HREC Farm Safety Orientation

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Today’s Topics:

- UVM Lab Safety Program/Policies
- Farm & Field Safety Basics
- Hazard Identification & Control
- UVM Emergency Response Procedure
- Reporting Accidents / Injuries
For 20+ years, I have purchased my food from
Former Board Member & Program Committee
“Friends of the Horticulture Farm”
UVM Risk Management & Safety

since December 1997
Safety for Field Work and Farm Operations

Learning environments at UVM often bring faculty, staff and students to a vast array of local, national and international locations for academic pursuits and research. These locations may include:

- forests
- mountains
- farms
- fields
- waterways

The Department of Risk Management and Safety works in partnership with individuals and groups both on and off-campus to assess the risks in these types of settings so that work may be done using proper controls and best safety practices.

Farms, such as the UVM’s Miller Research Complex, Horticulture Research Center and Morgan Horse Farm come with unique safety hazards unlike those in a typical wet lab situation. Jericho Research Forest and Proctor Maple Research Center are also off campus locations where both outdoor and indoor research is being conducted.

All of these locations are considered “laboratories” as defined by UVM’s Laboratory Health & Safety Policy and must adhere to the requirements of UVM’s overall Laboratory Safety Program.

Follow the link below to review safety programs at the outdoor research location that interests you:

- Miller Research and Education Center
- Horticulture Research and Education Center
- Morgan Horse Farm
- Jericho Research Forest
Horticulture Research and Education Center

UVM's Horticulture Research and Education Center (HREC) is a 97-acre facility used for agricultural research and education by UVM's Department of Plant & Soil Science, Continuing and Distance Education's Farmer Training Program and by professional plant organizations and local gardening groups. For over 50 years, University horticulturists have been testing new and unusual plants and fruits for their adaptation to the Vermont environment, especially cold Vermont winters.

Those conducting research or working at the HRC should complete the online Horticulture Research Farm Safety Training.

Depending on your job duties or the type of work you will be performing at the HREC, there may be additional safety trainings required. Task-specific or equipment-specific training is also required by the farm manager and or specific program Supervisors. Those driving UVM-owned vehicles, including tractors, must also complete Driver Safety Training.

Risk Management and Safety can provide in person classroom safety training as requested.

See the Train and Inform Personnel webpage to access online training.
We assist our customers with Identifying, Evaluating, & Controlling Workplace Hazards

**Identify The Hazard**
Anything that can cause potential damage, harm or adverse health effects

**Evaluate The Hazard**
Perform comprehensive review, including documentation

**Control The Hazard**
Elimination/Substitution * Engineering * Work Practices * PPE

*Hierarchy of Controls*

Traditionally, a hierarchy of controls is used to determine how to implement feasible and effective controls for any hazard.

Control methods at the top of the hierarchy are potentially more effective and protective than those at the bottom. Following the hierarchy can lead to the implementation of inherently safer systems, where the risk of illness or injury can be substantially reduced. Always follow the order of this hierarchy when considering how to control any laboratory hazard.

- Elimination/Substitution
- Engineering Controls
- Work Practices (also called Administrative Controls)
- Personal Protective Equipment
- References for Best Safety Practices
What’s the HAZARD here?
How might this be prevented or “controlled”?

“We think a 3 phase converter blew up”.  
~ Pete
Examples:
Past injuries at UVM Hort Farm

- FTP student steps on nail (through shoe) while deconstructing Common Ground.
- FHF workshop participant falls in mushroom walk. Extensive bleeding/existing wound was re-opened. (“her sock was dripping with blood”).
- Student helping in tree nursery dropped a set of loppers and cut his leg. Needed stitches.
- Intern: Serious case of poison ivy.
Environmental Health and Safety at UVM

At UVM, safety is a partnership and a shared responsibility, requiring the active involvement of people in all departments and positions. Whether you work in or use a laboratory, or an outdoor location off-site – our goal is to help you be as safe as possible. If you don’t know what you’re looking for here, please contact us at safety@uvm.edu.

Find out more about UVM’s Environmental, Health & Safety Professional Services.

You have a right to a safe & healthy workplace. It's the law! Click to download UVM's Policies of rights and responsibilities.

Safety Policies       Safety in Laboratories
Security              Safety for Field Work and Farm Operations
Building, IAQ and Egress       Safety in the Arts and Theatre
Emergency             Safety in Workshops and Machine Shops

The University of Vermont is strongly committed to ethical conduct and fostering a "culture of compliance". A "culture of compliance" is an environment that supports adherence to the law and to institutional policies and procedures. To express its commitment to these goals, the University has created the Compliance Program.
UVM policies you might take a moment to review...

NO Domestic Animals

“Under no circumstances should animals... be tied be tied to buildings, handrails, trees, bicycle racks, or other objects”.

SORRY NO DOGS ALLOWED
Additional UVM policies you might take a moment to review...

Student Alcohol and Other Drug

tobacco FREE UVM
Regulations That Apply To All Activities at Hort Farm
Help is just a phone call away!
UVM Physical Plant Department
EXAMPLE:

NEVER store combustible material in front of them.
NO Drain Disposal
of the following:

- has a pH less than 5.5 or greater than 9.5,
- is flammable (flash point is less than 140 degrees F),
- is reactive (oxidizers, water reactive, pyrophoric, explosive),
- exhibits a toxic characteristic,
- is a dye,
- has a strong odor,
- has high viscosity,
- or large volumes (more than 10 gallons), and
- is oily
**MATERIAL SAFETY DATA SHEET**

<table>
<thead>
<tr>
<th>Manufacturer’s Name</th>
<th>Living Acres, LLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Telephone</td>
<td>207-778-2390  (cell = 207-491-6657)</td>
</tr>
<tr>
<td>Address</td>
<td>251 Weeks Mills Rd., New Sharon, ME. 04955</td>
</tr>
<tr>
<td>Product Name</td>
<td>SEAPLUS (liquid fish &amp; seaweed fertilizer)</td>
</tr>
<tr>
<td>Formula</td>
<td>A combination of fish emulsion (45-50% solids stabilized with 5% phosphoric acid, ( \text{H}_3\text{PO}_4 ) and/or sulfuric acid ( \text{H}_2\text{SO}_4 )); and liquid seaweed, a water extract of <em>Ascophyllum nodosum</em> (rockweed) containing 2% potassium hydroxide (KOH).</td>
</tr>
<tr>
<td>Hazardous Ingredients</td>
<td>None</td>
</tr>
<tr>
<td>Physical Data</td>
<td>Boiling Point: 104°C  pH: 4.0</td>
</tr>
<tr>
<td></td>
<td>Solubility in water: 100% Density: 9.8 lbs/gallon</td>
</tr>
<tr>
<td></td>
<td>Appearance and odor: Brown, viscous liquid. Smell similar To fish, marine tidal flats.</td>
</tr>
<tr>
<td>Fire And Explosion</td>
<td>Flash Point: N/A</td>
</tr>
<tr>
<td>Hazard Data</td>
<td>Extinguishing Media: Water, Dry chemical, Foam.</td>
</tr>
</tbody>
</table>

You have the “Right To Know” Request Safety Data Sheets for materials you are using.
Review the “Routes of Exposure” on the Safety Data Sheet.
A Note About Chemical Sensitivities

YOU may not be sensitive or affected in any way by a chemical, pesticide or aerosol spray. However, materials you spray or use in one area may affect someone nearby who may have a chemical sensitivity. Can change over time based on repeated exposure.
You Are Required To Collect & Label Any Hazardous Waste e.g. oily debris / aerosol cans
Some **hazards** identified and evaluated in your work environment
HAZARD: blades/hand-held cutting tools

Always retract blades after use.

Used blades must be collected in puncture-proof containers.
Be sure to eat and stay hydrated!

Not eating breakfast before work is a **hazard**!
**PLEASE!** No bare feet or open toe shoes.

Wear only closed shoes to protect your feet.
(no sandals, tevas, crocs)
Helps minimize or eliminate any foot injuries.
Protect yourself from these hazards....
Ticks: Get the APP!

“I pulled a tick off my leg. Now I have a rash ...”

Treating tickborne disease? Get the app.

http://www.cdc.gov/mobile/mobileapp.html
Goats quickly gobble up poison ivy, but they don't eat the roots, which allows the plants to grow back.

Using **goats** over an extended period should will eventually starve the plant of the energy it needs to survive.”

~Bill Sciarappa, Monmouth County Agricultural Agent, July 23, 2013
Zoonotic Diseases transferred by goats

People Most at Risk:
Immune-compromised
Pregnant women
Handlers, open wounds
Keeping Backyard Poultry

Live poultry, such as chickens, ducks, geese, and turkeys, often carry harmful germs called Salmonella. After you touch a bird, or anything in the area where they live and roam, wash your hands so you don’t get sick!

An increasing number of people around the country are choosing to keep live poultry, such as chickens or ducks, as part of a greener, healthier lifestyle. While you enjoy the benefits of backyard chickens and other poultry, it is important to consider the risk of illness, especially for children, which can result from handling live poultry or anything in the area where they live and roam.
Safety Data Sheet for Salmonella can be found on this website.

Salmonella symptoms:
- Diarrhea
- Vomiting
- Fever
- Abdominal cramps
Wash Your Hands!

• Before taking a break to eat, or drink.
• Before removing/applying contact lenses.
• At the end of the day and/or before going home.
• Immediately after removing gloves, regardless of whether they were worn while using chemicals.
• Before and after using a restroom.
• If your hands contact chemicals, inks, oils, grease...
• **Before handling any food for sale.**
NOTICE
NO EATING, DRINKING OR SMOKING IN THIS AREA
FIELD AND FARM SAFETY BASICS

Hand Protection

Hearing Protection

Ergonomics

Eye Protection

Hand Protection
Personal Protective Equipment (PPE)

- Ear Plugs/Ear Muffs
- HRC Drawer of work gloves
- Safety glasses for you to use
- 4 mil thick Nitrile gloves
Too much sun is a hazard.
Protect yourself against the sun’s harmful rays

- Wear adequate sunscreen
- Wear wide-brimmed hat to protect you against harmful rays.
Hazard: Dehydration.
Know the Signs & Symptoms.

1. Noticeable Thirst
2. Muscle Cramps
3. Weakness
4. Decreased Performance
5. Nausea
6. Headache
7. Fatigue
8. Lightheaded feeling or dizziness
9. Difficulty paying attention
Prevent Heat-stroke

Symptoms of Heat Stroke

The hallmark symptom of heat stroke is a core body temperature above 105 degrees Fahrenheit. But fainting may be the first sign.

Other symptoms may include:

- Throbbing headache
- Dizziness and light-headedness
- Lack of sweating despite the heat
- Red, hot, and dry skin
- Muscle weakness or cramps
- Nausea and vomiting
- Rapid heartbeat, which may be either strong or weak
- Rapid, shallow breathing
- Behavioral changes such as confusion, disorientation, or staggering
- Seizures
- Unconsciousness

Avoid being in sun 2-4pm.
NEW!

Hives at Hort Farm: Be aware in case you are allergic
Establish a buddy system. Keep an eye on each other.
DAILY housekeeping creates a safer working environment for everyone, including the public!
Take Breaks!
PLAN for Potential Emergencies
Locate and learn to properly use the Emergency Eyewash Near the SHOP sink
Locate the closest fire extinguishers in your area. NEVER block access to them.

In Apple Sales Room by exit

In garage bay
Take HANDS-ON Fire Extinguisher Training Complete online “fire safety training: first.

<table>
<thead>
<tr>
<th>Fire and Life Safety Training</th>
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<tbody>
<tr>
<td>Fire Safety Training (on-line)</td>
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Fire Extinguisher Hands-on Training (register through UVM Professional Development & Training HERE - look for "Hands-On Fire Extinguisher Training". See schedule below. You can also submit a group request).

Recommended for anyone working in a laboratory. Recommended for anyone working with flammable liquids.
HRC Emergency Contact List

University of Vermont
Horticulture Research Center
Emergency Contact List

Physical Address is 65 Green Mountain Drive, South Burlington, VT
All numbers area code (802)

Fire/Police/Ambulance 911

1. Terry Bradshaw, manager cell 922-2591

2. Josie Davis, assoc Dean campus 656-1032
   Miller Dairy Farm 862-2151
   Plant/Soil Science main office 656-2630
   UVM Greenhouse 656-0465
   UVM Physical Plant emergency 656-2560
   Green Mt Power electrical (888) 835-4762
   Steven’s Propane 878-3710
   Truxo Fuels (fuel oil) 864-7828
   UVM Recycling 656-4191
   Lafayette Fence (Front Gate Service) 878-5341

HRC Safety Map

Emergency Phone Numbers
1-800-222-1222
Poison Control Center

Spill Response DNR 911
Sheriff/Police 846-4110
Fire Department
Phone #’s you need to know

Who answers?
State Police, in Williston VT
“65 Green Mountain Drive, So. Burlington”

(802) 656-FIRE
UVM Police (report suspicious person or activities, theft, etc)

(802) 656-2560
UVM Service Operations (SOS)
Press #1 to talk to dispatcher.
For non-emergency but critical service needs
UVM Recycles
A LOT of items!

Recycling Guide

- Aerosol Cans
- Appliances
- Batteries
- Cans & Bottles
- Cardboard & Boxboard
- Cell Phones
- Computers / Electronic Waste
- Concrete
- Confidential Paper / Shredded Paper
- Fluorescent Bulbs
- Food Waste / Compost
- Glass
- Hard Cover Books

Kitchen Oil & Grease
Mercury Thermometers
Newspaper & Magazines
Office Paper
Packaging/Peanuts
Paint & Paint Cans
Propane & Stove Fuel
Needles & "Sharps"
Scrap Metal
Sterno Fuel
Surplus Furniture
Techno Trash
Wood & Pallets
HAZARDS CAN OCCUR IN OFFICE ENVIRONMENTS TOO

AVOID THIS . . . BY AVOIDING THESE!

TRIPPING ON POWER CORDS
BAD ERGONOMICS
OPEN CABINETS

ALWAYS USE GOOD SAFETY PRACTICES

Questions?
Contact us at:
safety@uvm.edu
uvm.edu/safety