UBC Forestry Safety Plan Template and Guide

forestry
university of british columbia

The purpose of this guide is to provide a basic template for individual field safety plans. Individual safety plans are currently required at the departmental level within the Faculty of Forestry, however establishing a standardized faculty wide template with designated minimum required information serves to improve field safety broadly.

The field safety planning process consists of multiple steps, culminating in the creation of this plan, which can then be submitted for approval, filed, and implemented. Prior to completing this template, we suggest going through the Forestry Field Risk Questionnaire and associated resources in the Forestry Field Procedures and Safety Manual. The topics covered in these documents will assist in assessing the risk of your planned field activities, as well as mitigating those risks.

While this template contains fields for the minimum required information for a field safety plan, further additions or detail are always welcome. While some projects may find this minimum level sufficient, others may wish to explore further safe work protocols for specific tasks, advanced emergency evacuation plans, or specifics related to field schools and large group trips.

Information for this guide has been sourced from and based upon similar documents, including the Department of Forest and Conservation Sciences Individual Safety Plan, and the Department of Earth, Oceans and Atmospheric Sciences Fieldwork Risk Assessment.

Individual Safety Plan – Template

Project or Trip Name:

Project Lead Contact Details

First Name:

Last Name:

Email:

Date Plan Submitted:

Dates of Fieldwork (planned)

Start Date:

End Date:

Fieldwork Location (general location – specifics provided below):

Contact Details When in Field:

Phone:

Radio:

InReach Address:

Brief Fieldwork Activities Description:

Personnel Information:

Project Lead:

Name	Phone	Email	Relevant Safety Training
			e.g. Wilderness First Aid, Swiftwater Rescue, Avalanche Skills Training

Field Team Leader(s): *Add rows as needed*

Name	Phone	Email	Relevant Safety Training
			e.g. Wilderness First Aid, Swiftwater Rescue, Avalanche Skills Training

Field Team Members: *Add rows as needed*

Name	Phone	Email	Relevant Safety Training
			e.g. Wilderness First Aid, Swiftwater Rescue, Avalanche Skills Training

Field Site Description:

General area description:	e.g. Sampling will be conducted Cathedral Provincial Park, and the immediately surrounding areas
Nearest Town:	e.g. The nearest town is Keremeos, BC
Access to nearest town:	e.g. Access to Keremeos is via the Ashnola FSR, followed by BC Highway 3 eastbound for 5km. Estimated travel time from the field site is 65 minutes.
Nearest hospital (include nearest medical clinics or other care if hospital >60mins drive):	e.g. The nearest hospital is in Keremeos, which is a small community hospital open 6 days/week. The next nearest hospital is in Penticton or Princeton, with Penticton being the regional trauma center.
Access to nearest hospital:	e.g. Access to Keremeos Hospital is via the Ashnola FSR, followed by BC Highway 3 eastbound. Estimated travel time from the field site is 65 minutes. Access to the Penticton Regional Hospital is as above, with the addition of 25 minutes travelling North on Hwy 3a from Keremeos. Access to the Princeton Hospital is via the Ashnola FSR, followed by BC Highway 3 westbound. Estimated travel time from the field site is 95 minutes.

Field Site Map:

General area map:

Detailed site map (if applicable):

Hazard Assessment (see *Hazard and Risk Assessment* below for instructions)

Hazard	Source	Initial Risk Level *High, Med, Low, N/A*	Risk Mitigation Measure **Must** be completed if any risk	Final Risk Level
Stress	☐ Heat ☐ Cold ☐ Strenuous work ☐ Repetitive Motions ☐ Noise			
Wildlife	☐ Encounters ☐ Handling ☐ Disease			
Insects	☐ Bites/Stings ☐ Disease ☐ Allergies			
Vehicles	☐ Driving (on-road) ☐ Driving (FSR) ☐ Driving (off-road) ☐ ATV's ☐ Snowmobiles ☐ Bicycles ☐ Aircraft			
Climate	☐ Sun ☐ Rain ☐ Snow ☐ Wind			
Equipment	☐ Bladed Tools ☐ Chainsaw ☐ Brushing Tools ☐ Heavy Machinery ☐ Sampling Equipment			
Water	☐ Sampling in water ☐ Swift Water ☐ Boat use ☐ Off-shore marine travel			
Winter	☐ Avalanches ☐ Tree Wells ☐ Fall Through Ice			
Hygiene	☐ Food Prep ☐ Food Storage ☐ Personal			
Harassment or Violence	☐ Public ☐ Within team			
Remoteness	☐ Distance to medical care ☐ Getting lost ☐ Vehicle breakdown			
Other	☐ *Specify*			

Add additional rows or pages as needed. These are common hazards, but will not encompass all hazards you may face.

Daily Schedule

Provide a rough outline of the field activities, including approximate times. This should be updated prior to each trip (if multiple within a season), and left with the designated contact person.

Time	Activity	Location
07:00	Wake up, pack equipment, team tailgate safety meeting	Field Camp
09:00	Invertebrate sampling	Sample sites 3-4, 3-5, 3-6, 3-7
11:00	Move sampling areas	Transfer from block 3 to 4
12:00	Lunch, then invertebrate sampling	Sample sites 4-2, 4-3, 4-4
16:00	Return to camp	Field Camp via Stave FSR

Daily Check-In Protocol

Method of Contact:

Frequency of Check-In:

Check-in Person

Name:

Phone:

Email:

If check-in is missed, what should the check-in person do?

e.g. Try contacting cell-phones of all team members, contact accommodation provider, contact field collaborators or land managers. If not successful in establishing contact, call 911 to activate Search and Rescue response via the local RCMP detachment. Provide all of the above details as requested by dispatchers or emergency responders.

Do you have a grace period before activating this protocol?

Who should the check-in person notify at UBC Administration if this protocol is activated?

Emergency Response Protocol

General steps to respond to a medical emergency at your field site.

Also include response to other potential emergencies specific to your project or activities (e.g. Avalanche, boat capsize, ATV rollover)

Emergency Contacts (General)

Emergency	911
Nearest Hospital	
Forest Fire	1-800-663-5555 or *5555 from a cellphone
Nearest Search and Rescue Group	
Report a Spill	1-800-663-3456

Emergency Information Form – Please complete for each team member

NOTE: The following information is treated as confidential and is only for use in case of emergency.

Full name:	
Date of Birth (DD/MM/YYYY):	
Street Address:	
City, Prov., Postal Code:	
Phone (home/work/cell):	
Email address:	Care Card Number:

EMERGENCY CONTACT

Full name of contact:
Relationship:
Street Address:
City, Prov., Postal Code:
Phone (home/work/cell):
Email address:

MEDICAL (optional)

Do you have any medical conditions that could affect your safety in the field?
Yes [ ] No [ ] If yes, please describe:

Do you carry any medications for emergency use?
Yes [ ] No [ ] If yes, please describe:

Do you carry an epinephrine pen? **Yes [ ] No [ ]**
Do you have any known allergies? **Yes [ ] No [ ]** If yes, please describe:

Hazard identification and risk assessment

Excerpted from the UBC Earth, Ocean and Atmospheric Sciences Fieldwork Risk Assessment

To achieve a comprehensive appraisal of hazards during fieldwork it is advisable to incorporate the ideas of all participants and where appropriatestakeholders. A hazard considered as trivial to one participant may be considered significant to another. This diversity in hazard identification may result from variation in, personal experience, individual capabilities orbias associated with personal attitudes to health and safety.

Hazards may be site or task specific, they may be insidious or apparent and they have the capacity to affect individuals differently. The accepted method of 'Risk Assessment' is to score a hazard on the basis of 'Consequence' and 'Likelihood' (table 1). These individual scores are then used with the 'Risk Matrix' (figure 1) to determine the level of risk; giving a score of high, medium or low.

Where the risk associated with a task/hazard is determined to be high or medium the task should not be undertaken unless the hazard can be reduced. In this circumstance a systematic approach known as the 'Hierarchy of Control' needs to be applied to the control of a hazard (table 2). The hierarchy is subdivided into 5 levels of control; the first level of control being 'Elimination'. Elimination aims to remove a hazard or hazardous work practice from a worksite. An example may be to remove a tripping hazard. However, it is not always practicable or possible to eliminate ahazard and therefore the next control, 'Substitution' can be applied. An example of substitution may be changing from using a toxic chemical to a non-toxic alternative.

Skipping forward to the final level of control; Personal Protective Equipment (PPE) is considered the lowest, least effective, control because it assumes that the employee involve in a task will be exposed to some level of risk. Where long term exposure is likely PPE may not be sufficient in mitigating risks to employees.

To complete the Hazard Assessment Table in your safety plan, evaluate the initial risk using the consequence and likelihood matrix below (table 1, figure 1). Where assessed risk is medium or high, evaluate hazard mitigation methods you may be able to apply, following the hierarchy of control (table 2) to reduce risk. To evaluate your final risk for each hazard, reassess using the consequence and likelihood matrix, incorporating the decreased level of consequence or likelihood from your chosen mitigation. If the final risk remains high following mitigation, think carefully about whether this activity is truly essential to your work, or contact the Safety Committee for further guidance.

Table 1. Defining categories of Consequence and Likelihood

Consequence	Description
Major	Death or extensive Injury
Moderate	Medical treatment
Minor	First aid treatment
Insignificant	No treatment

Likelihood	Description
A	Is expected to occur
B	Could probably occur
C	Could occur but only rarely
D	May occur but probably never will

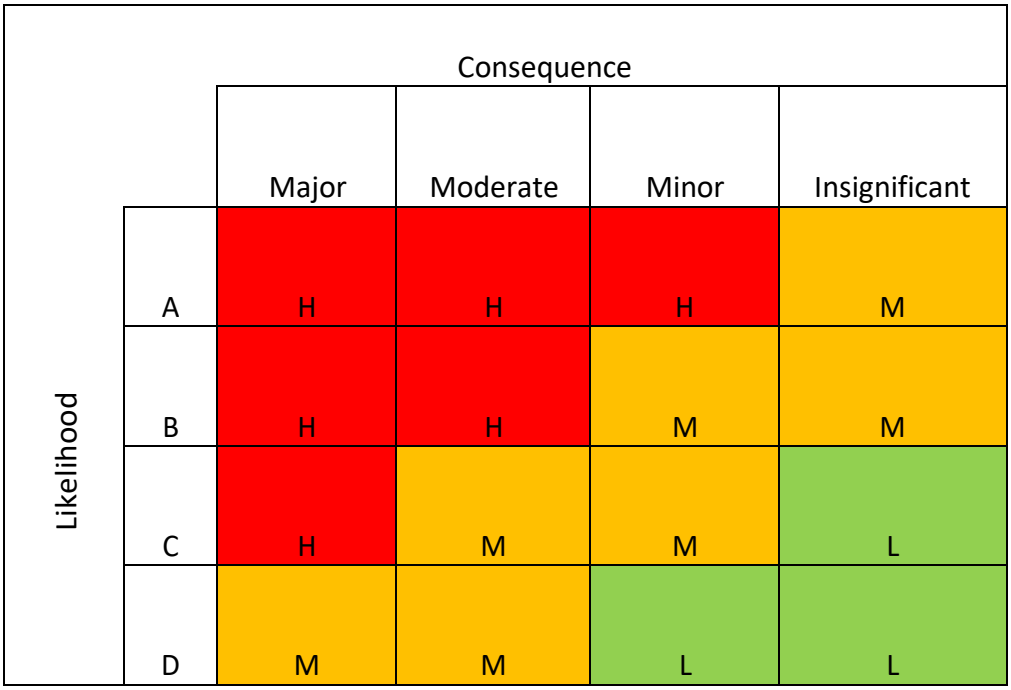

Figure 1. Risk Matrix combining elements of Consequence and Likelihood

Table 2. Hierarchy of control measures

	Example
1. Elimination	Remove the hazard • Asbestos: remove it from the building
2. Substitution	Use an alternative • use scaffolding rather that ladders • quieter machinery for noisy models
3. Engineering Controls	Separation of hazard • place a physical barrier around the hazard to exclude access • separate vehicle and foot traffic in warehouses
4. Administrative Controls	Change the work practice • require employees involved in hazard processes to have certain rest periods, e.g. truck drivers
5. Personal Protective Equipment	Provide protective clothing and or equipment.