College of Forestry 400: Forest Field Safety

Safety Policy & Procedure Manual Section 400: Forest Field Safety Effective: 01 January 2007

Revised: January 2020

Purpose

The purpose of this section is to provide information to help protect employees and students from the health hazards presented by field activities conducted in the forest.

Background Information

Workers performing in forest field conditions are regulated under Oregon Administrative Rules Oregon Occupational Safety and Health Division, Division 7,

437-007-0001 Authority of Rules. These rules are promulgated under the Director's authority contained in ORS 654.025(2) and ORS 656.726(4).

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0002 Purpose of Rules. The purpose of the rules contained in this Division is to prescribe minimum safety and health requirements for all employees employed in forest activities work.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/

General

- Field safety is the highest priority during all field activities
- Safety is an attitude
- Most accidents are the result of complacency and quite often happen to experienced workers
- Safety is a team effort as well as an individual effort

Sections covered in this manual include:

Section 410 Personal Protective Equipment
Section 420 Planning, First Aid, and Work Conditions Section
430 Tools, Fire Extinguishers, and Explosives
Section 440 Cutting Trees, Pre-commercial Thinning, and Slash Section
450 Forest Driving

College of Forestry 410: Personal Protective Equipment

Safety Policy & Procedure Manual Section 400: Forest Field Safety Effective: 01 January 2007

Revised: August 2019

Purpose

The purpose of this section is a) to ensure that all persons involved in forest field activities are properly trained in safe working practices and procedures and b) to ensure that College of Forestry field activities are in compliance with University and OR-OSHA rules and regulations for safety.

Background Information

Forest activities that require the use of personal protective equipment (PPE) are regulated under Oregon Administrative Rules Oregon Occupational Safety and Health Division, Division 7, subdivision D (437-007-0300).

The College of Forestry keeps and makes available to all of its employees and students hardhats, Hi-Vis safety vests, foam hearing protection, gloves, and safety goggles as well as field first aid kits through the Peavy Instrument Room. Hardhats are inspected for use by equipment room personnel and replaced after the service life has expired. First aid kits are inspected for perishable items and these are replaced as needed. Employees or students may check out safety equipment during the instrument room posted hours or by contacting the instrument room manager during other times. In addition, safety equipment may be reserved through the web page. The instrument room manager is:

Jim Kiser, Department of Forest Engineering 541-737-4219 jim.kiser@oregonstate.edu

Applicability

All academic, research, students, and visitors in the College of Forestry.

Policy

College faculty, staff, students, and visitors who perform any job-related activities in field conditions are required to obtain and use personal protection equipment where designated by this section.

Procedure

Personal Protective Equipment Checklist

The PPE requirements for each job activity in the forest may vary and the supervisor should inform each person under their supervision of the minimum PPE requirements for the activity and insure that each person complies with this. The following checklist is a summary of the minimum requirements for forestry field activities.

Hard Hat
Footwear
Hi-Vis Safety Vest
Eye Protection (Glasses with shields or goggles)
Hearing Protection
Hand Protection (gloves)
Personal first aid kit

Required Personal Protection Equipment

Hard Hat

A hard hat is required anytime you are outside of the vehicle on forest lands where there is potential for head injury from falling or flying objects. Hard hats must conform to ASTM standards and be Hi-viz in color. *OR-OSHA* (437-007-0305 Head Protection)

NOTE:

The employer is required to provide and require the use of hard hats for employees.

Footwear

Boots should be worn that are appropriate for the field conditions. Boots are defined as work boots with ankle support and non-skid soles. Persons whose duties require them to walk on trees, logs or boomsticks, must wear sharp caulked boots, or the equivalent.

Caulks are recommended when working in and around logs and slash. Caulks are not recommended on rocky ground. Persons who operate chain saws must wear cut resistant foot protection that will protect against contact with running saw chains. *OR-OSHA (437- 007-0330 Foot Protection)*

NOTE:

The employer is <u>not</u> required to provide logging boots for employees. The cost of logging boots may be borne by employees.

Clothing

A hi-viz vest is required around any active equipment, during hunting season, or along travel corridors. *OR-OSHA* (437-007-0310 High- Visibility Color)

A minimum standard of short-sleeved shirt and long pants are required for forestry field activities.

Hearing Protection

Hearing protection is required in areas where the db is > 85. This includes chain saw use. *OR-OSHA (437-007-0335 Hearing Protection)*

Hand Protection

Gloves must be used in any activity that exposes the hands to hazards including rough or sharp surfaces and any type of chemical or thermal use. *OR-OSHA* (437-007-0320 Hand Protection)

NOTE. The employer must provide and require employees to use hand protection where required:

Eye Protection

Safety goggles or shields for eyeglasses must be used where eyes are exposed to flying particles. *OR-OSHA (437-007-0315 Eye and Face Protection)*

NOTE: The employer must provide and require employees to use eye protection where required.

First Aid Kit

Each person should carry a small personal-sized first aid kit in addition to the larger crew first aid kit. A list of suggested kit supplies can be found at: https://ehs.oregonstate.edu/sites/ehs.oregonstate.edu/files/pdf/si/first_aid_kits_and_supplies_si006. pdf

In addition to the listed minimum requirements for PPE, special job activities may require the use of additional required PPE including flotation devices where workers are on or near water and respiratory protection where workers are exposed to air contaminant.

College of Forestry 420: Planning, First Aid, and Work Conditions

Safety Policy & Procedure Manual

Section 400: Forest Field Safety Effective: 01 January 2007 Revised: January 2020

Purpose

The purpose of this section is to ensure that all persons involved in field activities are properly trained in the identification of workplace hazards and the planning of safe working conditions including proper medical supplies and first aid training.

Background Information

All field activities may be subject to the rules and regulations for planning, first aid and work conditions as regulated under Oregon Administrative Rules Oregon Occupational Safety and Health Division, Division 7, subdivision C (437-007-0200).

Forest activities are divided into those of more than one day duration and those of no more than one day duration. Activities in this section include *Site Planning and Implementation*, *Hazard Identification*, *Checking Systems*, *Working Alone*, *Medical Services*, and *Weather Conditions*.

Applicability

All academic, research, students, and visitors in the College of Forestry who are conducting field activities. Procedure

The following checklist for supervisor should be evaluated prior to the start of any new activity. Please reference remote field conditions section which have specific requirements by OSU.

A pre-work onsite safety inspection has occurred

Identified hazards have been identified and marked where necessary

A checking procedure for all workers has been established especially for employees working alone

A medical plan for the site has been established

A weather plan has been established

Field sanitation has been provided for where appropriate

Site Planning and Implementation

Supervisors are responsible for the following regulations in the case of all activities whose duration is longer than one day are subject to the following:

Onsite Surveys

Before the start of any activities an onsite safety survey must be conducted. *OR-OSHA* (437-007-0200). The purpose of the survey is to identify any safety hazards that may be present on the site. In addition, the employer is required to conduct a pre-work safety meeting with all employees working on the site to discuss the site conditions and identified hazards as well as the medical evacuation procedures for that site.

NOTE: This meeting must be documented and may be used to satisfy the requirement for monthly safety meetings (OR-OSHA 437-007-0130(4)).

Prior to the start of any activities, danger trees or snags in the work area must be evaluated by a competent person. If any are deemed as hazards, they must be felled or at a minimum the work must be arranged to minimize danger to workers.

The employer is responsible for arranging activities so that the actions of one worker do not create a hazard for any other workers on the site.

Hazard Identification

Supervisors are responsible for identifying any worksite hazards and insuring they are marked appropriately (**OR-OSHA 437-007-0205**). Hazards are to be marked with hazard identification ribbon that must be bright orange, at least 1 1/2 inches wide, and marked in black with "skull and crossbones" and/or the word "Danger.

NOTE: The employer must notify employees of existing marked hazards in their work area and instruct all employees in the recognition and use of hazard identification ribbon. This ribbon must not be used for any other purpose than identifying hazards and must be removed when the hazard is abated.

Checking Systems

Supervisors are responsible for implementing a checking system to account for all employees at the end of each work shift. Employees must be knowledgeable about the checking system (**OR-OSHA 437-007-0210**).

NOTE: In the case of employees working alone, the employer is required to implement a system to check on the well being of those workers as provided in the section on **working alone** (OR-OSHA 437-007-0215(3)).

The checking system must include the time interval between checks and the procedures to be followed if the employee cannot be contacted, including provisions for emergency medical care and treatment.

- A specific person must be assigned for contacting the lone employee and verifying when contacts were made.
- The time intervals for checking must be understood and agreed to by all parties.
- Intervals should reflect the hazardous nature of the work and the methods available for checking.
- The system for checking an employee's well-being must be reviewed at least annually.

Working Alone

Workers are not prohibited from working alone when performing certain jobs which by their nature may be single employee assignments, provided the employer complies with the requirements for Checking Systems and Medical Services and First Aid (**OR-OSHA 437-007-0215 (3**)).

NOTE: (OR-OSHA 437-007-0215 Sections 1, 2, and 4).

The employer must not assign workers to a task or location so isolated as to be without visual, audible, or radio contact with another person who can summon or provide aid in an emergency.

When the job tasks include fire, suppression, prescribed fire, tree climbing, power chain saw operation, yarding, loading or a combination of these duties a minimum crew of two employees who must work as a team and must be in visual or natural unassisted voice communication with one another. In addition, when the job tasks include moving heavy parts or there is a probability of something heavy falling on a worker, there must be another person in the area who can render immediate assistance or emergency care.

Medical Services and First Aid

Supervisors are responsible for developing and implementing an emergency medical plan to ensure emergency medical service to employees with major illnesses and injuries (OR- OSHA 437-007-0220).

All employees must be knowledgeable concerning the emergency care and emergency medical treatment plan (Section 2).

All personnel employed in forest activities must be trained in first aid and CPR as follows (Section 3

- 1. In a language they understand.
- 2. At least every 2 years or as required by a nationally recognized first aid training provider.
- 3. All supervisors must be first aid and CPR trained prior to their initial assignment.
- 4. All new employees, other than supervisors, that are not first aid and CPR trained prior to their initial assignment must receive a first aid and CPR briefing.
- 5. For the initial start-up of an operation where new employees are assigned, at least one out of every five crew members must be first aid and CPR trained before work starts.

NOTE: (OR-OSHA 437-007-0215 Section 4).

Each worksite must have at least one serviceable and operable two-way radio, phone or radio/phone or one- or two-way messaging device available to reach ambulance service. Citizens' band radios are permitted only as a secondary means of communication. In the event of a communication "dead area" the crew must have a mobile communication unit or advance plans to relay emergency calls through another site.

NOTE: (OR-OSHA 437-007-0215 Section 6).

At worksites of more than one day duration, the employer must have available near the worksite communication device(s):

- Written land directions to the worksite.
- The worksite location by longitude and latitude.

NOTE: (OR-OSHA 437-007-0215 Section 7).

At work sites of more than one days duration When air evacuation is available, the employer must have available, near the worksite communication device(s), the:

- Name and phone number of the air evacuation service.
- Worksite location by latitude and longitude or township, range and section as required by the air service.

First Aid and Transportation

The employer must assure that transportation is always available to a point where an ambulance can be met, or the nearest suitable medical facility (OR-OSHA 437-007-0215 Section 8).

NOTE: (OR-OSHA 437-007-0215 Section 9).

Vehicles used for the transportation of personnel must carry a suitable first aid kit that is easily located. In addition to the vehicle first aid kit, additional first aid kits must be available at the job site. First aid kits must be suitably equipped for the job.

The instrument room carries these and they are available for checkout.

First aid supplies must be stored in adequate containers, clearly marked "First Aid", and regularly inspected and replenished as needed. The container must not be locked but may be sealed. All employees must be informed of the location of first aid supplies.

Working Near Unstable Objects and Danger Trees

Supervisors are responsible for conducting a general inspection of the worksite to identify trees, logs, rootwads, rocks, chunks or other objects that may roll, slide or fall towards personnel. If any object is likely to move during work activity, it must be removed, stabilized, or the work activities modified so that the unstable objects are no longer a hazard. (OR-OSHA 437-007-0225).

NOTE: Consideration must be given to rain, snow, other weather conditions, or working below felled and bucked timber that may increase the likelihood that objects may roll, slide, or fall.

Working Conditions

Supervisors are required to have a competent person who must determine if work activities can be safely conducted during inclement weather conditions or darkness. When weather conditions or darkness pose Section 400

a hazard to workers, the activity must be discontinued until the work is arranged to mitigate the hazard.

NOTE: This rule does not prohibit work activities at night, but it requires an assessment of conditions so work can be done safely.

Field Location Information

The following information should be recorded to assist emergency or search crews to reach the work site.

<u>Legal Description</u>	
Section	
Township	
Range	
County	
GPS Location (Lat & Long., Datur	n used)
Emergency Contacts Include the	nearest medical facility
Name	
Phone	
Name	
Phone	
Medical Facility	
Phone	

College of Forestry 430: Tools, Fire Extinguishers, and Explosives

Safety Policy & Procedure Manual Section 400: Forest Field Safety Effective: 01 January 2007 Revised: January 2020

Purpose

The purpose of this section is to ensure that all persons involved in forest field activities are properly trained in the use of hand and portable tools, chain saws, fire extinguishers, and explosives used in any forest activities.

Background Information

The use of hand and portable tools, chain saws, fire extinguishers, and explosives used in any forest activities may be subject to the rules and regulations regulated under Oregon Administrative Rules Oregon Occupational Safety and Health Division, Division 7, subdivision C (437-007-0400). The section on explosives has been deleted from this section. Employees engaged in any work activity that includes the use of explosives should follow the OR-OSHA directives with regard to the use and regulations of explosives (OR-OSHA 437-007-0415).

Applicability

All academic, research, students, and visitors in the College of Forestry. Procedure
The following checklist for supervisor should be evaluated prior to the start of any new activity.
All tools have been inspected for safe condition. All wooden handles have been inspected.
All tools have been stored in vehicles properly.
All employees using chain saws have been through a training course. Required fire extinguishers are
available and have been inspected.

Hand and Portable Power-Driven Tools

Supervisors are responsible for the safe condition of hand and portable power tools used in forest activities regardless of tool ownership. The supervisor must insure that all safety devices and controls must be in place and function properly. In addition, the supervisor must require all personnel to:

- 1. Inspect each tool before use to assure its safe condition
- 2. Report any unsafe tool condition
- 3. Remove or repair tools if the condition affects the safe operation

NOTE: If a slick or slippery axe or hammer handle cannot be firmly gripped, the tool must not be used.

All tools must be appropriate for their use and used in a safe manner. Wooden handles must be sound, straight-grained and tight-fitting.

Heads of shock or impact-driven and driving tools must be dressed or ground to remove any mushrooming.

When the heads of shock or impact-driven tools show a tendency to chip, they must be removed from service.

Cutting edges of tools must be sharp and properly shaped.

When tools are not being used, they must be stored in a location where they will not create a hazard.

Racks, boxes, holsters, barriers or equivalent means must be provided and used so the passengers and/or driver will not be endangered by tools, equipment or materials being transported, loaded or removed.

Chain Saws

The College of Forestry provides training in the safe use of chain saws. If you or your employees have not received this or equivalent formal training in the use of chain saws, you should not use them. Chain saw training can be arranged through the College Safety committee.

Operation of chain saws is regulated through OR-OSHA 437-007-0405

All chain saws must be inspected prior to use for cracked handles, loose bars, or other defective parts. Fueling for chain saws must be away from open flames and never with the engine running. Chain saws must have an operable chain brake and an automatic throttle.

Chain saws must always be started on the ground or some position with firm footing.

Never start a chain saw in the air.

You should never use a saw:

- To cut directly overhead in a manner that would cause limbs, chunks of bark or pieces of wood to fall on the operator.
- At a distance that would require them to relinquish a safe grip on the saw.
- In a position or at a distance that could cause you to become off balance, or have insecure footing.

When carrying a chain saw beyond a short distance, the engine should be off while walking and the chain brake engaged.

Fire Extinguishers

Fire extinguishers, where required are regulated through OR-OSHA 437-007-0410.

Fire extinguishers in use must be fully charged and maintained in operable condition.

They must be visually inspected monthly in addition to having an annual maintenance check. The annual maintenance check date must be recorded and this record must be retained for one year.

Training for use of Fire Extinguishers is provided through the university at https://ehs.oregonstate.edu/osu-fire-extinguisher-use

Explosives and Blasting Agents

- 1. The storage, transportation, handling, and use of explosives and blasting agents must be in accordance with OAR Chapter 437, Division 3, Subdivision U, Blasting and The Use of Explosives.
- 2. Explosives and blasting agents must be handled only by qualified, designated personnel.
- 3. Explosives and blasting agents must not be transported in:
- a. The driver's compartment.
- b. Any passenger-occupied area of a machine or vehicle.
- 4. Explosives must not be hauled on any vehicle while it is engaged in transporting workers.

EXCEPTION: This rule does not prohibit the driver and one qualified person from riding in a vehicle in which explosives are being hauled

College of Forestry 440: Cutting Trees, Pre-commercial Thinning, and Slash

Safety Policy & Procedure Manual Section 400: Forest Field Safety Effective: 01 January 2007

Revised: January 2020

Purpose

The purpose of this section is to ensure that all persons involved in forest field activities that involve cutting or felling of commercial trees, pre-commercial thinning, or cutting brush and slash are properly trained in the field procedures for these activities.

Background Information

Forest activities that require the felling of commercial-sized trees, pre-commercial thinning and slash cutting regulated under Oregon Administrative Rules Oregon Occupational Safety and Health Division, Division 7, subdivision I (437-007-0800).

Applicability

All academic, research, students, and visitors in the College of Forestry.

Policy

The policy of the College of Forestry is that no personnel under any circumstances are to fell any tree greater than 6" DBH unless they have been through a recognized training course and have been certified to fell trees. Projects that require felling trees greater than 6" DBH are to contact the College Safety Committee for available personnel who are trained and certified to fell trees. Personnel trained and certified to fell trees are to follow all rules in the section on *Logging Safety* in this manual.

Procedure

The following regulations are for those activities involving trees less than 6" DBH, bucking downed logs, or cutting slash.

Any worker falling a tree or bucking a log must be located so their work will not endanger others.

Personnel must not approach within two tree lengths of a tree being felled without receiving a signal from the person falling the tree that it is safe to approach.

The minimum distance between any worker(s) manually falling trees and any other personnel must be twice the height of the trees being felled.

EXCEPTION: This does not apply to a team of two or more working on the same tree.

NOTE:

All College personnel using chain saws or other tools are to be properly trained. Employees who are inexperienced in log bucking are to be directly supervised by a qualified person during any bucking activities. Supervisors are not to ask employees to use chainsaws for bucking logs if they are uncomfortable or feel unsafe in the activity.

Bucking Logs

Activities involving bucking logs (includes cutting disks off of downed logs) are regulated through OR-OSHA 437-007-0820.

When a worker is bucking, they must give a timely warning to others within range of any log that may move after being cut off. If unsure you should not proceed. In the case of windfalls only qualified persons are to buck windfalls.

Before workers start bucking, they must always examine the log to determine which way logs will roll, drop or swing and notify all others in the area before proceeding.

NOTE:

Never buck a log on the downhill side.

Before a worker starts to buck a tree or log they must:

- Clear away brush and other material which might interfere with a quick escape.
- Establish firm footing.

Logs that are not completely bucked through must be conspicuously marked with hazard identification ribbon as required by OR-OSHA 437-007-0205, sections (1) through (5).

Two or more persons must not buck the same tree or log at the same time.

The employer must provide and require employees to use applicable personal protection equipment where required.

College of Forestry 450: Forest Driving

Safety Policy & Procedure Manual Section 400: Forest Field Safety Effective: 01 January 2007

Revised: January 2020

Purpose

The purpose of this section is to ensure that all persons involved in field activities are properly trained in safe driving practices on forest and other unimproved roads.

Background Information

Driving on forest roads presents a host of safety issues not normally found on paved public roads. Most forest roads in both the national forests and industrial lands are single lane roads, with occasional turnouts and surfaced with rock and gravel. These roads were all originally designed and constructed to be logging roads and are commonly steeper and windier than public highways, and probably most important, they were designed and constructed to be single lane roads. In addition, most roads are gated with special vandal- resistance gates that have their own hazards associated with them.

Procedure

General Driving Practices

When driving on forest roads, you will normally see only one set of wheel tracks in the road. This means that if someone is coming towards you, they are driving in the same set of tracks! There are some practices that make this situation safer.

Drive at a speed where you can stop in ½ the distance that you can see down the road. That way, when you meet someone who just came out from around a blind corner, you can each stop before hitting the other vehicle. For most forest roads under good conditions the maximum safe speed is 15-20 MPH.

Stay to the right side of the road around blind corners. Usually the sharp blind corners have wide spots for the outside lane to use. Make it your regular practice to swing wide around these corners in case someone is coming the other way. These roads were built for limited traffic volumes. Today there are far more vehicles driving around in remote parts of the forest.

Pay attention to the road as far ahead as you can. Often you can see part of the road where you will be next, even when you can't see around the next corner. Sometimes it is even in sight out your side window. Notice if there are any vehicles there that you will be meeting soon. A good practice on dry days is to look ahead for dust indicating another vehicle coming.

A number of other safe practices include:

- When driving on forest roads you should always have headlights on to help others see your vehicle approaching.
- All passengers as well as the driver must wear seat belts whenever the vehicle is moving. This is also state law.
- Every vehicle should have a first aid kit and all persons in the vehicle should know where the first aid kit is located.
- On forest roads, trucks, lowboys, graders, and emergency vehicles have the rightof-way. Whenever you need to move over to the right you should remember to stay out of the ditches and be especially careful of soft shoulders which are typical on forest roads.

Forest Vehicles

Know your vehicle well. In many cases you will be driving a vehicle that is different from your personal vehicle. It may be larger in size and/or engine power and likely have 4 wheel-drive. If it does have 4 wheel-drive, make sure you know how to engage and disengage it before you need to use it. Some vehicles are automatic and require nothing more than a simple button push from the cab while others are fully manual and require you to manually lock the wheel hubs from the outside. If you are alone and need to do this, turn off the engine and put the vehicle in park before getting out to lock the hubs.

Public Use of Forest Roads

On state and federal lands in particular, the roads and forests are used by the public sometimes in large numbers. A good practice when encountering others hiking or biking on the roads is to assume that they may have dogs with them. You should be alert to the possibility that a pet dog may be nearby in the brush or across the road running loose. When encountering bicyclists remember they do not have as many options for moving over on loose gravel. Be courteous as well as safe and slow down. Horseback riders pose an additional safety concern. Horses by nature are prone to panic at the slightest occurrence. This poses a danger for the rider and it is best to stop and allow the horse and rider to pass unless the rider motions for you to pass.

Active Forest Operations

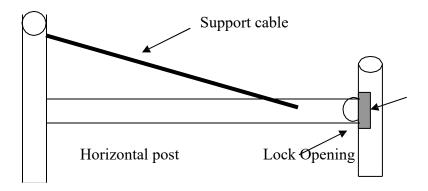
If you are visiting or come upon an active forest operation you should always consider the following.

- Stay well away (300 feet or more) from equipment until the operator acknowledges your presence, stops the machine, and motions for you to proceed forward.
- If you come across steel cables on the ground across the road do not drive over them until you have been instructed to. Many of these are "live" lines and could move at any moment.

• Be aware that the road surface around active operations may be quite soft and disturbed. Drive carefully around these.

Forest Gates

Forest roads are generally controlled by steel post gates similar to the one shown. The gates have a locking mechanism inside the opening in the small post and in some cases will have multiple locks in a configuration that allows the gate to be opened by unlocking any one of the locks present. It is important that before opening one of these you carefully note the configuration and are able to replace it the same way. Failure to do this could result in becoming locked behind the gate.



The lock opening in the small post is a favorite place for wasps and hornets to build nests. In addition, vandals have been known to place broken glass and other objects inside these openings. *NEVER place your hands inside to open a lock without first looking inside.*

The cable that attaches the horizontal post is a support cable. You should always pay attention to its condition. Vandals have been known to cut or damage this support cable. *NEVER pull a gate open toward you. Always push it away.* If the horizontal post were to fall off the hinge it will land on the ground and not on you.

When you are on forest roads remember that you are generally on someone else's lands. The general rule is to leave gates as you find them. If gates are open when you arrive, leave them open. If they are locked you should lock them after you pass through. A good habit to get into is to leave a note in the lock box indicating to others that you are somewhere on the roads inside the gates. A better option is to place a metal tag out on the gate lock that has your name and phone number on it. This indicates to others that you are still inside the area.

College of Forestry 460: Remote Site Safety

Safety Policy & Procedure Manual Section 400: Forest Field Safety Effective: 01 January 2007

Revised: January 2020

Purpose

To ensure that employees are prepared to safely conduct remote fieldwork, are accounted for, and have reasonable access to assistance in the event of an emergency.

Background Information

Fieldwork is fundamental to the University's mission. By its very nature, fieldwork has the potential to expose employees to hazards that are uncommon to their day-to-day lives. Fieldwork is not exclusive to any particular discipline and may be viewed as commonplace in agriculture, engineering, fisheries and wildlife, forestry, and geology, among others. And while extremely remote sites, such as Antarctica, certainly command an elevated level of respect and attention to detail, it is "routine" fieldwork that most often leads to injury, illness, or other unintended consequences. OSHA's General Duty Clause requires that employees are provided "a place of employment ... free from recognized hazards ... likely to cause death or serious physical harm ... about which the employer knew or should have known".

Procedure

More information on remote site work is offered on the following EH&S sites:

 $\underline{https://ehs.oregonstate.edu/sites/ehs.oregonstate.edu/files/pdf/remotefieldworksafetyg\underline{uide.pdf}$

https://ehs.oregonstate.edu/fieldwork-safety

College of Forestry 470: Safe Fieldwork Strategies for At-Risk Individuals

Safety Policy & Procedure Manual Section 400: Forest Field Safety Effective: 01 January 2007 Revised: February 2023

Purpose

To ensure that all persons involved in forest field activities are properly trained in safe fieldwork strategies for at-risk individuals.

Background

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. The plan will detail potential risks and identify ways to address the risks. There are many resources that outline strategies for researchers, supervisors, and institutions to minimize threats to at-risk populations while conducting field work. It is the duty of the supervisor to self-educate on the conditions at field sites and identify issues that might impact the safety of field crew members. Here are several resources designed to help you create a safe work environment for a diverse scientific community:

- Research Paper 'Safe fieldwork strategies for at-risk individuals, their supervisors and institutions': https://urgeoscience.org/wp-content/uploads/sites/33/2021/03/Safe-Fieldwork-Strategies-for-At-Risk-Individuals.pdf
- Seminar Recording 'Safer Science: Strategies to protect at-risk researchers when conducting fieldwork':
 https://vod.video.cornell.edu/media/Safer%20Science%3A%20Strategies%20to%20protect%20at-risk%20researchers%20when%20conducting%20fieldwork/1 noix4lnn
- UC Riverside Training 'Fieldwork Toolkit Leadership Training Series': https://training.ucr.edu/fieldworkleadership
- Field Safe at Oregon State University: https://osufieldsafe.weebly.com/
- Research Article 'A guide for developing a field research safety manual that
 explicitly considers risks for marginalized identities in the sciences': <u>Rudzki et al.</u>
 2022 Guide for developing a field safety manual considering riskes of marginalized
 identities.pdf
- Research Article 'Best practices for LGBTQ+ inclusion during ecological fieldwork: Considering safety, cis/heteronormativity and structural barriers': https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.14339

Applicability

All academic, research, students, and visitors in the College of Forestry who are conducting field activities.