

Code of Practice
for the
***Faculty of Natural
Resources Management***

Field School/Trips



Prepared by: Dr. Mathew Leitch
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Code of Practice for Forestry Field School

I draw your attention to the Code of Practice for Forestry Field School and ask all faculty, staff and students to implement it. This code of practice has been carefully developed in conjunction with Occupational Health & Safety (OH&S) rules and regulations together with advice from all users

Please read this code thoroughly, make sure you understand it and comply with it at all times.

This Code of Practice has been compiled by Dr. Mathew Leitch and authorised for distribution by *Dr. Ulf Runesson*, Dean, Faculty of Natural Resources Management.



Faculty and Staff involved with Field School Management

Dean of Natural Resources Management, Dr. Ulf Runesson, oversees the overall operation of Field School with the assistance of all participating faculty and staff. Faculty and staff possess high level skills in their discipline, they have designed the FS activities to complement your in-class curriculum and they are here to help you learn!

Any problems or concerns during Field School should first be brought to the attention of one of these people such that a quick response/repair can be made. Following FS, concerns dealing with Field School should also be brought to the attention of the appropriate Professor or Staff person first and then, if not resolved, to the appropriate Chair.

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Preface

Within the Faculty of Natural Resources Management, Field School activities are a requirement of all four years in the Honours Bachelor of Science in Forestry (HBScF) and the first two years of the HBES/BES (Honours Bachelor of Environmental Studies/Bachelor of Environmental Studies) Programs. HBES/BES students taking certain upper year level courses (e.g. pathology, entomology, mensuration II) may also be required to take the relevant FS component.

FS is an essential tool for many faculty and staff to introduce students to concepts and methodologies and to collect data for use in classroom or laboratory settings. This is not only a great opportunity for students to learn, but also for students to interact with faculty and staff in a more casual atmosphere prior to the start of formal classes. Please note that Field School is generally off-campus and as such, additional thought must be put into ensuring the safety of our students, staff and faculty. Safety considerations and special requirements must be observed in order to keep Field School safe for all users. Therefore, it is essential that anyone who attends Field School should be 1) properly inducted and trained on any equipment to be used, 2) wearing appropriate personal protective equipment (PPE) and 3) behaving in accordance with the expectations of this Code of Practice.

To ensure the safe and smooth operation of Field School, forward planning is required by all involved. Faculty and Staff begin this process several months in advance often dealing with outside agencies and service providers who have their own health and safety as well as employment standards to consider. The logistics are complex and therefore some elements are not subject to change. Nonetheless, given that field conditions can sometimes alter unexpectedly, we must also be prepared to be flexible and to put alternative plans into action. With these constraints in mind, we value your input but may not be in a position to act on it immediately.

For further information regarding Field School refer to the university calendar, consult with a Program Chair (Dr. Luckai or Dr. Runesson), or talk to a faculty or staff member.

Enjoy your Field School experience!

*“Remember if you want to move a mountain,
you must first begin by moving small stones”*

Be Patient

Field School Code of Practice Introduction

Field School activities are designed to provide students with practical knowledge and experience. As Field School generally occurs outside the classroom, there are some risks associated with this activity. As a result, safety must be explicitly considered and incorporated into the whole process. This will be discussed in the safety section below. A Field School Code of Practice is presented here for **faculty, staff and students** to help avoid unsafe working practices and to set procedures that will enable all users to effectively carry out activities with minimum interference or risk of injury. Occupational Health and Safety regulations, and common sense, suggest that all persons be made aware of the Field School Code of Practice and all faculty, staff and students follow the rules and regulations set out in this code. **ANY CONDUCT** which falls outside of this Code of Practice will result in the person's removal from Field School until such a time that the Dean reinstates him/her.

Management

The faculty or staff member responsible for a particular day activity with the students is essentially the person who is responsible for the students. This person is the first contact for any concerns dealing with their portion of Field School. Before using any equipment for the first time you must be trained by a person authorised to train users for the particular equipment. **AUTHORIZED TRAINERS** and **AUTHORIZED USERS** are different. A trainer is capable in the use and maintenance of the equipment while users are generally capable in the use of equipment. Faculty and staff for any given exercise while on Field School are considered the **AUTHORIZED** trainers. Any questions relating to equipment should be brought to their attention as should any damaged, missing or non-working equipment. In some cases, equipment will be loaned to students for the FS period – any equipment lost or damaged is the responsibility of the student and will be charged for.

Safety at Field School

To prevent unnecessary risks to faculty, staff and students, proper **Personal Protective Equipment (PPE) must be worn**. In the Lakehead University Calendar the PPE required by students in the Faculty of Forestry and the Forest Environment is as follows:

- hard hat (current)
- rain gear
- back pack
- safety glasses
- suitable clothing and footwear (green-tag safety-toed boots, gloves)
- hand lens
- safety glasses
- compass
- high-visibility reflective vest
- snowshoes

(* **NOTE:** some equipment, such as snow shoes, may not require safety-toed boots to be worn, see the instructor prior to the trip if you are not sure about required safety gear).

When PPE (eg. protective clothing, goggles, gloves, glasses, boots etc.) is necessary, it cannot be shared. PPE is to be provided by each user. It should be considered an investment in your professional supplies as it will also be used at some point in classes and during summer employment. Generally, for field activities all must wear safety-toed boots, high-vis vest, hard hat and safety glasses. Your compass and other gear should be with you; however, these items may not be required for all field activities.

Before any Field School activity is carried out, a Risk Assessment is completed and filed with the Natural Resources Management Front office. The Assessment ensures that effective preventative measures are taken (i.e. use quality assured buses, identify proper PPE, leave itinerary at school, etc.) as well as providing a checklist of items for use during the event itself. Risk assessments help to ensure smooth and safe activities in the field.

Most other aspects of FS safety relate to the actual activities in the bush where accidents can, and do, occur. The idea is to reduce both the chance and severity of an accident therefore minimizing negative outcomes. In the case of a small injury, all Field School trips will be equipped with a basic first aid kit and first aiders (identified on page 12 of this document).

Further Information on Safety Issues

This Code of Practice is intended to outline aspects of management specific to the Forestry Field School and should be used as a general outline for this activity only. Further information on Occupational Health and Safety can be obtained through campus literature (Resource Centre for OH&S 343-8128), government literature, faculty and staff.

Basic summary of rules and regulations for Forestry Field School

Field School activities will have certain rules and regulations, which should allow for a safe and productive field school.

- all students must read the Forestry Field School Code of Practice,
- in the field a high-vis vest, hard hat and safety-toed boots (safety glasses if in the bush) **must** be worn at all times,
- if in an indoor lab, close-toed shoes **must** be worn,
- any additional PPE (on top of that above) outlined in a risk assessment **must** be worn during Field School (e.g. a lab coats in the Pathology or Soils labs),
- equipment **must** be returned in a neat and operational manner,
- all waste is disposed of in an appropriate manner (no littering),
- all work areas must be cleaned up,
- a spill of any chemical or other material must be reported promptly,
- students must not use any equipment without first being trained on the equipment,
- no horseplay,
- **no** smoking in the field (designated area will be assigned at each location),
- **no** alcohol during field school activities.

Use of Bench Space

If labs occur indoors during Field School, benches must be kept clean and tidy when not in use. If something must be left overnight or longer make sure there is a label attached and it is appropriately located considering the experiment at hand, safety issues and other users of the lab. At the end of each working day make sure the bench space you have been using is cleaned off and the mess removed. In most forestry lab facilities all bench space is shared. Bench space is limited so make every effort to accommodate other users to avoid conflicts.

Storage of Samples

There is limited storage space in Faculty facilities. Any storage of samples, etc. from Field School activities will be arranged with or by the faculty or staff member in charge of the activity. All student material stored must be appropriately labelled and not left longer than is required.

Storage and Handling of Chemical Materials

It is standard practice that Material Safety Data Sheets (MSDS) be acquired and maintained in the form of a register for all chemicals (fixatives, preservatives, lab chemicals) used and stored and that this be accessible to all persons working in the laboratory. If students are required to use any chemical it is important that they be made aware of the issues related to using the chemical (i.e. toxicity, required PPE etc.). It is unlikely there will be chemical use in Field School; however, it could occur and students must be trained in the safe handling and storage of the chemical used (e.g. gasoline for saws is the most likely substance to be used and transported). If they do not use the chemical directly but it is involved in the activity the students must be made aware of risks associated with the chemical. Before any new chemical is introduced to the workplace, the MSDS should be obtained and a risk assessment should be carried out to ensure all aspects of safe handling and storage are met. All chemicals will be stored in appropriate storage facilities based on the nature of the chemical (e.g. Explosive, Flammable etc.). If transportation is required all chemicals will be transported according to Lakehead University guidelines.

Disposal of Wastes

As a general rule, ***“if you made the mess, you clean the mess”***. This also applies to left over materials, whether useable or not. Waste bins for non-hazardous materials are available if you are in a lab on campus. If in the bush, then the old saying ***“if you can pack it in full you can pack it out empty”*** applies. **Littering is never acceptable anywhere.** In the case of chemicals or hazardous waste material, the faculty or staff member will provide direction and supervision for students who must use required PPE. If unsure of proper procedures, contact the Lakehead University Resource Centre for OH & S (343-8128).

Sharps (eg. razor blades, scalpel blades etc.)

Special “sharps containers” are placed in all labs where these types of items are used. These containers will be labelled and will be on field trips if required. **DO NOT throw sharps in regular rubbish bins** as this may injure our cleaning staff. A similar waste “glass container” is provided in labs in case of broken glass.

Cleaning of Equipment

Maintaining cleanliness of equipment will benefit all users. Dirty equipment can lead to breakdowns as well as decreased performance and possible risks to the operator. For most purposes, wiping off the equipment is all that will be required; however, if more or a specific process is required then these procedures will be explained to the students for that piece of equipment. Be sure to wear appropriate PPE when cleaning equipment.

NOTE: when cleaning any piece of equipment, make sure the **power is off** and the equipment is unplugged (if equipment is corded).

Similarly, **NEVER** reach into a piece of equipment to remove debris while it is powered up or operating.

Code of Practice for Forestry Field School

The Code of Practice for Forestry Field School has been developed for the safety of all people involved. We ask all Field School students to implement it as this Code of Practice has been carefully developed in conjunction with Occupational Health & Safety together with advice from users.

Please read this code thoroughly, make sure you understand and comply with it at all times. Attendance at Field School (mandatory) can and will be revoked if unsafe practices or procedures occur.

This Code of Practice has been written by Dr. Mathew Leitch and authorised for distribution by *Dr. Ulf Runesson*, Dean, Faculty of Natural Resources Management. Prior to beginning Field School you must read this document, understand the rules and regulations as stated, and that privileges may be revoked if unacceptable practices or behaviour occurs.

THINK SAFE ----- WORK SAFE

Enjoy Your Field School

Emergency Contact Numbers

	<u>Number</u>
<i>All on Campus Emergencies</i> (injuries, fire, criminal, chemical spills, Explosion, odour etc.)	internal phone 8911 external phone 343-8911
<i>Off Campus Emergency</i>	911
<i>LU Security office</i>	internal phone 8569 external phone 343-8569
<i>Health Services</i>	343-8361
<i>Power House</i> (heat, water, electrical)	day 343- 8273 night 343- 8569
<i>Police</i>	(9)684-1200
<i>Poison Control</i>	(9)1-800-268-9017
<i>Thunder Bay Regional Health Sciences Centre</i>	(9)684-6000
<i>First Aiders in Natural Resources Management</i>	
Joan Lee	343- 8621
Frank Luckai	343- 8570
Paul Charrette	343- 8502
<i>Faculty of Natural Resources Management Administration</i>	
Jennifer Manion	343- 8507
Eva Scollie	343- 8511

Definitions							
Exposure	E	Likelihood	L	Consequence	C	Risk Level	Hierarchy of Risk Controls
Continuous	10	Almost Certain	1.0	Catastrophic	20	E >20	Elimination is a permanent solution and should be attempted in the first instance. Substitution involves replacing the hazard or environmental aspect by one of lower risk. Engineering controls involve physical barriers or structural changes to the environment or process. Administrative controls reduce hazard by altering procedures and providing instructions. Personal protective equipment last resort or temporary control.
Frequent	6	Likely	0.6	Major	10	H >10	
Occasional	3	Possible	0.3	Moderate	5	M 3-10	
Infrequent	2	Unlikely	0.1	Minor	2	L < 3	
Rare	1	Rare	0.05	Insignificant	1		

LEGEND

E: extreme/significant risk; immediate action required; must be managed by senior management with a detailed plan, notify RMO immediately.

H: high risk, senior management attention needed, detailed research and management planning at senior levels

M: moderate risk, management responsibility must be specified; manage by specific monitoring or response procedures

L: low risk, manage by routine procedures; unlikely to need specific allocation of resources

Details of Action to be Taken

Actions: *(These should be determined by both the person(s) identifying the risk and the responsible manager).*

When determining action refer to Hierarchy of Risk Control.

Person assessing the risk: _____ Date: _____

Authorised by: _____ Planned completion date: _____

Actions Completed

Actions by: _____ Completed (Initials & date): _____

Note on environmental aspects - Environmental aspects are to be considered in all activities. The following have been identified as possibly requiring attention in planning activities – but the list is by no means exhaustive. Show any other aspects that may be specific to your activity only. Treat these aspects in the same manner as assessing personal risk factors.

Type of activity	Aspects	Possible impacts etc.
Field-based	Trampling vegetation Collecting samples – soil etc. Chainsaw use Toilet facilities	Trampling rare or endangered flora Transporting soil between sites – pathogens etc. Fumes, noise – effect on nearby communities Contamination of catchments etc.
Laboratory-based	Experiments using chemicals, fume cupboards etc.	Waste disposal – emissions to atmosphere, wastewater system, landfill contamination from soil and wood samples, trade waste disposal issues
General works	Handling of potentially dangerous goods – chemicals etc.	Contamination of air, soil, water, stormwater system
Resource usage	Power, water, paper, general consumable usage etc.	Resource depletion, greenhouse gas pollution etc.

Waiver of Claims and Release from Liability

Please read carefully before signing. Activity waivers have held up in Canadian courts. Consider that you are assuming both physical and legal risk, which have potential financial implications for you and/or your family should you be injured or killed while participating in a Faculty activity.

The undersigned student (hereinafter referred to as the "Undersigned") agrees to participate in the Natural Resources Management Field School and other Natural Resources Management field trips that are part of the curriculum, or linked to research and other authorized activities of the Faculty of Natural Resources Management.

Details:

The Undersigned hereby releases the Faculty of Natural Resources Management, Lakehead University, its agents, volunteers, and employees from all liabilities, claims, demands, actions, and causes of action of any nature whatsoever arising from, or related to:

- any damage of any nature whatsoever including, but not limited to, damage, loss, theft, or destruction of property; or
- any injury, including death;

that may be sustained by the Undersigned, howsoever arising, notwithstanding such damage, loss, theft, or destruction of property, injury or death, results from the negligence of the Faculty of Forestry and the Forest Environment, Lakehead University, its agents, volunteers, or employees, while attending at, participating in, or travelling to or from said field school or field trips.

The Undersigned further states and affirms:

- that (s)he is aware of the fact that the aforesaid field trips/school and travel, even under the safest conditions possible, may be hazardous;
- that (s)he is in proper physical condition and health to participate in such field trips or travel and is aware that participation could, in some circumstances, result in physical injury;
- that (s)he has disclosed to the Program Chair any chronic medical condition (e.g. asthma, diabetes, epilepsy, etc.) that may affect his/her safety or performance during field activities;
- that (s)he is competent to sign this "Waiver of Claims and Release from Liability"; and
- that (s)he has read and understands all of the provisions herein contained.

This release shall be binding upon the heirs, estate trustees, successors, and assigns of the Undersigned.

Signed on the _____ *day of* _____, _____

Name (printed): _____ Date of Birth: _____

Local address: _____

Signature: _____ Witnessed by: _____

Contacts in case of an emergency:

Name : _____ Phone Number: _____

Name : _____ Phone Number: _____