**Safe Work Procedure Farmer’s Fields**

**PURPOSE**

This document describes safe work procedures for working in a farmer’s field.

**SCOPE**

*Identify who this document applies to: faculty, staff, paid students, volunteers, visiting researchers, etc. This document applies to all UBC employees (faculty, staff and paid students).*

This document applies to all UBC employees (faculty, staff, paid students, and volunteers).

**REGULATIONS**

* [Workers Compensation Act](http://www.bclaws.ca/Recon/document/ID/freeside/96492_00)
  + [Section 115: General Duties of Employers, 116: General Duties of Workers, General Duties of Supervisors 117](http://www.bclaws.ca/Recon/document/ID/freeside/96492_03#section115)

**DEFINITIONS**

***Administrative Controls:*** The modification of work processes or activities to minimize risk

***Engineering Controls:*** The modification of the physical work environment to minimize risk

***Hazard:*** A potential source of harm to a person that can lead to a risk of injury or occupational disease

***Risk:*** The chance of injury or occupational disease

***Risk Assessment:*** The process where hazards are identified, their risk evaluated, and controls for the risk

are determined to eliminate the hazard or minimize the risk

***Supervisor:*** The person directly responsible for overseeing the tasks of the worker

***Worker:*** All employees of UBC including faculty, staff, and paid students

**RESPONSIBILITIES**

**Department Head**

* Review and approve safe work procedures outlined in this document prior to their implementation

**Supervisor**

* Conduct a risk assessment to identify the potential hazards associated with a particular job and their associated risks
* Implement controls using the hierarchy of controls to minimize the risk due to the hazard
* Complete a safe work procedures to accompany the risk assessment for a particular job by using this template
* Ensure proper training has been provided to workers PRIOR to commencing work (e.g. safe work procedures, use of equipment or tools, personal protective equipment requirements, identifying and reporting hazards, etc.) and that the training has been documented
* Ensure workers have access to and understand any required documentation such as manuals, Safety Data Sheets (SDS) etc.
* Educate workers on emergency procedures, contacts and numbers. If emergency contact information is not posted at the workplace, provide the worker with a copy to carry with them. The worker must know what to do in case of emergency/injury
* Ongoing consultation with Joint Occupational Health and Safety Committee in the review and revision of this procedure to ensure the content is adequate and relevant to current research
* Communicate risks that may arise outside of those that are predetermined

**Workers**

* Understand and follow this safe work procedure
* Complete the required training for the task
* Use proper personal protective equipment
* Report any unsafe conditions to their supervisor
* Report all incidents in [CAIRS](http://www.cairs.ubc.ca) within 48 hours of the occurrence of the incident

**RISK ASSESSMENT**

[*Attach*](http://rms.ubc.ca/health-safety/safety-programs/risk-assessment-safe-work-procedure/) *the completed risk assessment to end this document.*

**TRAINING REQUIREMENTS**

*Document all safety related training courses completed including site specific training on procedures required for the task or emergency response. Mandatory UBC Safety Courses have already been listed*

**Table 1: Training Courses**

|  |  |  |
| --- | --- | --- |
| **Course** | **Name of Worker** | **Date Completed** |
| New Worker Safety Orientation |  |  |
| Violence in the Workplace |  |  |
| Preventing and Addressing Bullying and Harassment |  |  |
| Privacy and Information Security Fundamentals Training Part I |  |  |
| Privacy and Information Security Fundamentals Training Part II |  |  |
| Safety Supervision at UBC |  |  |
| Bear Awareness Training  (<https://www.youtube.com/watch?v=z5TFw6utz3g>) |  |  |
| Safe Driving Manual Training  (<https://www.icbc.com/driver-licensing/Documents/driver-full.pdf>) |  |  |
| Truck and Trailer Safety Tips  (<https://www.icbc.com/driver-licensing/Documents/towing-trailer-full-guide.pdf>) |  |  |
| ATV Safety Tips  (<https://myhealth.alberta.ca/Alberta/Pages/all-terrain-vehicle-atv-safety.aspx>) |  |  |
| Farm Machinery Safety Tips  (<https://www.worksafebc.com/en/health-safety/tools-machinery-equipment/tractors-pto>) |  |  |
| Soil push probe training |  |  |
| Soil auger training |  |  |
| Soil bulk density training |  |  |

**Table 2: Procedures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Procedure Name** | **Read by Trainee** | | | **Proficiency Witnessed by Supervisor/Trainer** | | |
| **Full Name** | **Initial** | **Date** | **Full Name** | **Initial** | **Date** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**MATERIALS/EQUIPMENT**

*See Safe Work Procedure Guidance Document Appendix C for guidance.*

Depending on the season, a combination of the following may be need.

Personal PPE for All seasons:

* Sunglasses or protective eye equipment
* Steel toed boots and/or boots with ankle protection

Personal PPE for Summer:

* Sunscreen (SPF 50+)
* Hat
* UV protective clothing

Personal PPE for Winter:

* Rain boots with steel toe if possible
* Warm clothing
* Water resistant clothing

Various other equipment that may be needed:

* All your field equipment for the day (sampling equipment, shovels, measuring tape, coolers, bags etc.)
* Backpack
* Cart
* Buckets
* Cellphone
* Bear spray / bear banger
* Whistle
* Gloves
* Backup battery storage
* Water
* Non-perishable food
* Jumper cables
* Change of clothes or additional clothing

**SAFE WORK PROCEDURE**

*Please provide all steps to safely perform task in this section*

Depending on your situation, the following may apply.

COVID-19 AMMENDMENTS TO FIELD WORK SWP

1. Daily self-assessment: All students, faculty, staff, and others must assess themselves daily for COVID-19 symptoms prior to engaging in in-person UBC activities.
2. Active Self-Assessment – supervisors are responsible to confirm daily self-assessment with all employees and participants.
   1. Self-assess at start of day on the day of the field work event (and do not attend if experiencing Covid-19 symptoms)  
      See: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/symptoms>  
      See:<https://bc.thrive.health/covid19/en>  
      See: <https://srs.ubc.ca/health-safety/ubc-safe-vancouver-app/>
   2. State explicitly that field team members will stay home in advance of field work when sick and will follow guidance about self-isolation
   3. A 14-day self-isolation protocol will be followed for those that report or demonstrate symptoms, or are returning from outside the country
   4. Maintain safe physical distance of 2 metres at all times and wherever possible.
3. Wear non-medical masks in transport (where applicable), when indoors or if the 2 meter distance between participants may not be ideally maintained in the field
4. Plan to sanitize frequently touched surfaces and objects and specify the product used, frequency of use, areas where it will be used.
5. Participants will:
   1. maintain personal hygiene throughout the day – wash and/or sanitize hands regularly
   2. avoid touching their face,
   3. cough or sneeze into elbow
   4. keep personal items with them at all times
   5. abide by all the guidelines in this safety plan
6. Before heading out to the field, assess whether additional training would be recommended. Beyond the training that may be required as part of normal field safety plan, PIs will need to ensure that field teams receive appropriate guidance and training in COVID-19 safety protocols. They should plan on discussing this as a team in advance of the field work. Training could include but is not limited to:
   1. Bear Awareness and Wildlife Safety
   2. Safe Driving Manual and Tips
   3. Truck and Trailer Safety Training
   4. ATV safety Training
   5. Farm Machinery Training
7. The advisability of including undergraduate students in field teams should be considered carefully.  Please consult your Associate Dean Research with any questions.
8. Location and Evacuation Planning
   1. Safety and evacuation plans will vary depending on the location of the fieldwork.  Projects undertaken in the Greater Vancouver region will have a lower risk threshold.  The same is true for UBC-O researchers conducting work in the Kelowna region.  Projects requiring a return journey over eight hours will need to consider the appropriate course of action if a team member develops COVID-19 symptoms.  In these cases, researchers should both identify a credible evacuation plan as well as provide a list of local hospitals near the field site, should they be instructed by public health authorities to self-isolate in place.  A copy of this plan should be provided to each team member with an additional copy stored in field vehicles.
   2. In the event of evacuation, team members should maintain physical distance, sanitize vehicles and put on non-medical masks.  Please note, at this time non-medical masks are best acquired at UBC through central procurement.
9. Local Communities
   1. Public health authorities have identified the potential health and resource burden that a COVID-19 outbreak triggered by visitors could place on remote communities.  Field work plans must carefully explain how interaction with local communities will be avoided and how food, housing and fuel needs will be handled to minimize in-person interactions. When this is not possible, field work should not be conducted.
10. Travel and Accommodation
    1. Transport to and from the site will vary depending on the project.  One person per vehicle should apply where possible and if the team must be physically distanced.  If the safety plan calls for more than one person per vehicle because of road or remote conditions, then the vehicle must be large enough to accommodate 2m between occupants and team members should employ non-medical masks.  Please see the [resources page](https://srs.ubc.ca/health-safety/safety-programs/risk-assessment-safe-work-procedure/) for further guidance.
    2. Accommodation should be arranged to minimize potential interaction with local communities.
    3. To support physical distancing, team members should have separate accommodation or separate rooms and account for how sanitization of common spaces will be implemented.
    4. Food should be prepared by each individual separately or by one person.  Those preparing foods should wash hands before and after using any equipment.  Each person should bring their own cup and containers from home. No sharing of kitchen dishware/utensils should occur unless an adequate means of sanitization (such as a dishwasher) is available.
11. Share Equipment
    1. Identify all shared equipment.  Identify how equipment (whether shared or not) will be sanitized. If appropriate, identify how physical distancing measures will be implemented when using shared equipment.
12. Call the farmer a couple of days prior to sampling. Make sure to ask whether they will be in the field with any large equipment, if they will be spraying pesticides (re-entry times for pesticide spraying vary widely), and if there will be any other issues with being in their field.
13. Check the weather forecast for your sampling day and prepare necessary.
14. Take a walk around the vehicle you will be using to get into the field. Ensure that there is no damage to the outside of the vehicle, none of the tires are looking low, all equipment is strapped down and will not be moving around.
15. Make sure the vehicle is set up for you comfortably, so that you can reach all the pedals and can see all mirrors
16. Pay attention to road conditions and drive accordingly.
17. When you get to your site, make sure you are able to pull over completely and get off the road entirely when possible.
18. Take a quick scan around your site for new potential hazards – such as unexpected vehicles, farm equipment, evidence of wildlife etc. Think about how this new hazard will affect your work for the day – what extra precautions you can take, if you will be able complete your field work that day, and how you can better prepare for next time.
19. Wear all your PPE for the day, and carry heavy items you will need with you in a backpack or cart.
20. Keep good posture when taking your samples or completing field work to limit strain to muscles.
21. Return samples back to the vehicle when you have a manageable amount, and don’t take heavy loads.
22. Take small breaks, stretch, and drink throughout the day to preserve energy, prevent strain, and stay hydrated .
23. Try to take turns with your co-worker. Doing different tasks will prevent you from getting a repetitive movement sprain.
24. When you head back from your site, tie down all of your equipment and samples to make sure they don’t move around or get damaged.

**Before Arriving to Site:**

*Outline steps that will be carried out by the supervisor before arriving to site. You can modify the steps listed below to suit your needs*

1. Complete a Risk Assessment
2. Ensure workers are physically fit to carry out activities and have been educated on the need for any vaccinations
3. Ensure adequate insurance is obtained where necessary (e.g. travel, activity, vehicle, medical)
4. Complete Table 3: Names and Contact Information, Table 4: Working Groups and Supervision, Table 5: Itinerary, Table 6: Site Information and Table 7: Transport
5. Ensure all materials/equipment listed above are packed. Ensure all electronics have full battery.
6. Check the weather forecast to ensure the intended study site is safe under the current conditions
7. Confirm minimum crew size based on site specific risks
8. Confirm there is sufficient supervision for the workers
9. Please add more steps (if required)

**SAFE WORK PROCEDURE (CONT’D)**

**Table 3: Names and Contact Information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of Direct Supervisor of workers** | **Title of Direct Supervisor of workers** | **Contact Number** | | **Email** |
| *Add rows as needed* |  |  | |  |
| **Name of on-site Supervisor(s)**  **(If different than the direct supervisor)** | **Title of on-site Supervisor(s)**  **(If different than the direct supervisor)** | **Contact Number** | | **Email** |
| *Add rows as needed* |  |  | |  |
| **Name of Worker** | **Title of Worker** | **Contact Number** | **Email** | |
| *Add rows as needed* |  |  |  | |
|  |  |  |  | |
|  |  |  |  | |

**Table 4: Working groups and Supervision**

|  |  |
| --- | --- |
| **Minimum Crew Size based on site specific risks** |  |
| **Is a Spotter required and if so, who will be the spotter?**  **(e.g. bear encounters, exposed shorelines)** |  |
| **Level of Supervision that will be provided**  **(e.g. check in with workers at beginning and end of shift, working alongside workers etc.)** |  |

**Table 5: Itinerary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Start Date and Time** | | **End Date and Time** | **Accommodation Location/Address** |
|  | |  |  |
| **Outline of Activities that will occur from Start to End Date/Time** | | | |
| **Date** | **Time** | **Activity** | |
| *e.g. Jan 1* | *e.g. 8:00am* | *e.g. Leave UBC by car and drive to Location X* | |
| *e.g. Jan 1* | *e.g. 1:00pm* | *e.g. Arrive at Location X* | |
| *e.g. Jan 1* | *e.g. 1:30pm* | *e.g. Conduct site activities (set up equipment and collect samples)* | |
| *e.g. Jan 1* | *e.g. 4:00pm* | *e.g. Return to UBC by car* | |
| *Add rows as needed* |  |  | |

**SAFE WORK PROCEDURE (CONT’D)**

**Table 6: Site Information**

|  |
| --- |
| **Names and locations of all sites visited (GPS location if needed)** |
|  |
| **Mode of Communication appropriate to the location (ex. Two way radio, mobile phones)** |
|  |
| **Grid References and Maps** |
|  |

**Table 7: Transport**

|  |  |
| --- | --- |
| **Mode of transportation to and from site** | **Mode of transportation on site (if applicable)** |
|  |  |

**SAFE WORK PROCEDURE (CONT’D)**

**Before Commencing Work At The Site:**

*Outline steps associated with personal protective equipment, equipment set up, meetings that occur before work commences, etc. You can modify the steps listed below to suit your needs*

1. Conduct a Pre-job briefing outlining:
   1. Hazards and associated risks as per the completed risk assessment
   2. Review maps/charts of the area
   3. Environmental conditions for the day
   4. Itinerary of the day
   5. Reminder for all to carry their communication devices on them all the time
   6. Mandatory Personal Protective Equipment required
   7. Accident/Incident reporting
   8. Emergency Procedures
   9. Level of supervision to be adhered to (appropriate to the experience of the individual participants)
2. Please add more steps (if required)

**Commencing Work/Work Procedure:**

*Outline your methodology used to carry out your task in a clear systematic process. Translate each row on your Risk Assessment into 1-2 steps that incorporate the task, hazards and controls.*

1. Working outside in summer – before leaving vehicle or shelter, apply sunscreen, wear proper foot protection, put on hat and sunglasses.
2. Working in farmers fields – call farmer day before to confirm work and ask about any new hazards (equipment in area, pesticides, animals, hunting, etc.), wear appropriate footwear, safety vests/high visibility clothing,
3. Working near wildlife – google search park or area to see if there are any wildlife warnings, carry bear spray, speakers, and make noise in the field.
4. Working with sampling probes, shovels, spades, tools – wear gloves and maintain good form while using equipment, take short breaks.
5. Working with farm equipment or machinery – read safe operation guide for equipment/receive training, wear appropriate PPE (gloves, hard hat, ear protection, high visibility vest etc.)
6. Driving to and from field – google the road and traffic conditions ahead of time, wear sunglasses if necessary, do a quick walk around the vehicle to ensure it is in good condition, tie all equipment down, take breaks, maintain conversation, follow defensive driving tips
7. Working in the fall/winter in inclement weather – wear appropriate clothing (boots, sweater, parka, rain coat etc.), use a backpack or cart to keep hands free to catch yourself in a fall
8. Carrying heavy equipment – use a backpack, cart, or buckets, carry smaller loads, ask for help
9. Add more steps to this section if required

**Post Procedure:**

*Outline items related to methods of disposal, expectations of housekeeping, etc. You can modify the steps listed below to suit your needs*

1. Workers to provide supervisor with field maps identifying any areas of concern which may be flagged as potentially unsafe
2. Field personnel to debrief on any considerations for future safety at the field site
3. Add more steps to this section if required

**OTHER IMPORTANT INFORMATION**

*Identify other important information that can help protect staff against injury and damage. You can modify the steps listed below to suit your needs*

* If workers will be [Working Alone or in Isolation](https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-04-general-conditions#SectionNumber:4.20.1), the work alone procedure [documentation](http://rms.ubc.ca/health-safety/safety-programs/personal-safety/6969-2/) needs to be completed
* If the worker may be exposed to the hazard of [Workplace Violence](https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-04-general-conditions#SectionNumber:4.27), a [Workplace Violence Risk assessment](http://rms.ubc.ca/health-safety/safety-programs/personal-safety/workplace-violence-prevention/#What%20are%20supervisor/department%20responsibilities%20for%20workplace%20violence?) needs to be completed
* In the event of a sudden deterioration of safe conditions, field work may need to be stopped until which time it is safe to continue
* All Incident/Accident will be reported onto [CAIRS](https://www.cairs.ubc.ca/) ([www.cairs.ubc.ca](http://www.cairs.ubc.ca)) or if internet access is not readily available the process below will be used (Note: incidents need to be reported within 48 hours of the occurrence of the incident:
* Please add to this section (if required)

**Emergency Rescue and Evacuation Procedures**

**Table 8:**

|  |  |
| --- | --- |
| **Nearest Local Hospital Name and Address** |  |
| **Nearest Local Police Station Address** |  |

**Table 9: Emergency Contact Information**

*List all relevant emergency agencies and associated number to summon them.*

|  |  |
| --- | --- |
| **Police** | 911 |
| **Fire Department** | 911 |
| **Canadian Coast Guard (if applicable0** |  |
| **Name and Number of UBC Emergency Contact (this person should not be at the field with you)** |  |
| **Mode of Emergency Communication** |  |

**Table 10: First Aid Requirements**

|  |  |
| --- | --- |
| **Number of workers who may require first aid at any time** |  |
| **Nature and extent of the risks and hazards in the workplace (low, moderate or high risk of injury)** |  |
| **Types of injuries likely to occur** |  |
| **Any barriers to first aid being provided to an injured worker** |  |
| **Time that may be required to obtain transportation and to transport an injured worker to hospital**  **(< 20 minutes or > 20 minutes)** |  |
| **Type and quantity of equipment, supplies, facilities, first aid attendants and services as required by** [**Schedule 3-A**](https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-03-rights-and-responsibilities#Schedule3A) **First Aid Risk Assessment results** |  |

**Table 11: First Aid Attendants**

|  |  |
| --- | --- |
| **Name of Worker** | **Type of First Aid Training** |
| *Add rows as needed* |  |

**Emergency Procedures**

*See Appendix D for guidance. List procedures associated with all reasonably possible emergencies.*

**Table 12: Onsite Trained Specialists**

|  |  |
| --- | --- |
| **Name of Worker** | **Area of Trained Speciality** |
| *Add rows as needed* | *e.g. Sailing* |
|  | *e.g. Rock Climbing* |

**Review and Retention**

This Safe Work Procedure is reviewed annually or whenever deemed necessary by the responsible departmental representative.

**Document Approval Signatures**

|  |
| --- |
|  |
| Name of Supervisor |
|  |
| Name of Department Head |

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| Signature of Supervisor |
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| Signature of Department Head |

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|  |
| Date |
|  |
| Date |

This signature confirms that this document has been reviewed and approved as per the process detailed in Figure 1 of the Safe Work Procedure Guidance Document