



## Department of Zoology Biology Final Honours School Zoology Fieldwork Safety Guidelines

The Biology FHS Zoology Fieldwork Safety Guidelines operate within the Oxford University Department of Zoology Safety Rules (available from Mr C Clay, Area Safety Officer, Room B24, tel. 71445). They deal with common fieldwork situations likely to be encountered by undergraduate students.

Fieldwork is defined as any academic, teaching or research work performed outside of the department or Wytham Field Station.

Before starting, FHS students must:

- Read these Fieldwork Safety Guidelines. These should be only used to indicate potential hazards and possible means of control.

Refer to University Guidance Note S7/95 'Safety in Fieldwork' available at <http://www.admin.ox.ac.uk/safety/0795.shtml>

- Complete a Safety Registration for FHS Projects form which incorporates a risk assessment and submit to C Clay. A detailed health and safety plan should be completed if this is felt inadequately covers how the risks are controlled and attached to the form. Forms are obtainable from C Clay.
- Overseas work must be approved by the Head of Department and is dealt with separately.
- If your work is at Wytham Field Station, contact Phil Taylor (71188) or Judith Lloyd (71178) for registration. If your work is in Wytham woods contact Judith Lloyd who will arrange for a permit to be issued.

### 1. Conduct in the field

#### 1.1 General

- Common sense and an awareness of potential hazards are probably the most important means of minimising risk associated with general fieldwork.
- All fieldworkers must have an up-to-date tetanus injection.
- Never do fieldwork under the influence of alcohol or drugs.
- Carry basic first aid supplies. Ensure that someone in the group has at least a basic knowledge of first aid.
- If unfamiliar with the surroundings, carry a map of the area.
- Should you become ill with flu-like symptoms, make sure your doctor knows that you carry out regular fieldwork. Contact the University Occupational Health Service.

- Carry emergency telephone numbers with you in the field (for example, your supervisor's number, University Safety Office).
- Wear strong clothing appropriate to the climate and sturdy boots. Avoid wearing jeans and exposed skin.
- Wear thick gloves if you need to clear vegetation;
- Avoid going into woodland in very high winds; if you must do so, wear a hard hat;
- If you require medication, ensure that it is carried as necessary.

## 1.2 Working alone

- Working alone should be actively discouraged but this is sometimes at odds with fieldcraft, and often logistically impossible. The hazards and precautions outlined below are particularly important when working in remote areas.
- *Associated hazards:*
  - You may find yourself in a situation that you cannot handle alone;
  - Should an accident happen the alarm will not be raised until you are missed, which could be some time.
- *Possible precautions:*
  - **Always tell a responsible, nominated person where you are going and when you will be back; this person or persons should be named in your Safety Registration Form;**
  - Carry a mobile phone or other means of emergency contact. A prior survey to ensure adequate signal must be performed and consideration given as to what to do if there is no signal;
  - Carry an emergency whistle.

## 1.3 Night work

- *Associated hazards:*
  - You are less able to spot potential danger;
  - Should an accident happen, you are harder to find
- *Possible precautions:*
  - Carry a torch with fully charged batteries;
  - Familiarise yourself with the area by a daylight visit;
  - Wear high visibility clothing.

## 1.4 Rivers, canals, lakes and swamps, and their banks

- *Associated hazards:*
  - Drowning;
  - Hypothermia through becoming wet;
  - Boating accidents (see 3.5);

- Sudden fluctuations in water level and current;
- Weirs;
- Loose banks;
- Leptospirosis carried in water
- *Possible precautions:*
  - Lone working near or on water should not be allowed
  - Lifejackets (not buoyancy aids) which keep the head above water must be worn in boats;
  - Wear waders or Wellingtons (only in shallow water) if your feet are likely to get wet and cold;
  - Be aware of potential fluctuation in water level and current – keep in touch with local staff if possible for up-to-date information;
  - Make sure you understand river navigation and condition signs – read local information and obey warning notices;
  - Have reasonable access to a towel and dry clothes ('reasonable' will depend on temperature – in cold conditions it might be essential to change out of wet clothes immediately);
  - Cover wounds with a dressing. Wear protective gloves if appropriate and exercise good hygiene measures (hand washing post-work, avoiding eating or drinking during work etc);
  - Should you become ill with flu-like symptoms make sure your doctor knows you have been working around water and may have been exposed to certain diseases;
  - Further information on Weil's disease may be found at <http://www.hse.gov.uk/pubns/indg84.htm>

## 1.5 Woodland

- *Associated hazards:*
  - Falling over twigs, brambles, and other vegetation, stones;
  - Being scratched or pierced by brambles, twigs, barded wire;
  - Falling down animal burrows and ditches;
  - Falling bits of wood
  - Field work, particularly in areas with long grass, could bring you into contact with Lyme disease;
  - Some plants excrete toxic substances which can lead to severe irritation.
- *Possible precautions:*
  - Ask your supervisor or experienced staff or obtain local knowledge on any endemic plants which are toxic. Avoid if possible and wear long sleeves and gloves if appropriate. Report skin rashes to University Occupational Health Services or see your GP.

## 1.6 Farmland

- *Associated Hazards:*
  - Farm machinery, chemicals and equipment;
  - Livestock;
  - Farm vehicles;
  - Asthma and hay-fever caused by dust and pollen in summer;
  - Crossing gates and fences;
  - Electrical fencing.
- *Possible precautions:*
  - Inform all landowners of your activities
  - Do not touch farm machinery, equipment, chemicals or livestock unless this is part of your work and you have been suitably trained
  - If you have a serious allergic reaction you must seek medical advice, and may have to stop work
  - Take care climbing over gates and fences

### 1.7 Working in cold or heat

- *Associated hazards:*
  - Hypothermia, frost bite
  - Heat stroke, sun-burn, dehydration
- *Possible precautions:*
  - For cold conditions, make sure you are warmly dressed in several layers, wear a hat and gloves and have access to a warm drink
  - For hot conditions wear a sun-hat, use sun block on exposed skin, and have access to drinking water.

## 2 Handling animals and animal matter

### 2.1 General

- Be aware of the risks of developing allergy and likely symptoms
- Refer to University Policy Statement S2/03 available from C Clay or at <http://www.admin.ox.ac.uk/safety/oxonly/s203.shtml>;
- Make sure that you have a relevant licence if your work requires one, and that you fully abide by its terms and conditions.

### 2.1 Handling animals

- *Associated hazards:*
  - Being bitten, scratched or kicked;
  - Infection resulting from being bitten or scratched;
  - You are unlikely to be able to handle an animal without coming into contact with its bodily fluids.

- *Possible precautions:*
  - Ensure that you are properly training before handling any animal;
  - Treat any injury with first aid and obtain medical assistance if appropriate;
  - Contact University Occupational Health as soon as possible.

## 2.2 Contacting carcasses, faeces, urine, saliva, blood or bedding in the field

- *Associated hazards:*
  - All are capable of harbouring potentially harmful pathogens (see below for details about individual species);
  - They may produce an allergic reaction, particularly carcasses, urine and bedding;
  - Disposal of animal matter.
- *Possible precautions:*
  - Ensure a risk assessment under COSHH is completed;
  - Wash hands thoroughly after coming into contact with animal matter;
  - Animal matter coming from commensal species should be handled with disposable gloves;
  - Animal material should be disposed of following Departmental Safety Rules section 5.4;
  - Syringes and sharps should be disposed of following Departmental Safety Rules section 5.4.

## 2.3 Disease examples associated with particular species

- Leptospirosis (rat's urine); Salmonella (poultry); Yersinosis (birds); Toxoplasma (faeces); bovine TB (badgers); Duvenhage virus (bats).

## 3. Specific activities

### 3.1 Manual handling including repetitive tasks and lifting equipment (traps, D-vac, video equipment, radio-tracking equipment, batteries)

- *Associated hazards:*
  - Long term injury
  - Dropping load on a foot or hand
- *Precautions:*
  - Learn to handle loads properly – see C Clay; a leaflet is available for information and an assessment of risk must be done and will need to be recorded

### 3.2 Using a ladder

- *Associated hazards:*
  - Equipment breakage

- Ladder slipping, falling sideways or toppling back
- Over-reaching
- *Possible precautions:*
  - Refer to University Policy Statement S5/05 'The Work at Height Regulations 2005' available from C Clay or at <http://www.admin.ox.ac.uk/safety/0505.shtml>;
  - Try to avoid using a ladder where possible;
  - Make sure the ladder is on level ground at the base and is secured against slippage. Foot the ladder where necessary;
  - Ensure the ladder is maintained (a formal system for this is required) and suitable for the task;
  - Do not lean sideways while on the ladder; if necessary secure the ladder at the top;
  - Do not over-extend the ladder.

### 3.3 Using electrical equipment

- *Associated hazards:*
  - Electric shock
  - Fire or explosion
  - Chemical spillage from wet batteries (see 3.6)
- *Possible precautions:*
  - Refer to University Policy Statement S1/00 available at <http://www.admin.ox.ac.uk/safety/s100.shtml>
  - Equipment should have a fuse protection of the correct rating and a residual circuit breaker (RCD);
  - Equipment should be electrically tested (PAT test);
  - Ensure you only use equipment suitable for the task and that you are trained in its use.

### 3.4 Handling a boat

- *Associated hazards:*
  - Capsizing or running aground;
  - Engine failure;
  - Sinking through leaking.
- *Possible precautions (see also section 1.4):*
  - Fieldworkers must not handle a boat until they have received training and never alone;
  - Always wear a life jacket;
  - Carry a bailing bucket, oars and rowlocks;
  - Maintain outboard engines properly – always check fuel and spark plugs and carry a tool kit;

- Tell a nominated person of your intentions and expected time of return.

### 3.5 Using chemicals

- *Associated hazards:*
  - Flammable, harmful, toxic
- *Precautions:*
  - Refer to University Policy Statement S6/05 'Control of Substances Hazardous to Health (COSHH) Regulations' available from C Clay or at <http://www.admin.ox.ac.uk/safety/oxonly/s0605.shtml>
  - Read Departmental Safety Guidelines and ensure a COSHH assessment is completed for all hazardous chemicals;
  - Take particular care to label dangerous chemicals and prevent access or inadvertent contact with them by members of the public;
  - Make sure that chemicals left out in the field (for example rat poisons) are not placed where children or pets are likely to find them.