# Field Safety

for Geopeople

This presentation is adapted from the
PSU Field Safety Manual

# What is a Safety Culture?

- safety is at the forefront of all of our actions
- we protect each other
- everyone is responsible

# Field environments pose unique challenges:

- Unfamiliar environment
- Reduced access to transportation, food, medical resources, etc.;
- Unfamiliar cultural norms or language;
- Physically strenuous work
- Environmental hazards
- Unfamiliar teammates

# Prevention and Preparation are key

- Develop a written field plan
- Communicate the plan & logistics
- Carry appropriate insurance
- Clear leadership structure
- Prepare for all known hazards
- Check-in regularly with the Team
    - daily briefing & de-brief
- Check-in/check-out with supervisor/Geology office

Use the Geology Field Safety Planning form

# Risk Management

# Hazard vs Risk

- A Hazard is **anything that can cause harm**
- Hazards are the *sources of risk*.


- Risk is the **likelihood and consequence** of an adverse event
- Can be **managed** through planning and procedures

# Hazards in Field Research

- Environmental: terrain, weather, water, etc.
- Social/Psychological: Harassment, violence, crime, etc.
- Biological: wildlife, plants, disease vectors, etc.
- Logistical: failures of transportation, communication, equipment, etc.

- Hazards depend on your local context.

# Risk Management

1. Identify Hazards
2. Assess likelihood and consequences of adverse events
3. Discuss team's tolerance for risk
4. Manage Risk
    a. have safety equipment and train to use it
    b. bring first-aid equipment and learn to use it
    c. identify risk-minimizing behaviors to prevent accidents
    d. have an emergency plan
        i. emergency vs project leadership
        ii. communication (with team, with outside world)
        iii. evacuation plan

# Scenario

To reach your desired outcrop, you must hike up a steep, loose, rocky slope. As you approach the foot of the climb, you hear a small rock tumbling downslope.

**DISCUSS**

- What are the Hazards
- What are the risks
- Discuss team's tolerance for risk
- How do you manage the risk

Tips:

Stream crossing safety while hiking and backpacking

# Field work hazards and prevention

# Heat Illness prevention - Canvas training mandatory for employees

- Acclimate well before the trip (exercise in the heat)
- **Always be willing to stop**
- Wear full coverage sun protection
- Work at ½ to ¾ speed; take breaks as necessary
- Bring a shade tent if no shade available.
- Hydrate obsessively and check your teammates
- Proper hydration -> urinate every 2-3 hours; output is light yellow to clear.
- Treat a headache with plenty of water *before* taking a pain reliever.
- Treat grouchiness with plenty of water and a snack
- Learn the signs and symptoms of heat exhaustion and heat stroke.
  - H*eat exhaustion* should be treated immediately; work stops for the day.
  - ***Heat stroke* is a medical emergency** - call 911 or InReach.
- Hydrate at camp or the car *before* heading into the field.
- In the backcountry, carry a water purifier.
- Rehydrate with ½ - 1 L of water 1-2 hours before bedtime.

# Preventing falls, sprains and strains

- Wear adequate footwear
- **Always be willing to stop**
- Don’t “tough out” an ongoing joint injury
- Hike at a pace that suits the *slowest team member*
- Packs should have reasonable weight and fit comfortably
- Don’t take shortcuts, especially switchback shortcuts
- If off-trail travel is necessary, budget extra time
- Consider using hiking poles
- Avoid stream crossings when possible

# Blisters can be debilitating

- Treat hotspots before they become blisters
- **Always be willing to stop**
- know your footwear (and break them in!)
- carry extra dry socks;
- bring a small towel if you'll cross streams
- assemble a blister care kit, know how to use it

# Wildlife

- Research the animals you might encounter
- Learn their identifying features, habitat, scat, and tracks
- Learn how to behave if you encounter one
    - Carry your epi-pen and let others know of your bee allergy

# Plants!  (learn to identify poison oak and poison sumac)

# Wildfire Smoke

- Check fire and air quality map at AirNow.gov
- Check weather forecasts for wind speed and direction.
- Bring N95 respirators during wildfire season

Wilfire smoke training on Canvas (mandatory for PSU employees)

# Responding to field emergencies

# Medical response

- Step 1:

  **Make sure the scene is safe**

- Step 2:

  **Take a deep breath**

  **move slow to work fast**

# Urgency of medical response

- **Simple First Aid**
  - fully field treatable
  - can often continue work

- **Urgent care required**
  - no immediate danger of permanent damage
  - treatment/stabilization is temporarily effective
  - unable to continue working
  - self-evacuation is reasonable

- **Medical Emergency**
  - Threat of death or permanent disability
  - stabilize and transport to higher care
  - immediate professional evacuation

# Stay ahead of the situation

- **Simple First Aid**
  - fully field treatable
  - can often continue work
- **Urgent care required**
  - no immediate danger of permanent damage
  - treatment/stabilization is temporarily effective
  - unable to continue working
  - self-evacuation is reasonable
- **Medical Emergency**
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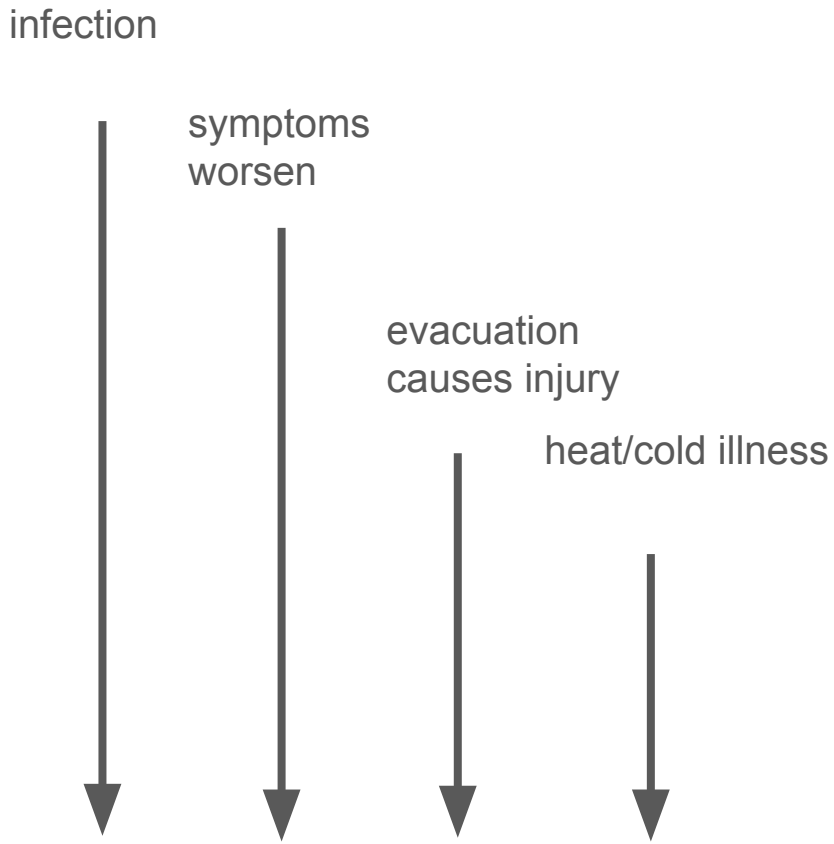


# First Aid

# First Aid

## Rule #1 - provide care at your level of training

See Oregon's good samaritan law

# Heat illness treatment (training available through Canvas)

- Learn the signs and symptoms of heat exhaustion and heat stroke.
- For heat exhaustion:
  - get to shade or provide with jackets, tarp, etc
  - sit comfortably (try to provide a back rest)
  - sip ½ - 1 L water slowly (patient will likely be nauseated)
    - trick: 1 jello packet dissolved in cool water can be soothing to the stomach
  - if water is plentiful, pour some cool water over head
  - if patient can't tolerate any water, call 911 (heat stroke is coming soon) and prepare to evacuate (or be evacuated)
- For heat stroke:
  - ***Heat stroke* is a medical emergency - call 911 or InReach immediately**
  - Douse head and clothing with cold water
    - even if concious, patient is unlikely to tolerate anything by mouth
  - Don't attempt to evacuate unless absolutely necessary - better to be evacuated in a dedicated litter by an evacuation team

# Treating blisters

- Take care of “hot spots” *before* they become blisters
  - cover with cloth or other tape to prevent rubbing.
  - Take the tape off at night to allow skin to dry.
- Treat with moleskin quickly if a hot spot remains painful
- If it’s a blister, cover with a moleskin “doughnut”
- If you need to pop a blister:
  - pop blister with sterilized pin or very sharp knife point
  - do not remove skin!
  - lube with antibiotic ointment
  - cover with sterile bandage, cover bandage with tape.
- Learn to treat blisters

# Wound Care

1. If possible, have the injured party care for themself
2. Control any bleeding - apply pressure with sterile gauze or fabric wrap
3. Clean the wound with soap and clean water; thoroughly rinse
4. Cover the wound with sterile bandage; wrap large dressings with roller gauze
    a. use antibiotic ointment for minor wounds
5. Monitor for infection (redness, pus, swelling, fever)

# Taping an ankle

See this video

**Make sure not to cut off circulation!**

- **Check circulation and comfort while taping, and check frequently afterward.**
- **non-stretch tape is strongly recommended - stretch tape and self-adhering “vet wrap” are much more likely to cut off circulation.**

# Optional medical trainings

Depending on your field sites, you may want additional medical training not offered through PSU. Some options in the Portland area include:

CPR

Wilderness first aid

NOLS Wilderness Medicine Skills

Naloxone/Narcan administration

New! Narcan Training now offered at PSU

# NOLS 30 Mins Recorded Trainings Available


- Ankle Taping and Wrapping led by Jake Wallace (WEMT Manager)

Ankle Taping and Wrapping Recording
Passcode: &X97CZ3N

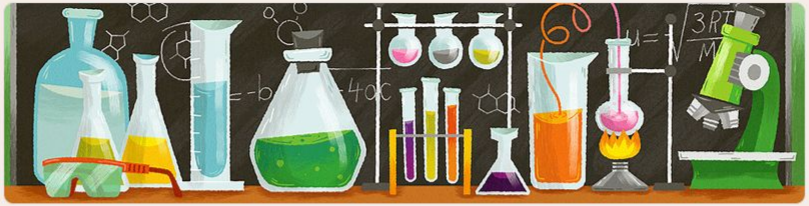
- Blister Management led by Jim Wynn (WEMT Program Specialist)

Blister Management Recording
Passcode: rrmN*+6v

- Top Items in Your First Aid Kit led by Graham Prather (NOLS Wilderness Medicine Education Manager)

Blister Management Recording
Passcode: $.3jHTZ%

# Document incidents and near-misses



# Near-Miss and Incident Reporting for PSU Research and Teaching in the Lab/Field

This Near-Miss and Incident input form consists of two pages. The first page is designed to collect the information necessary to describe the incident being reported. The second page is designed to help us understand how this incident relates to our lab safety program as well as other events in similar laboratories. These questions can also help stimulate thought about ways that the event could have been prevented or preparedness for it improved. After you submit the form, it will be reviewed by members of the EHS department and the Chemical Hygiene Committee for clarity.

Remember that response to any question is optional, however, the more information you provide, the more helpful the information we collect is likely to be to your fellow scientists on campus. This form is designed to help us gather data, not to get you or your lab mates in trouble. We may contact you with further questions or requests for clarification. At the end of the form there will be a section to include your e-mail address and your name, if you'd like to receive follow-up information on the event you reported. It is not required, but it would be appreciated. We greatly appreciate you providing us this information so that we may follow up with you in order to make any necessary improvements to our laboratory safety program.

EHS Near-miss and Incident Reporting

# Preventing Social/Cultural Ouchies & Harassment While Working in The Field

# Content Warning

This part of the training contains content about harassment, assault and other forms of oppression.

Please take care of yourself in a way that feels good to you. Take a break when/if you need it.

# The field: unique challenges, opportunities

- Limited outside communication/ ways to leave
- Long hours, close quarters, blurry boundaries
- Power asymmetry, students depend on leaders
- Interactions with non-group members

# Experiencing the World

**What are your team's identities?**
How might they affect how they move through the world?
What ways might field work put them at risk?

Have they experienced harassment before?

Are they a person with visible or invisible disabilities?
Are they neurodiverse?

Do they identify as female, trans, nonbinary, intersex, or gender nonconforming?

Are they a person of color?

Are they from an immigrant family?

# Shared Responsibility to Mitigate Risk

There is no way to eliminate risk during fieldwork


Strategies to mitigate risk - the researcher

- Engage in fieldwork with another person
- Carry credentials and wear identifying clothing
- If at any time you feel unsafe or had a risky encounter, report it

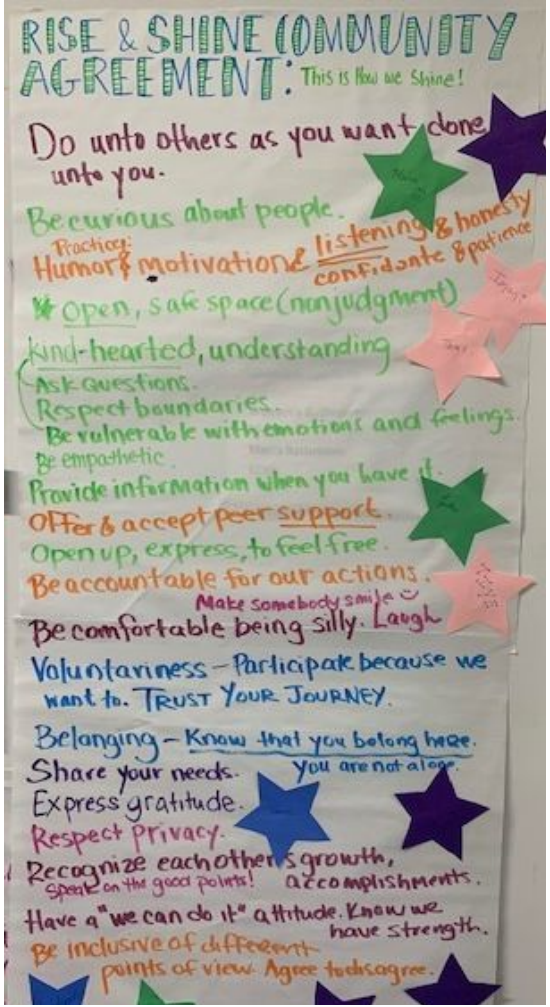
Strategies to mitigate risk - the supervisor

- Self-educate on the experience of your team members' identities and the corresponding risk
- Review and agree upon fieldwork and safety plans with the researcher before any fieldwork begins
- Discuss field safety and associated risk with all lab members

# Prevention: **Prepare** for inclusive field settings

## Build a community agreement:

- Actively involve all participants
- Include health, safety, boundaries, respect, etc.
- Give examples: e.g. agree to disagree, share camp chores equitably, group check in every day….



# Prepare: Preventative Logistics - avoiding ouches and harm

Best practices include:

- Discussing boundaries and expectations with non-participants/outsiders
- Person-first?, identity-first? Racial-identity? Pronouns? Ask for preferred language and implement using it
- Discussing privacy, hygiene, bathroom, sleeping protocols
- Eliminate opportunities for othering (ex: train everyone, not just those with less field experience)
- Establishing mechanisms for switching sleeping quarter/work partners
- Establishing high communication standards; daily group check-ins

# What is harassment?

“It is unlawful to harass a person (an applicant or employee) because of that person’s race, color, national origin, sex (including pregnancy, gender identity, and sexual orientation), religion, disability, age (age 40 or older), or genetic information.…Although the law doesn’t prohibit simple teasing, offhand comments, or isolated incidents that are not very serious, harassment is illegal when it is so frequent or severe that it creates a hostile or offensive work environment.”

-U.S. Equal Employment Opportunity Commission

# Sexual harassment in the field

There is very little research on harassment and assault in field settings, that being said, the field is a particularly high risk place for experiencing these types of events…

- 64% of field participants reported experiencing sexual harassment while in field (1)
- 22% reported physical harassment or assault (2)
- Consequences and responses look different in the field than in the office

“Fieldwork is an important and transformative part of science. But it also carries higher risk of harassment and assault.”

-FieldFutures


1. Report: Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine. National Academies of Science, Engineering and Medicine harassment in science women. (2018)
2. Berdahl, J. L., & Moore, C. (2006). Workplace harassment: Double jeopardy for minority women. Journal of applied psychology, 91, 426436.

# Field settings and just plain making someone comfortable vs. uncomfortable

If you see something…

Say* something

Be the change


*There are multiple ways to ‘say something’ without putting yourself at risk or going beyond your comfort zone. We’ll cover a few here today.

# Red flags and behavioral warning signs:

- Inappropriate jokes or comments, particularly in power relationships
- Controlling behavior or imposed isolation on one person by another
- Verbal abuse, cruel or derogatory remarks
- Blame-shifting for feelings and problems
- Making threats, even in jest

# How to respond to provocations, emergency situations

# The 5 D's of Bystander Intervention

We will send around slides that go over the 5 D's in more detail

**Distract:**


A simple way to intervene and can derail the incident by interrupting it

**Delay:**


Make a difference by checking in with the person after the fact

**Direct:**


Directly respond to the harassment by naming what is happening

**Delegate:**

Ask for assistance, resources or for help

**Document:**

It can be really helpful to record an incident as it happens, but only if it is safe to do so

# A Word on Safety

- **When intervening**, **prioritize** your own safety. If you don't feel comfortable safely intervening, see if you can get someone else to help.
- **5Ds Methodology** is designed to take care of the person experiencing harm and not to address the person causing the harm or disrespect, with the exception of "direct" intervention.
- **You can safely report your experience of harassment** and ask for help from bystanders, or support others who have been harassed by reporting the incident on a secure platform, such as through Right To Be's Storytelling Platform

# Distract

Distraction is a subtle and creative way to intervene. Its aim is simply to derail the incident of harassment by interrupting it. The keys to good Distraction are:

1. Ignore the person who is harassing, and engage directly with the person who is being harassed.

2. Don’t talk about or refer to the harassment that’s happening. Instead, talk about something completely unrelated.

# Delegate

Delegation is asking a third party for help with intervening in harassment. The keys to Delegation are:

1. Look for a Delegate who is ready and willing to help. Often, a great choice is the person right next to you.

2. When you Delegate someone to help you, try to tell them as clearly as possible what you're witnessing and how you'd like them to help.

# Document

Documentation involves either recording or taking notes. It can be really helpful to record an incident of harassment, but there are some keys for safely and responsibly documenting harassment:

1. Assess the situation. Is anyone helping the person being harassed? If not, use another of the 5Ds. Recording someone's experience of harm without ensuring they're already receiving help can just create further trauma for them. If someone else is already helping out: assess your own safety, and if you are safe, begin documenting.

2. **ALWAYS** ask the person who was harassed what *they* want to do with your recording and/or notes. **NEVER** post it online or use it without their permission.

# Delay

Even if we can’t act in the moment, we can still make a difference for someone who’s been harassed by checking in on them after the fact. Many types of harassment happen in passing or very quickly, and it’s not always possible we’ll have a chance to intervene in another way. But we don’t have to just ignore what happened and move on. We can help reduce that person’s trauma by speaking to them after an instance of harassment.

- After the incident is over, check in with the person who was harassed

# Direct

Sometimes, we may want to respond directly to harassment by naming the inappropriate behavior confronting the person doing harm.

Use this one with caution, because Direct intervention can be risky – the person harassing may redirect their abuse towards the intervening bystander, or may escalate the situation in another way.

# Direct (Continued)

The first key to Direct intervention is to assess the situation before you decide to respond, by asking yourself the following questions:

1. Are you physically safe?

2. Is the person being harassed physically safe?

3. Does it seem unlikely that the situation will escalate?

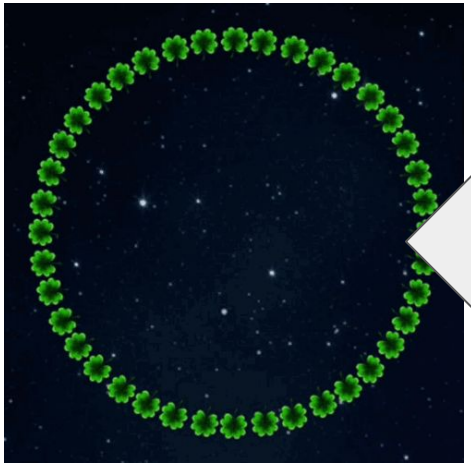
4. Can you tell if the person being harassed wants someone to speak up?

If you can answer yes to all of these questions, you might choose a direct response.

The second key to Direct intervention is to keep it short and succinct. As tempting as it may be, avoid engaging in dialogue, debate, or an argument – since this is how situations can escalate. If the person harassing responds to your Direct intervention, focus your attention on assisting the person who was harmed, instead of engaging with the person doing the harm.

# In summary… inclusive norms in your field setting

- Repeatedly and regularly discuss community agreements, particularly those regarding harassment and assault
- Treat others with respect, including using preferred gender pronouns
- Assert boundaries and insist they be respected
- Avoid isolation with someone you don't feel comfortable with
- Have fun and do good science!

Click for more detailed info and to think through scenarios

# Additional information

# Transporting Field Teams Safely

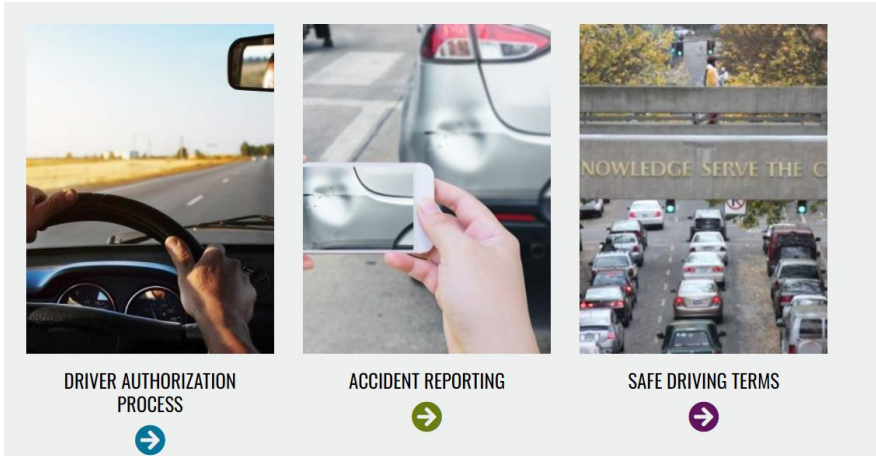
- Research routes, road conditions, and road closures before leaving
- Choose appropriate vehicles and obtain licenses and training as needed
- Have a minimum of two trained drivers on a field team
- Boats and ATVs require extra training certificates and safety equipment
- Reach out to your department staff to assist with vehicle rentals, when needed.
- Inspect all vehicles prior to leaving for the field
    - Carry appropriate field vehicle safety equipment
- Know what to do in the event of an accident or if the vehicle gets stuck
    - Carry a PSU Accident Report Form in the vehicle

# Driver Safety

PSU Safe Driving Program

- Drivers of university owned or rented vehicles must complete the Safe Driving on Canvas and submit a Driver Authorization Form
  - More details can be found at Driver Authorization Process
- PSU owned and rented vehicles are covered by PSU insurance, PSU Auto ID Card. Personal vehicles are not.
- Always carry a copy of the Accident Information Form and at least two Witness Cards.

- Off-Road Driving: Lessons Learned & Precautions
  - Oregon 4x4 Driver Training



# Driver Safety - High Occupancy Van Use

Employees seeking authorization to operate high occupancy vans (vans which hold between 9-12 passengers) must first complete the process to become an authorized university vehicle driver. Once this process is complete there are additional requirements for obtaining high occupancy van driver authorization.

Self-register for and complete the PSU High Occupancy Van Operator Safety Training in Canvas.

Complete the PSU High Occupancy Driver Authorization Form.

- Verify PSU Driver Authorization Form is completed
- Verify High Occupancy Van Operator Safety training is completed
- Driver and department approver signs and submits to Risk Management
- Risk Management approves and signs
- Forms may be submitted to Don Johansen (johansed@pdx.edu)
- Form is retained in department files
- Renew authorization form every two years; consists of an interview between the supervisor and employee to confirm the information on the original form

Employees may not operate a high occupancy van until Risk Management returns the approved form.

# Protecting Cultural Resources During Fieldwork

PSU Inadvertent Discovery Training

Reno Nims, NAGPRA Coordinator

Rnims@pdx.edu; 503-725-6611

# What are Cultural Resources?

A legal term of art for the physical aspects of human cultural heritage

Tangible heritage (aka cultural resources)

- Places, buildings, belongings that have cultural / historical value
- Archaeological sites, cultural properties, cultural centers

Intangible heritage

- Songs, stories, practices, celebrations

Hula kahiko (intangible)
on a kahua hula (tangible)
Hawai‘i Volcanoes National Park, NPS

# What are Cultural Resources?

Culturally important objects and places, often with evidence of past human activity

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Culturally important objects and places, often with evidence of past human activity

# Why are cultural resources important?

Flowers family, OHS

OCDP OREGON CHINESE DIASPORA PROJECT

Cultural resources:

- have ongoing importance to living Tribes and communities
- are historical evidence of people's lives and cultures in past
- are protected by state / federal law!

Some people illegally take and sell cultural resources

- Important to protect all location information too!

2009 Canoe Journey, Suquamish

# Where are cultural resources found?

Anywhere and everywhere!

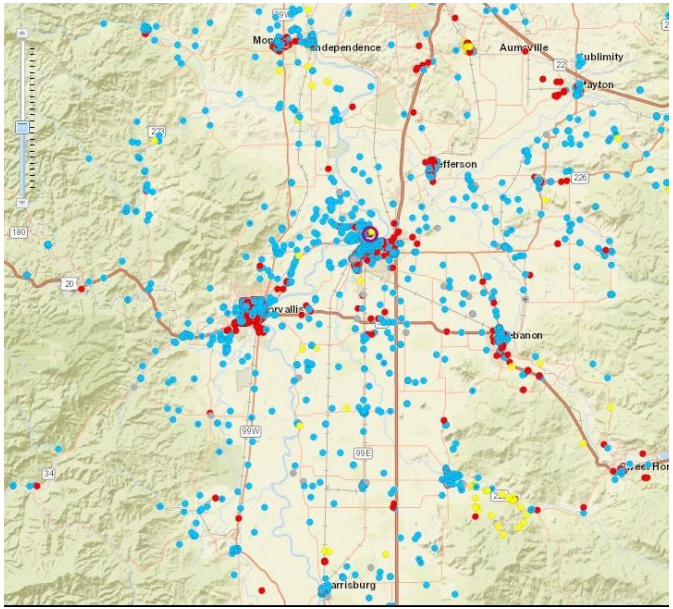
- On public or private land
- In cities, forests, valleys, mountains
- On beaches, in rivers, and lakes

Many cultural resources have been recorded and mapped

**Many could be found or disturbed during field research**

- Known as an “inadvertent discovery”

Map of historic buildings near Corvallis
Oregon Heritage, OPRD



Where do you work? What do you do in the field?
How could this affect different types of cultural resources?


Pitfall trap


Sediment core


Soil sampling, USGS


Camera trap

# For any project that might affect cultural resources…


Washington Department of Ecology

Prepare an **Inadvertent Discovery Plan** that tells you:

- what to look for
- what you need to do if you accidentally disturb something
- who you need to notify or call for help

Always keep a copy with you, and show it to all field staff at the start of a project

# Consequences

If you disturb cultural resources and then don't follow the plan…

- Your project may be delayed
- The costs of your project may increase
- You may cause harm to other people and communities
- You or the University may face civil or criminal penalties
- You may damage your own and PSU's relationships
  - with Native American Tribes,
  - state and federal agencies,
  - landowners, or others

# What to do if you disturb cultural resources?


1. **STOP** all work near of the find (immediately)
    - Do not touch or move anything
2. **PROTECT** with a 100 foot buffer (within 1 hr)
    - Do not allow vehicles, equipment, or unauthorized persons within the boundary
    - Keep all information confidential
3. **NOTIFY** a Project Manager and PSU NAGPRA Coordinator (within 1 hr)
    - Share a description of the find and its location (be as specific as possible)
    - They will notify agency contacts, landowners, the State Historic Preservation Office, State Police, and Native American Tribes as needed

Do not allow any work to resume within the boundary until you are directed to proceed.

# If you find <u>human remains</u> or a burial…


1. **STOP** all work (immediately)
2. **PROTECT** with a 300 foot buffer (within 1 hr)
    - Block the person's remains from view, exposure, damage
    - Do not touch or disturb, leave everything in place
    - **Do not take any photographs**, unless law enforcement request it
3. **NOTIFY** a Project Manager and PSU's NAGPRA Coordinator (within 1 hr)
    - They will notify State Police
    - **Do not call 911**

Law enforcement will determine if the remains are human, and if they are forensic

# If in doubt, leave it alone!

I am here to help:

- answer any questions
- prepare an Inadvertent Discovery Plan
- respond to inadvertent discoveries

Contact Information:

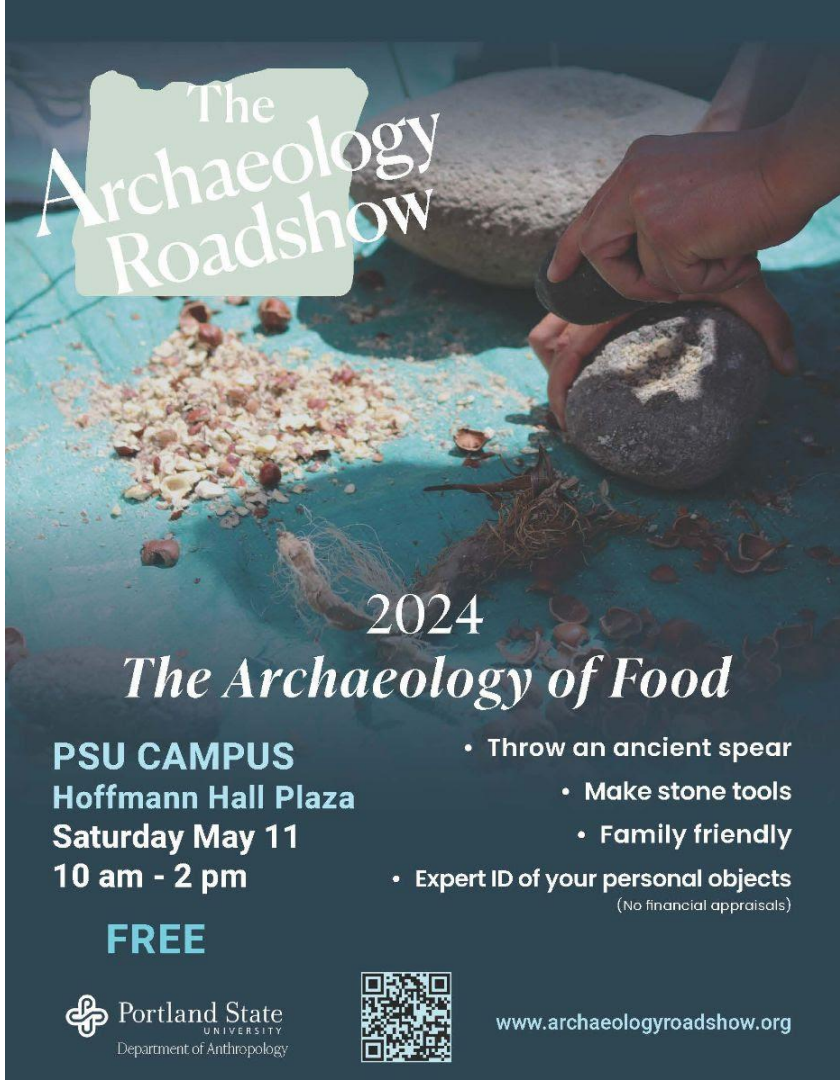

- Reno Nims
- Rnims@pdx.edu
- 503-725-6611



# Want to know more?

Visit the [Archaeology Roadshow!]

- Saturday, May 11 (10am-2pm) @Hoffman Hall, PSU
- Saturday, June 1 (11am-3pm) in Bend!
- Saturday, June 22 (10am-3pm) in Hines!



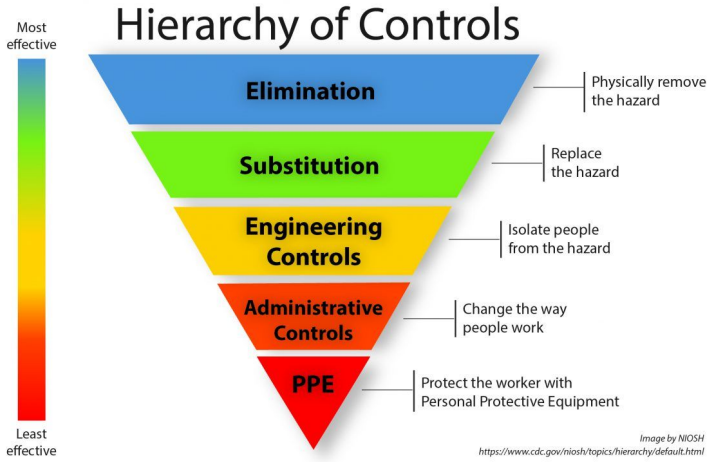
# Risk Acceptance/Tolerance

- Establish a risk score acceptable for your team and project
- Work with team members and lead researcher to meet a variety of needs
- Tradeoff: Lower risk tolerance requires more resources and less flexibility
    - For example, a higher tolerance team would stay out in deteriorating weather; a lower tolerance team would evacuate sooner.

# Controlling Risk

Controls help lower risk by reducing their likelihood or severity:

- First-line of defense is prevention: 100% Effective
- Second-line of defense is mitigation: Limit the Negative Impacts

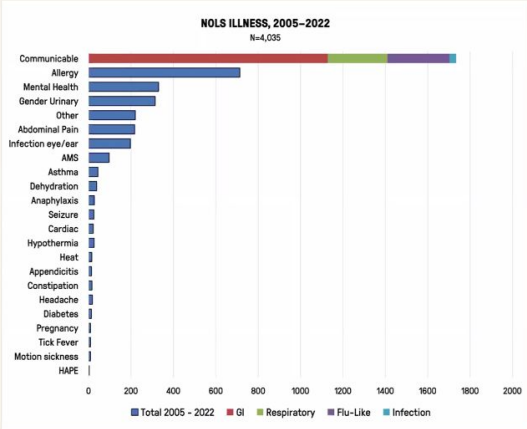


# Field Work Case Study

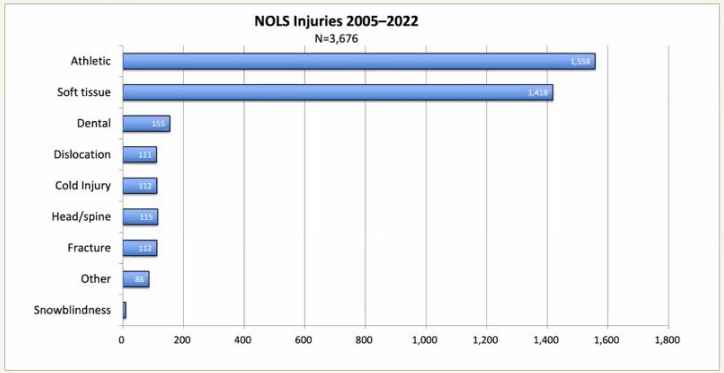
"Desert Van Debacle"

## What gets us sick in the backcountry?

- G.I. issues #1 of Comm Diseases
- Allergies, but not Anaphylaxis
- Urinary/Repro/Abdominal




## How we get hurt:




- Athletic, followed closely by soft tissue.
- What about blisters and hotspots?
- Dental, a distant third.
- Fractures and Dislocations tied.

# Data Takeaways

**NOLS INJURY AND ILLNESS STATISTICS**

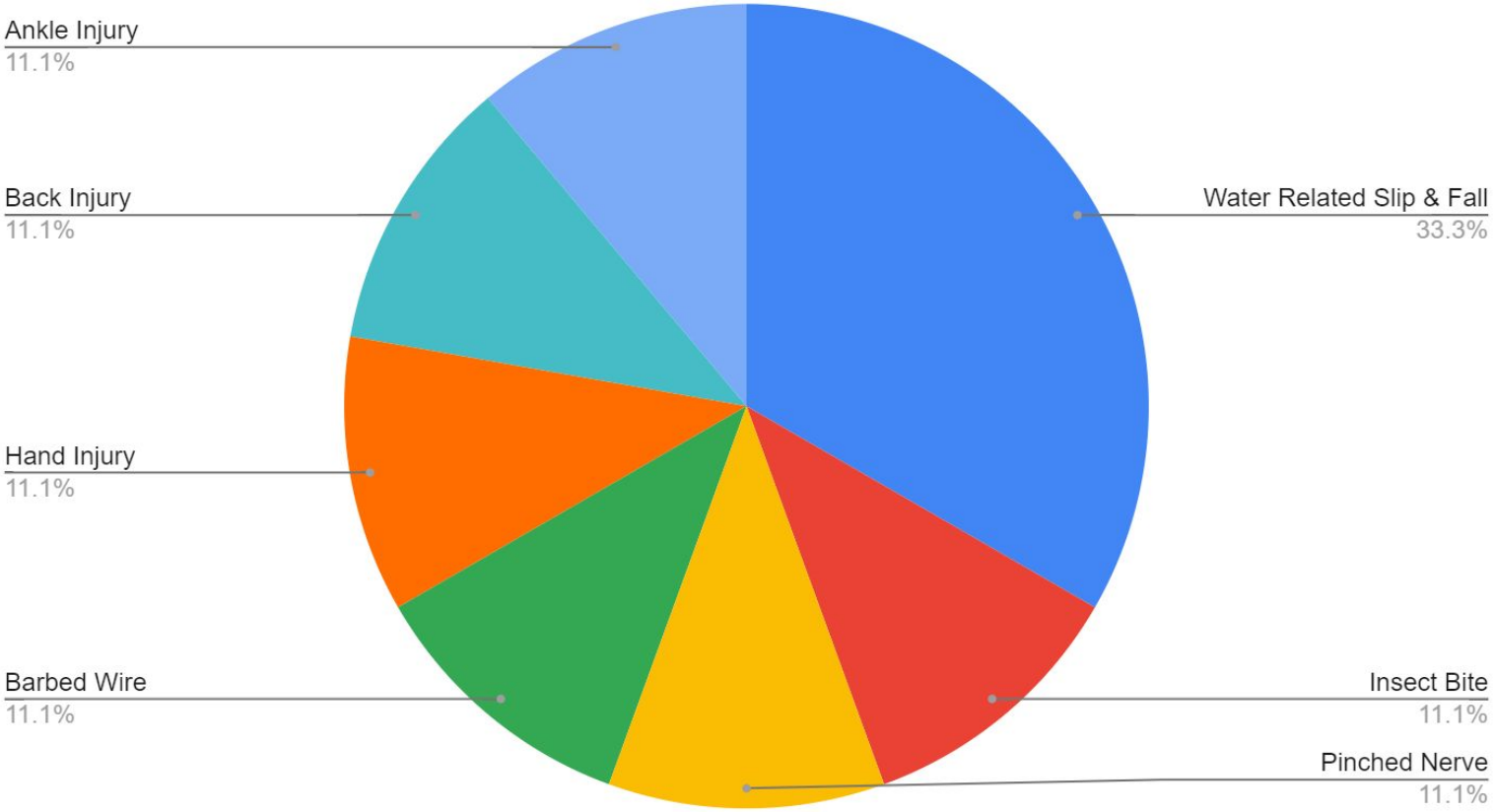
**For period of fiscal years 2019–2023**

| INJURIES: | ILLNESSES: |
|---|---|
| • 5% of students are injured | • 8% of students become ill |
| • 36% of injured students are evacuated | • 26% of ill students are evacuated |
| • 37% of field medical incidents are injuries | • 63% of field medical incidents are illnesses |
| • 42% of injuries are sprains, strains, and tendon injuries | • 42% of illnesses are communicable, e.g., flu |
| • 40% of injuries are soft tissue injuries | |
| • 6% of injuries are fractures and dislocations | |

If we were to plan our first aid supplies based on numbers alone:

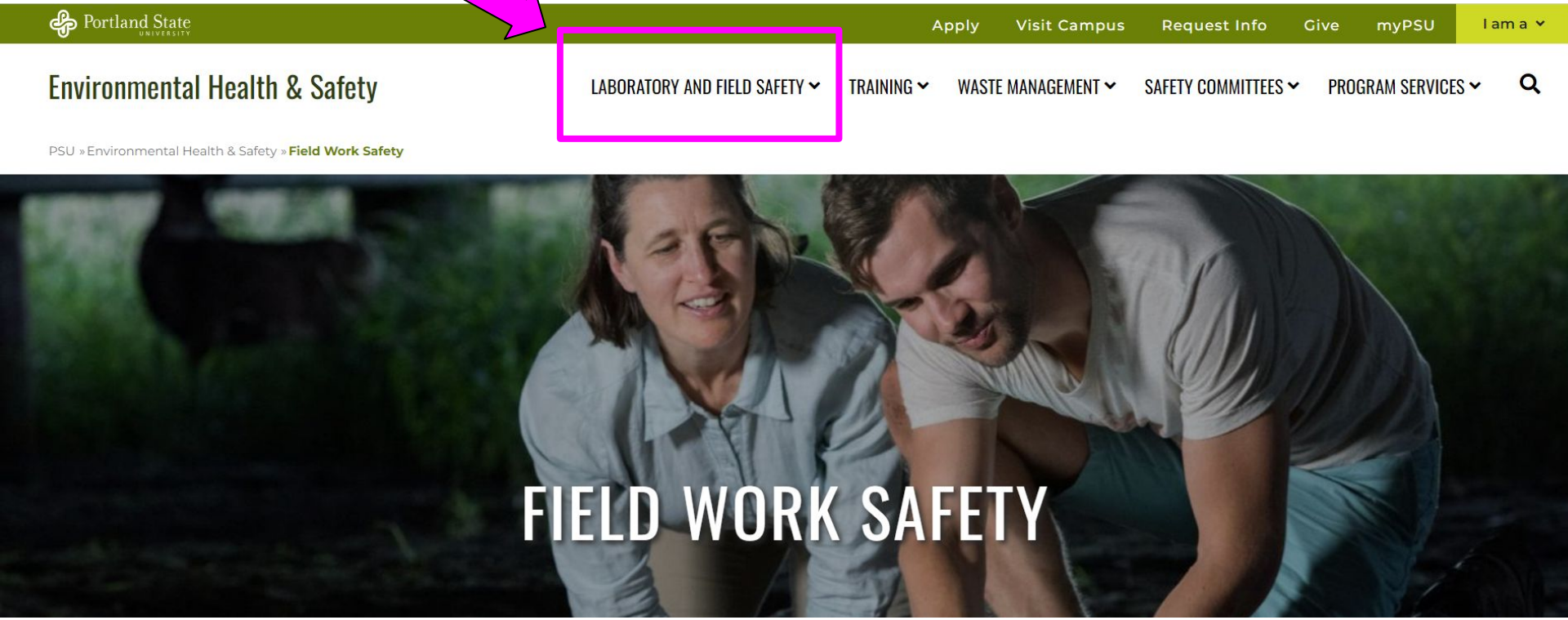
- Medical issues? Be ready for GI issues, wash your hands, know evac guidelines to differentiate abdo/urinary/repro.
- Injuries? Rolled ankles, cuts, bumps and bruises, and blister prevention.
- Dental emergencies, more common than one might think.

# PSU Reported Field Work Incidents 2022-23

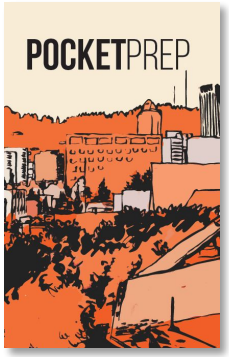


# PSU Resources & Policies

# EHS Field Work Safety



# **Have a Plan -** Team / Individual




- ✓ Agree on Several Meeting Places
- ✓ Pick Local and Out-of-Area Contacts
- ✓ Update Emergency Contacts Regularly
- ✓ Write It Down and Make Copies
- ✓ Share and Practice Your Plans
- ✓ Leave a Trail

**Helpful Templates:**

- Family Emergency Plan (PublicAlerts.org)
- PocketPrep (PBEM)
- Commuter Emergency Plan (FEMA)
- Be 2 Weeks Ready (OEM)

# FIELD SAFETY MANUAL

CULTIVATING PRODUCTIVE AND INCLUSIVE RESEARCH TEAMS

COMMUNICATING WITH THE PUBLIC & LAND MANAGERS

BRINGING MINORS INTO THE FIELD

UNDERSTANDING FIELD SITE RISKS

TRANSPORTING FIELD TEAMS SAFELY

PREPARING FOR MEDICAL EMERGENCIES

RETURNING FROM A FIELD TRIP

INSTITUTIONAL RESOURCES AND REFERENCES

# Service Animals in the Field

- Students with service animals are welcome to participate in field experiences. This is true whether the experience is provided by PSU or a third-party on behalf of PSU.
- Service animals are permitted to accompany students anywhere they go, including field trips, without the need for formal accommodation.
- Students are highly encouraged to consult with the Disability Resource Center (DRC) regarding their specific needs and those of their service animal.

# Service Animals in the Field

- Consulting with the DRC can help ensure that accommodations and support are in place to facilitate a successful experience for both the student and the service animal.
- While not mandatory, collaborating with the DRC offers insights and resources.
- Ultimately, the goal is to promote inclusivity and accessibility, ensuring that all students have equal opportunities to engage in educational experiences

# Communicating with the Public and Land Managers

To reduce the risk of negative interactions with members of the community:

- Gather as much information about the field site as possible
- Prioritize field research sites that are safe for everyone on the team
- Inform the team of local customs and cultures
- Acquire physical copies of research permits and credentials
- Have multiple emergency contact options if something goes wrong
- Don’t be a bystander
- Carry a copy of the field safety incident and near-miss log for easy documenting

# Bringing Minors into the Field

- For minor students, volunteers, and employees - supervisors must obtain a completed PSU Authorized Volunteer Waiver with the signature of the minor's legal guardian before the minor is allowed in the field.
- Be supportive of team members with dependent children - in some cases, bringing the child into the field setting is the best care option the parent has. Work with them to determine appropriate accommodations for the child's safety.

# Returning from a Field Trip

- Talk about negative or risky interactions within field teams or with the public
  - Supervisors should check in about how the team feels, not just how the data collection went
- Report negative or unsafe encounters
  - Report discrimination/harassment to Global Diversity and Inclusion
  - When reporting sexual misconduct, there are several reporting options through PSU
- Report medical incidents or injuries
  - PSU employees may eligible for Worker's Comp
- Check in with site land owners or managers
  - Maintains working relationships and goodwill
- Restock spent supplies
- Return rental vehicles and report any damage

# Equipment/PPE/Wader Decontamination

- Invasive species can be spread through field gear.
  - Avoid felt sole waders
  - Thoroughly clean, dry, and/or freeze equipment before using in the next field location.
  - If in area with known invasive species, research recommended cleaning techniques
- Keep chemical contaminated equipment isolated
  - Use sealable plastic bags to contain contaminated clothing/items
  - Avoid any contact with water sources

# Field Work Attire/Accessories

- All team members should be made aware of weather conditions and necessary attire and accessories.
- Rain gear, warm layers, wool socks, boots with traction, waders, sunglasses, hiking poles, etc.
- Equipment is rarely “one size fits all.” Supervisors should acquire items in the right sizes for their teams.

# Borrowing EHS safety equipment

EHS has the following items to borrow:

- DeLorme inReach Satellite Trackers (monthly cost)
- PSU Logo safety vests (free)
- ABC Fire Extinguishers (free)




•Field Work Safety Items Request Form

•In the event of an emergency in the field, these Delorme units have an SOS button that sends a beacon to a 24/7 search and rescue monitoring center. The Delorme unit will communicate your GPS coordinates to the center and will send help to your location.

# Field Chemical Use

- Wear proper personal protection equipment (PPE) - gloves, eye protection, etc.,
- All chemicals (fixatives, solvents, etc.) must be transported in a labeled and durable secondary container
- Hazardous wastes and chemically contaminated items must kept isolated in sealable containers and disposed of properly and legally
- Keep SDS available and inform all team members of the chemical hazards
- Develop a spill response plan and train all team members before the trip
- Acquire supplies for any chemical first aid response


REI
co-op
BACKPACKING
WHAT TO DO IN A BEAR ENCOUNTER

# What to do in a Mountain Lion Encounter

If you see a mountain lion:

- Stay Calm
- Do not approach
- Do not run
- Do not crouch down or bend over

If the mountain lion moves in your direction or acts aggressively:

- Do all you can to appear intimidating
- Throw things at it

If the mountain lion attacks you:

- Fight back!

Always immediately report all sightings, encounters or attacks.

Mountain lion enjoying the ocean at Cannon Beach, OR

# Potentially Relevant PSU Safety Trainings

- Bloodborne Pathogens Annual Training
- Formaldehyde Annual Safety Training
- Sharps in the laboratory Video
- (Institutional Biosafety Committee (IBC)) Biosafety Work Approval and Training
- Animal (Vertebrate) Care and Use (IACUC) Approval, Oversight and Training
- Human Subjects (IRB) Review and Oversight