

College of Forestry REMOTE FIELDWORK SAFETY PLAN TEMPLATE

Pursuant to the <u>EH&S Fieldwork Safety Guide</u>, this form (or equivalent) must be completed by the Supervisor (Principal Investigator (PI), field coordinator, or manager, etc.) and submitted to the Departmental Safety Manager prior to departure for remote fieldwork.

Remote Areas: (defined in terms of accessibility, as any location more than approximately one hour's travel time from definitive medical treatment)

The EH&S Fieldwork Safety Guide requires the Supervisor to manage the development and implementation of the operational unit's Remote Fieldwork Safety Plan. At a minimum, the plan shall include:

• A risk assessment:

Certain populations face increased risk when conducting fieldwork especially if they are entering unfamiliar communities and ecosystems. Supervisors will identify and adhere to practices to minimize risk for these individuals while conducting fieldwork. The best practices will be discussed with members of the field crew and included in the field safety plan. Please read more in the <u>College Safety Manual</u>, Section 400

- \circ $\,$ An action plan describing how risks will be managed
- A 'check-in/check-out' procedure to ensure that fieldworkers are accounted for while at the remote site
- An emergency response plan
- Identification of risk-appropriate training

NOTE: If a Supervisor performs fieldwork under the oversight of a more rigorous entity which requires fieldwork planning and risk assessment, said entity's fieldwork program may serve in place of OSU's College of Forestry's Remote Fieldwork Safety Plan. In the case that an alternate entity's fieldwork safety plan is used, documentation must still be submitted prior to initiation of remote fieldwork.

Plan prepared by:	Position/Title:
Phone number(s):	Email address:

Description of Fieldwork:

University Contact (PI or designated person on campus, name, office and cell phone #, email):

Local (Field) Contact (Crew lead, name, office and cell phone #, email):



EMERGENCY PROCEDURES

Emergency Plan for Research Location: include information on communication, equipment, local emergency contacts, emergency OSU contacts, etc. (use table below or include copy when submitting)

OSU (non field) Emergency Contacts and Dhone #s
OSU (non-field) Emergency Contacts and Phone #s
In-field OSU Emergency Contacts and Phone #s
Local Emergency Contacts (first responders) and Phone #s
(e.g., law enforcement, Coast Guard, search and rescue)

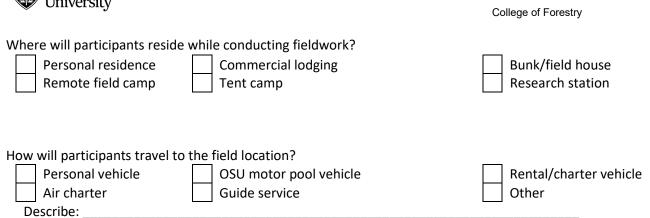
Will work take place in a remote area?

Remote Areas: (defined in terms of accessibility as any location more than approximately one hour's travel time from definitive treatment)

Yes. Complete this form.

No. No need to fill out unless you would like to.





Hazard Identification:

Hazard identification is critical to ensuring the Fieldwork Team's safety. The following checklist provides a guide to identifying common hazards. The Supervisor should review all aspects of the fieldwork to ensure comprehensive hazard identification has been completed.

Physical Demands:

What physical demands will the fieldwork entail?

Climbing	Extreme Heat	Manual lifting, carrying or handling heavy loads (≥50 lbs)
High Altitude	Extreme Cold	Working on, near, or over water
Hiking	Sun Exposure	Other:

Orientation:

Υ	Ν	NA			
			Have arrangements been	made to provide participants wit	th:
			□Potable water □Perso	nal washing/hygiene DToilet fac	cilities or procedures
			Have participants been in	formed of suitable clothing, foot	wear, and personal supplies
			required (e.g. boots, hat,	raingear, sunglasses, sunscreen,	insect repellent)? List required
			personal supplies below.		
			•	made to provide participants wit tective equipment such as:	th, and train them in the safe use of,
			□ Safety Glasses	Respiratory Protection	Coveralls
			Protective Footwear	Protective Headwear	Hearing Protection
			□ Gloves	Face Shield	Waders (Hip, Chest)
			 Knee/shin Guards Other: 	□ Flame Retardant Clothing	Personal Flotation Device
Have participants been made familiar with Oregon State University's policy on t drugs? https://hr.oregonstate.edu/employees/current-employees/health-wellness-and workplace Have participants been made familiar with Oregon State University's policies su Safety Policy / Respectful Workplace and Learning Environment Policy / Violence https://fa.oregonstate.edu/saf-manual https://hr.oregonstate.edu/manual/civility-workplace https://studenthealth.oregonstate.edu/violence-prevention					



Required personal supplies:

Other Hazards/Protective Measures/Comments:

Communication Systems

What communication systems will be employed?

•			
Cell Phones	Leaving Itinerary at Base Camp	Whistles/Air Horns	
Radio or Walkie-Talkies	Scheduled contacts	Satellite Communication (Spot,	
Satellite Phone		InReach)	_
	Other:		

How will participants remain orientated to their location?

Maps (paper)	Compass	Identification of safest routes
GPS (spare batteries)	Local guides	Area familiarization trips
Aerial photo	Other:	
Electronic map software		

What procedures have been established in the case participant(s) become lost?

Υ	Ν	n/a	
			Participant training on remaining at location, use of emergency signals, use of emergency survival gear
			Provision of survival gear
			Procedure for organized search
			Precautions against fire
			Precautions in the event of extreme weather conditions
			Other Hazards/Protective Measures/Comments:

First-Aid Kits

First-aid kits are required for all off-campus operations. It is the **Supervisor's responsibility** to provide the kit. It is the **crew's responsibility** to ensure that the kit is maintained. Prior to the departure for fieldwork, the Supervisor is responsible to document the presence of a first-aid kit for the trip and any other required first-aid supplies. The crew leader is responsible for informing the supervisor of needed replacement of first aid supplies.

First Aid and Emergency Response

Y	Ν	NA	
			Is first aid kit complete? (ensure all contents have not expired)
			Have all participants been made familiar with the location of first aid kit and its contents?
			Will itinerary be left with responsible person at the University?



First Aid and Emergency Response - Cont'd

College of Forestry

Y	Ν	NA	
			Will itinerary be left with responsible local authority?
			Are emergency contact numbers for local emergency assistance provided, and will be located in a readily available location available to all crew members?
			Has nearest medical facility been identified?
			Each participant created their profile on the website https://fieldplan.forestry.oregonstate.edu
			Have individual personnel medical needs been considered and addressed?
			Is there means to summon assistance in case of emergency, i.e., cell or satellite coverage been identified? Describe:
			Have all participants been made familiar with the Oregon State University Incident Reporting Process? (See website http://risk.oregonstate.edu/workerscomp/forms)
			Are additional first aid supplies required for this project or an individual? List:

Other Hazards/Protective Measures/Comments:

Clothing

Fieldwork participants should be informed of the appropriate field clothing to be worn while conducting their work. If additional specialize clothing is needed, the University will provide it. When extreme weather conditions are anticipated, appropriate clothing must be taken.

Equipment Checklist:

Specialized Clothing – describe:

PPE (respirator, eye/face protection/head protection/footwear/high visibility wear) - describe:

Training on safe use procedures for power equipment	Licenses (e.g. vehicle/boat/diving equipment)
Other training	Emergency supplies
Communication devices (e.g. whistles, 2-way radios)	Vehicle travel survival kit
Maps	Material Safety Data Sheets
Spot/InReach device or EPIRB	Fire tools
Other:	

Safe Use of Equipment and Work Processes:

Equipment and activities to which specific training or certification is required include: Written Standard Operating Procedures (SOP) or Written Instructions (WIs) for common hazardous tasks performed in remote field locations are printed and taken to the field and attached to this form.

Chain Saws, tree felling, bucking, cross sectioning	Explosives
Compressed Gases	Fall Protection above 6 feet
Confined Space	Hazardous Materials
Diving (Free, SCUBA, Line, NITROX, Tri Gas)	Ladders
Excavation/Trenching/Tunnelling	Lifting Devices and Hoists
Noise exposure above 85dBA	Scaffolds



Safe Use of Equipment and Work Processes - Cont'd

Powered saws, grinders & planers Travel Un-Improved Roads **Firearms** ATV **Chemical Immobilization Rocket Nets Fire Extinguisher** Climbing (tree, rock, tower), Rappelling, Rope work Towing a trailer Personal watercraft, other watercraft Snowmobiles Electrofishing Forest road driving Van driving Powered Mobile Equipment (fork lift, tractor, heavy equipment) Minimum Distances from exposed energized conductors (e.g. power lines) Other:

Y	N	NA	
			Are/will participants (be) trained to operate the equipment safely and in compliance with regulatory standards?
			Have/will employees been trained in Standard Operating Procedures?
			Have/will employees received first aid and CPR training?

List Hazardous Procedures:

REQUIREMENTS:

Equipment

All field equipment must be checked by a qualified person to ensure that it is in safe working condition (before removal from campus). Documentation of this pre-trip assessment of equipment is advised by use of a checklist or email to project leader that equipment is in safe working condition. Individuals operating the equipment must be trained in the equipment's proper use. Equipment must be checked by a qualified person periodically and replaced/repaired as needed.

Appropriate personal protective equipment (PPE) to be used while conducting fieldwork should be identified and, if necessary, provided to field workers. If PPE is required for work i.e. hardhats, safety goggle, high-viz vests, ear plugs, OSHA requires the employer to provide employees with the appropriate PPE. Required PPE must be used, and training must be provided in the proper use and maintenance of the PPE.

Participants inappropriately attired or without the correct PPE will not be allowed to participate in the Fieldwork.

College of Forestry



Will participants be exposed to zoonotic hazards?

Yes, fills	section	below.
------------	---------	--------

No, continue to next section

Zoonotic Hazards:

Y	Ν	NA			
			Have participants been adequately trained in the handling, capture and restraint of study		
			species?		
			Will participants be administering drugs/anaesthetics or obtaining biological samples?		
			If so, have they been trained in techniques appropriate to the species and in how to manage		
			disposal of waste or surplus materials?		
			Have participants been instructed on techniques to avoid unexpected encounters with		
			potentially dangerous wildlife?		
			Have participants been informed of the modesof contraction of disease from wildlife		
		(zoonoses) in the study area (e.g. Rabies, Plague, Hanta Virus, Tularemia, etc.)?			
		Have participants been made aware of the signs/symptoms of potential zoonoses that ma			
			be present in wildlife in the study area?		
			Have participants been made aware of potential vegetation hazards and the identification of		
			toxic plants such as Poison Oak / Poison Ivy?		
			Will an Epipen be on hand for those that need one?		

Other Hazards/Protective Measures/Comments:

Note: Occupational medicine offers rabies vaccinations for high risk work.

Will anybody be working alone?

Yes, fill this section

No, continue to next section

Working Alone

(Solitary field research activities in remote areas are discouraged; when possible, field research involving particularly hazardous locations or activities should be conducted by two or more people. When working alone is necessary, thorough risk analysis specific to solitary field work, establishing a method for regular communication, and check-in planning including steps to follow if a scheduled contact is missed are critically important; see guidelines and requirements for remote fieldwork.)

Υ	Ν		
		Will any participant be working alone?	
			Description (required)
		Has an effective communication system been established (e.g. radio, walkie- talkies, phones, whistles, air horns, flares, frequent and scheduled contact Example: Solo worker will be equipped with an InReach device, and check in that everything is OK hourly with a person with full communication capabilities (phone, internet, etc.))?



Working Alone - Cont'd

Description (required)

Limitations or prohibitions on certain activities while alone? Example: Solo worker will not use a chainsaw for regular work, and only if needed to open a road to get out. Communication with contact will be established before beginning chainsaw use, with regular (10 minute) updates.	
Establishment of minimum training or experience or other standards of competency before working alone?	
Example: Solo worker has X years of experience with data collection in this manner, navigating roads, and check in check out procedures.	

Does this project plan to handle Chemicals or Hazardous Materials?

Yes, fill section below.	No, continue to next section.
--------------------------	-------------------------------

Chemicals and Hazardous Materials:

Y	Ν	NA	
			Will hazardous material be transported to and from the site?
			Is each hazardous material brought to the field properly identified with a label (no abbreviations or formulas)?
			Will there be a hazardous material handling/spill kit taken to the field?
			Will the hazardous material/spill kit be inspected on a regular basis with used items replaced as used?
			If hazardous materials are collected in the field is there a SOP for safe handling and transportation of them?
			Will Safety Data Sheets for each hazardous material used be readily available to participants?
			Will samples be preserved in hazardous material (ethanol, formalin, etc.)?
			Will appropriate materials be available to adequately handle hazardous materials, spills, leaks, or releases?
			If applicable, have participants been trained for safe use, transport, and storage of radio isotopes in the field? (see OSU Radiation Safety Policy (https://ehs.oregonstate.edu/rso/rso_forms))

Other Hazards/Protective Measures/Comments:



Will this project require Travel Immunization/Prophylaxis Requirements?

Yes, fill section below. No, continue to next section.

Travel Immunization/Prophylaxis Requirements

http://www.cdc.gov/vaccines/aci	p/index.html	
Diphtheria	Polio	Other (specify below):
Hepatitis A	Rabies	
Hepatitis B	Rubella	
Japanese Encephalitis	Tetanus	
Malaria	Typhoid	
Measles	Yellow Fever	

Will there be anybody under the age of 18?

Yes, consult with HR for working with youth. No

RISK ASSESSMENT: List all identified hazards, including but not limited to those identified in the above form. Describe available measures that will be implemented in order to eliminate or reduce risks to acceptable levels.

	Risk level	
RISK	High, Medium, Low	PRECAUTIONS TO BE IMPLEMENTED



I, the undersigned, acknowledge that, in keeping with the OSU's College of Forestry's Remote Fieldwork Safety Plan Instruction:

- (a) I have been fully informed of the risks of this fieldwork as listed in this form and that I accept them;
- (b) I am aware of and will comply with the established safety procedures (SOP's and WP's initialed by participants and attached to this form) and my duties as a participant as set out in the OSU's Travel and College of Forestry's Remote Fieldwork Safety Plan, including my duty to take reasonable care for my health and safety and the health and safety of others who may be affected by my actions;
- (c) I am in a satisfactory state of health to undertake the field activity/research described in this form;
- (d) I have received all of the recommended immunizations listed in this form; and
- (e) I am aware of limitations of insurance coverage.
- (f) For specific requirements reference the OSU's College of Forestry's Remote Fieldwork Safety Plan Safety Instructions, Training requirements, and guidelines.

ACKNOWLEDGMENT OF PARTICIPANTS:			
NAME (print)	SIGNATURE (confirmation)	DATE	
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Signature of Principal Investigator

I acknowledge that this safety plan has been prepared in keeping with the requirements of the Oregon State University procedures for safety in fieldwork:

Name (print)

Signature

Date

Signature of Unit Head or Unit Safety Manager (or equivalent)

I acknowledge receipt of this document:

Name (print)

Signature

Date