

Field Safety Plan

Field Site Location: Redwood National Park/PrairieCreek State Park—Fern Canyon
Activity: Short hike, photographing plant specimens
Created for: Fern study – November 27, 2015 **Date of rev:** 11/23/2015

General Site Information: *less than 100 feet elevation, slippery, cold, often foggy, isolated canyon within state park*
If travelling more than 100 miles from campus, register your trip at ehs.ucop.edu/away for UC travel insurance documentation and location-specific trip alerts. For international work, the [Worldcue Trip Planner](#) is available to assist with planning logistics, identifying local services, and guidance regarding local hazards.

Geographic Location:	Latitude:	41°40.00	Longitude:	-124°06.50
Local Contact:	NPS Headquarters at (707) 822-XXXX Lodging location: Redwood Hostel, Hwy 101, (707) 834-3333		University Contact: <i>Not on trip. Provide person a copy of this Field Safety Plan.</i>	Brandon DeFrancisci, EH&S (510) 642-3073 Frequency of check-ins: <u>daily via email or text at end of the work day</u>
Nearest Emergency Medical Services (EMS):	<i>In an EMERGENCY, DIAL 911. For Redwood National and State Parks information dial (707) 465 7335; nearest Ranger Station is at Prairie Creek Visitor enter on Hwy 101, (707) 488-2039</i>			
Nearest Emergency Department (ED):	<i>Mad River Community Hospital, 3800 Janes Rd, Arcata. 50 miles south on Hwy 101. From 101: exit Guintoli Lane turn right – (707) 822-3621</i>			
Go/No Go Criteria:	NO GO: <i>Heavy rain or storm conditions, if dirt road to fern canyon is blocked or inaccessible. Check Redwood NP website prior to departure for warnings/alerts at nps.gov/redw/planyourvisit/directions.htm</i>			
Directions to site	<i>From Hwy 101 south of the Prairie Creek Visitor Center turn west onto dirt road marked Davison Rd, follow for 8 miles. 4 wheel drive recommended during rainy season but generally passable for all vehicles in the summer; the access road to Fern Canyon and Gold Bluffs Beach cannot accommodate vehicles more than 8' wide and 24' long. No trailers are allowed.</i>			
Parking Areas:	Primary: <i>signed parking lot for Fern Canyon at end of Davison Road</i> Secondary: <i>on last visit the road was gated at Golds Bluff campground, had to walk in last mile along road to trailhead</i>			
Assembly Areas:	Primary: <i>at Prairie Creek Visitor Center off Drury Parkway near restrooms at 7:30 am</i> Secondary: <i>assemble again at trail signpost near parking lot before entering fern canyon (around 8:00 am)</i>			
Expected temperature/weather:	<i>Cool, foggy and damp; check local forecast via National Weather Service forecast: (707) 443-7062</i>			
Drinking water availability:	If forecast exceeds 80°, Cal/OSHA requires access to at least one quart (4 cups) per person per hour for the entire shift, i.e., an 8 hour shift of strenuous work requires access to 2 gallons per person. Water must be fresh and suitably cool. <input type="checkbox"/> Plumbed water available <input type="checkbox"/> Water cooler with ice to be provided <input type="checkbox"/> Bottled water provided <input checked="" type="checkbox"/> Other: <u>fill bottles at ranger station</u> <input type="checkbox"/> Natural source and treatment methods (e.g. filtration, boiling, chemical disinfection): _____			
Access to Shade/Shelter:	If forecast exceeds 80°, shade must be provided by any natural or artificial means for rest breaks. Shade is not considered adequate when heat in the area does not allow the body to cool (e.g., sitting in a hot car). <input type="checkbox"/> Building structures <input type="checkbox"/> Trees <input type="checkbox"/> Temporary Canopy/Tarp <input type="checkbox"/> Vehicle with A/C <input type="checkbox"/> Other: <u>canyon is cool and shaded</u>			
High Heat Procedures Required when temperatures are expected to exceed 95° F	If possible limit strenuous tasks to morning or late afternoon hours. Rest breaks in shade must be provided at least 10 minutes every 2 hours (or more if needed). Effective means of communication, observation and monitoring for signs of heat illness are required at all times. Pre-shift meeting required. <input type="checkbox"/> Direct supervision <input type="checkbox"/> Buddy system <input type="checkbox"/> Reliable cell or radio contact <input checked="" type="checkbox"/> Other: <u>not applicable</u>			
Personal Protective Equipment (PPE):	Required: <i>waterproof boots with good tread, warm clothes, rain gear</i> Recommended: <i>Walking sticks, gloves, beanies</i>			
Out of Bounds Areas:	<i>Do not climb up canyon slopes, stay on the canyon floor trail</i>			
Cell phone coverage:	Device carried? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Type: Coverage: none Nearest location with coverage: <u>Orick</u>	Satellite phone/device:	Device carried? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Type: <u>DeLorme</u> Coverage: <u>spotty</u> Nearest location with coverage: <u>beach</u>	
Nearby services:	<i>None. Usually lose reception on Verizon around Orick</i>			
Access:	<i>Signed trail to canyon is < 1 mile, fairly easy, but rocks within canyon can be wet and slippery, multiple creek crossings required (usually < 1 foot deep), drift wood or rocks may provide crossing points. Only entry to canyon from parking lot is via the signed trail; north side of canyon is accessible from James Irvine trail from the Visitor Center (8 miles)</i>			
Physical demands:	<i>List any physical demands required for this trip and training/certification provided; e.g., diving, climbing, high altitude, swim test, respirator use, etc. (consult with EH&S regarding appropriate training & documentation)</i>			
Field Team/Participants:	Primary Field Team Leader: <i>Sara Souza (510) 725-2517</i> Secondary Field Team Leader: <i>O. Draper (510) XXX-XXXX</i> <input checked="" type="checkbox"/> Field Team/Participant list is attached as training documentation <input type="checkbox"/> Other attachment, e.g, course roster Is anyone working alone? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If so, develop a communications plan with strict check-in procedures; carry a sat device for remote locations.			
First Aid Training	Please list team members trained in first aid and the type of training received. Cal/OSHA requires at least one trained person (with current certification) for work in remote locations: <i>Sara Souza, WFA certified 9/2015</i> Location of group medical/first aid kit: <i>Sara Souza will carry NOLS First Aid Kit 4.0; additional basic first aid kit is under the passenger seat in the Ford van.</i>			

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Immunizations or Medical Evaluation (if applicable)	<i>None Required; all participants should keep standard immunizations current, e.g., tetanus</i> For travel-related immunizations or medical advice, contact the UHS International Travel Clinic at 510-643-7177 at least 6 weeks prior to your trip; for required or recommended immunizations and medical clearance related to your research protocol, contact the Occupational Health Clinic at 642-6891.
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Safe Work Practices

List identified risks associated with the activity or the physical environment and appropriate measures to be taken to reduce the risks. Refer to relevant protocols, SOPs, etc. if applicable.

<ul style="list-style-type: none"> Use buddy system, watch out for each other and stay within voice contact at all times. Meeting up with group for scheduled breaks and lunch in the canyon and by 4:30 at the parking lot.
<ul style="list-style-type: none"> Wear waterproof boots with good tread, cross rocks and shallow creek bed carefully to avoid slips, twisting ankles, etc. Bring extra dry layers to leave in the vehicle.
<ul style="list-style-type: none"> Carry snacks, lunch, and water; a thermos with warm tea or coffee is also recommended.
<ul style="list-style-type: none"> Do not approach elk They are often in the nearby dunes and meadows, sometimes lying down and not easily visible.
<ul style="list-style-type: none"> Do not pick or eat mushrooms
<ul style="list-style-type: none"> If going to the beach: watch for sneaker waves, hazardous surf; don't enter water.

Additional Considerations

Contact EH&S at 510-642-3073 or ehs@berkeley.edu for guidance. Check all that apply.

- One or more of the following will be handled/transported: hazardous biological, chemical, or radioactive materials, pesticides, animals, or fireworks.
- Activities are to involve one of the following: ATVs, snow mobiles, tractors or other motorized vehicles; rigging, climbing, fall protection; shoring/trenching, digging/excavations, caves, other confined spaces or egress/access limitations; chainsaws, hand held power tools; explosives or fire arms; lasers, portable welding/soldering devices; other hazardous equipment or tools.
- Modes of transportation other than regularly scheduled commercial carriers (e.g. chartering a boat, plane) will be used.
- The [University Auto Insurance Policy](#) for university vehicles, personal vehicles, and rental vehicles has been reviewed.
- Visas, permits, finances, import/export controls, transportation of specialized equipment, and data security have been considered. (See [UC Global Operations](#) (ucgo.org) or contact UC Berkeley [Office of Legal Affairs](#) or [Research Administration & Compliance](#) for guidance.)
- Personal safety risks during free time have been considered or discussed, e.g., alcohol or drug use, leaving the group, situational awareness, sexual harassment, or local crime/security concerns. You may use the [Worldcue Trip Planner](#) 'Location Intel' tab to generate a security brief.

Campus Contacts:

<p>UCPD Emergency Number: (510) 642-3333 University Health Services: uhs.berkeley.edu Faculty/Staff: (510) 642-6891 (Occupational Health). Students: Access care via the online appointment system or the advice nurses at (510) 643-7197. Office of Environment, Health & Safety (EH&S): ehs.berkeley.edu, (510) 642-3073 or ehs@berkeley.edu Risk Services Emergency Number: 510-289-8282 or (800) 527-0218 (United Healthcare - UC Travel Insurance) Report injuries: Call EH&S at (510) 642-3073 or use the Employer's Report of Injury</p>
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First Aid Reference – Signs & Symptoms of Heat Illness		
Signs & Symptoms	Treatment	Response Action:
HEAT EXHAUSTION <ul style="list-style-type: none"> Dizziness, headache Rapid heart rate Pale, cool, clammy or flushed skin Nausea and/or vomiting Fatigue, thirst, muscle cramps 	<ol style="list-style-type: none"> Stop all exertion. Move to a cool shaded place. Hydrate with cool water. 	<p>Heat exhaustion is the most common type of heat illness. Initiate treatment. If no improvement, call 911 or seek medical help. Do not return to work in the sun.</p> <p>Heat exhaustion can progress to heat stroke.</p>
HEAT STROKE <ul style="list-style-type: none"> Disoriented, irritable, combative, unconscious Hallucinations, seizures, poor balance Rapid heart rate Hot, dry and red skin Fever, body temperature above 104 °F 	<ol style="list-style-type: none"> Move (gently) to a cooler spot in shade. Loosen clothing and spray clothes and exposed skin with water and fan. Cool by placing ice or cold packs along neck, chest, armpits and groin (Do not place ice directly on skin) 	<p>Call 911 or seek medical help immediately.</p> <p>Heat stroke is a life threatening medical emergency. A victim can die within minutes if not properly treated. Efforts to reduce body temperature must begin immediately!</p>

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Photos, Maps, Diagrams

Insert maps of approach route and detailed outcrop traverse routes, photos of general terrain and areas requiring extra caution, etc.



Fern Canyon Loop Trail (description from the NPS website)

Location: Prairie Creek Redwoods State Park

Trailhead: Marked trailhead is at Fern Canyon parking area off Davison Road. Trail can also be accessed via James Irvine Trail, Coastal Trail, and Friendship Ridge Trail.

Mileage: 0.7-mile loop

Difficulty Level: Non-level grades, not steep. Some trees to climb over or go under

Description: Some of the exquisite ferns now clinging to Fern Canyon's shadowy 30-foot cliffs are ancient species whose ancestry can be traced back 325 million years. Look for velvety five-fingered ferns, dark green sword ferns, and delicate lady ferns. Scouring winter floods periodically rush through the canyon. Seasonal bridges only exist in the summer season.

Updates:

<http://www.nps.gov/redw/planyourvisit/safety.htm>



