses, the rules set out here and in the University guidelines apply throughout the entire duration of the course, including at weekends and at night. Where there are periods of out of work time, such as weekends and nights on residential courses, only those over 18 years of age may undertake any trip/social activity, and return times must be agreed in advance with the course leader. Any activity undertaken at such out of work times is taken at the risk of the student/field course participant and the University can accept NO LIABILITY for any accident or injury sustained during the course of such activity.

Liability:

Insurance cover for the majority of situations/activities that may arise in the course of fieldwork is provided under the University policies, detailed at <http://ocla.ucc.ie/General/insurance.asp>. Exceptions are highlighted where possible in the process but should be considered in advance of all fieldwork, particularly at higher risk levels. There are also exceptions arising for travel to certain high risk countries/areas of unrest. Again, these should be considered in advance of fieldwork planning.

4: Extraordinary circumstances – Contingency planning and threat analysis

In most cases, particularly in relation to fieldwork activities in Ireland and within the EU, a relatively straight forward field work and risk assessment plan will be sufficient. However, in all instances of fieldwork planning attention should be given to contingency planning for unforeseen events, for example, major travel disruption, restrictions on fieldwork locations due to disease/climatic conditions/civil unrest/natural disasters, and/or medical emergencies during the course of fieldwork. There may also be instances where fieldwork, particularly in locations outside of the

EU, will require an additional threat analysis process, in which considerations of security and political threat levels, and/or extreme environmental conditions will be assessed in advance. In such cases it may be necessary to review information right up until the final stages prior to departure, and during the trip, with the advice of the institution insurance adviser, as well as external bodies such as the Department of Foreign Affairs, the UN, WHO and any relevant embassies/agencies in the relevant country. Such fieldwork would come into the higher risk categories in the risk assessment procedure and will be addressed on a case by case basis by the Safety Committee.

5. Risk Assessment and Approvals Procedure

The steps involved in the RAAP are detailed below and a flow chart of the process is shown in Fig.1.

Step 1: Planning

Step 2: Hazard Identification and Risk Profiling

Step 3: Risk Assessment and Approvals

Step 4: Monitoring and Review

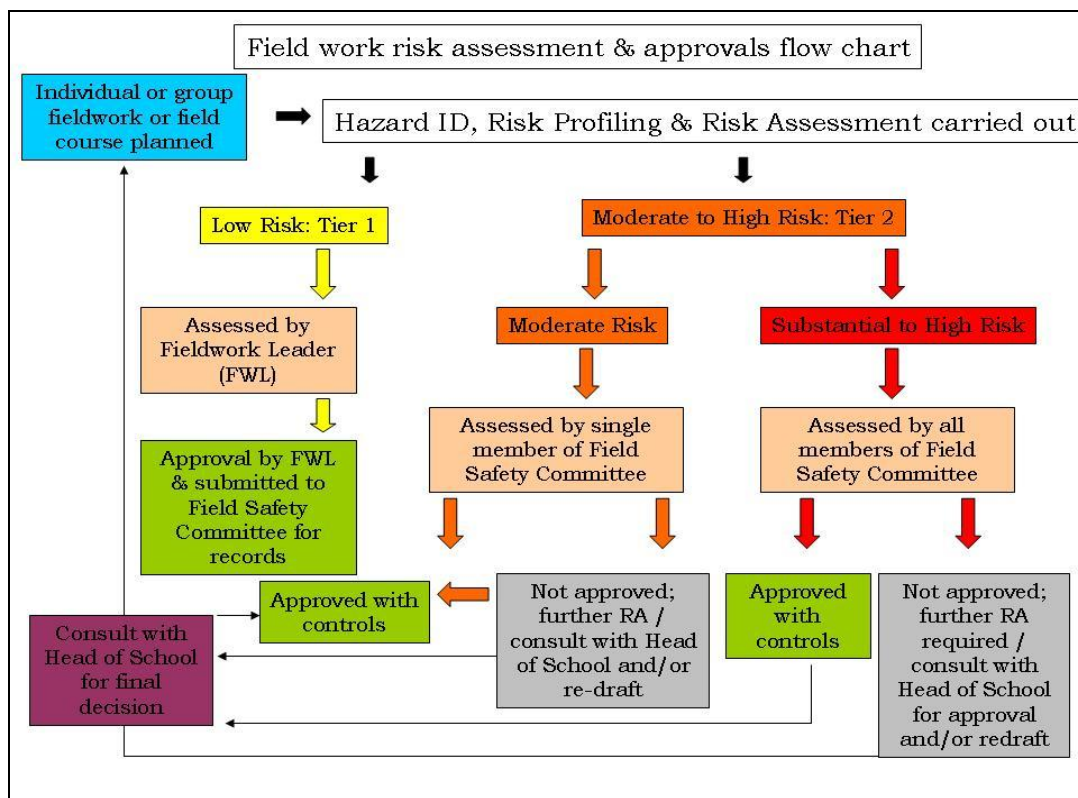


Fig 1: Field work risk assessment and approvals flow chart

Step 1: Planning

All fieldwork will be planned in advance with due regard to safety considerations by the relevant researcher/supervisor/fieldwork leader. All fieldwork must be planned sufficiently in advance of intended departure for the subsequent risk assessment and approvals process to be carried out. Planning is the first step in that process. This may require a very limited time, and generic risk assessments and procedures for low risk common field work activities/areas (Tier 1), or a more stringent approvals process for field activities with moderate to substantial risk levels (Tier 2).

The Appendices 1 through 12 contain checklists and guidelines intended to guide the Fieldwork Leader/participant through the planning and risk assessment process. The field work risk assessment and approvals flow chart is shown in Appendix 1. This graphically illustrates the planning and approvals requirements for various risk levels of field work. Fieldwork and field course planning checklists are provided in Appendices 2a & b. A basic pre-fieldwork equipment and vehicle checklist is provided in Appendix 2c, the list is not exhaustive. It is the responsibility of the Fieldwork Leader to ensure that any equipment or vehicles used for fieldwork activities have had the appropriate safety checks. Appendices 3a & b provide guidelines on identifying hazards and risks of fieldwork activities/areas in relation to e.g. communications, health, vulnerable groups, specific hazards of particular activities etc. and suggests control measures to reduce the risks. Appendix 4 provides the template risk assessment forms for fieldwork and field courses which must be filled in and approved prior to fieldwork. Guidelines for field course participants are provided in Appendix 5. These should be provided to all field course participants prior to field courses. Planning for health and first aid on fieldwork is mandatory. A template confidential health questionnaire (a requirement for field course participants) is provided in Appendix 6, general guidelines on health and first aid in the field are provided in Appendix 7, and the School Emergency Incident Procedure is provided in Appendix 8. In all cases care should be taken to ensure adequate means of communication with e.g. emergency services. All field work participants should be familiar with these guidelines and procedures. They detail minimum School requirements for medical/first aid training and equipment on field work which must be adhered to and addressed by Field work Leaders. A number of field work activities and areas require that participants have appropriate training, licenses or other permissions. A provisional list of such requirements is given in Appendix 9 and 10. It

should be consulted in fieldwork planning. The list is not exhaustive. Consent forms for both field course participants and field work leaders/individuals are provided in Appendix 11a and b. An additional checklist, in relation to accommodation for field courses, is provided in Appendix 12.

Areas and/or activities and/or participants which may pose difficulties / increased or unusual risks may need to be considered separately and will require more rigorous planning. Contingency planning and threat analysis may be required for such areas/activities. These should be addressed on a case by case basis, relevant concerns highlighted in the planning stage and risk assessment procedure, and contingencies included in the hazard and control section of the Risk Assessment form.

Step 2: Hazard Identification and Risk Profiling

A hazard identification and risk profiling chart is provided in Appendix 3. This details a number of general hazards associated with all types of field work in all habitats/environments, and a number of site/activity/habitat specific hazards which may be encountered. The list is not exhaustive. The chart details numerous control measures to reduce Risk levels to as low as possible. This chart should be consulted when planning field work and filling in the risk assessment forms.

Step 3: Risk Assessment and Approvals

A Risk Assessment form must be filled out for all field activities, for both individual and group postgraduate/staff research and undergraduate and postgraduate field course activities. Templates are provided in Appendix 4. The Approvals process is divided into two tiers to facilitate ease of the approvals process. Tier 1 will fast track approvals of Low risk activities. Tier 1 requires completion of a risk assessment form, in which the researcher/field work leader(s) describes the general nature and value of the proposed activities, proposed itinerary, identifies the main hazards and characterises the potential risk level. Field work proposals reaching only a low level of risk will be exempted from a further approvals process. Tier 2 will involve a more stringent approvals process for field activities with moderate to substantial risk levels. Field work proposals with moderate and above risk levels will be submitted to the Safety Committee by the fieldwork leader/supervisor. Proposals with moderate risk levels will be assessed by a single member of the committee. Proposals with high to substantial risk levels will be assessed by at least three members. In either case

proposals may be approved, approved with controls, directed to the Head of School for final approval, assessment, and/or be returned to the planning stage. A flow chart of the approvals procedure is provided in Figure 1 (Above) and Appendix 1.

Step 4: Monitoring and Review

Ongoing monitoring and review of the Risk Assessment and Approvals Process will be carried out to ensure that fieldwork health and safety standards are maintained and improved where necessary. This will take place at various levels:

Post field work/field course de-brief sessions should be held to highlight any notable issues around fieldwork safety that arose during the fieldwork/course. Anonymous feedback forms for field course participants should be used to monitor status of field safety and response to it by participants. Anonymous feedback forms for students undertaking unsupervised fieldwork should also be provided. Feedback from fieldwork leaders and field course participants, as well as incident reporting, should be directed to the Safety Committee for centralised review and policy revision if necessary.

Training needs emerging in the field should be logged, and training in field should be logged. If necessary the training/competency requirements of Fieldwork leaders and planning guidelines should be updated in response. Incident and near-miss reporting must be dealt with as swiftly as possible, and safety procedures updated immediately if relevant.

Periodical reviews of specific aspects for fieldwork safety guidelines and procedures should be carried out, i.e. reviews of competence, training and induction requirements of fieldwork leaders and individuals, emergency procedures, use of third party providers etc. The timeframe for these reviews will be decided by the Safety Committee.

The School Safety Committee will carry out an annual review of the Field Safety Policy and procedures. A selection of proposals at each risk level will be assessed, along with feedback from that year, to maintain standards, update hazard identification, planning and control checklists, and assess the implementation of procedures. Policy and guidelines will be adjusted to reduce potential shortcomings in planning, processes and procedures, and management of the fieldwork.

The Head of School will be required to sign off on the Fieldwork Safety Policy each year following the Safety Committee review process.