

## FIELD CAMP SAFETY

### THERE IS NO SUBSTITUTE FOR COMMON SENSE

#### 1) Transportation

- a. Travel to Utah. Vehicle maintenance. Highway safety.

##### Prevention/Response

Make sure vehicle is checked daily.  
Obey all highway safety rules and regulations.  
Do not drive when tired, or when using drowsiness-inducing prescription drugs.  
Do not drink and drive.

- b. Field excursions with roadside stops.

##### Prevention/Response

Pull vehicle completely off the road.  
Do not walk backwards into the road.  
Do not cross the road without first looking both ways.  
If you have to cross the road, do so in a group.

#### 2) Geology

- a. Use of hammers.

Hammering on rock can be a hazardous activity because bits of rock fly off in all directions.  
Bits of metal flake off a hammer when hit by another hammer.

##### Prevention/Response

Always use eye protection.  
Never use one hammer to hit another. Always use a chisel made of tempered steel.  
Do not hammer rocks close to other people.

#### 3) Climate

- a. Sunburn and sunstroke

Ephraim and the surrounding areas are at relatively high elevations and the air is dry: this means the effects of exposure to the sun will be much greater than in Ohio. Be aware of the consequences of too much or unprotected exposure to the sun. Heat exhaustion can occur due to exposure and dehydration.

Heatstroke is a condition in which the body's normal cooling system breaks down. Signs of heatstroke include lack of co-ordination, irrational behavior, confusion, delirium. These warning signs may be followed by collapse, unconsciousness, and convulsions. **HEATSTROKE IS A VERY SERIOUS MEDICAL PROBLEM.**

##### Prevention/Response

Wear a hat that protects face, ears and neck.  
Use sunscreen on all exposed skin.  
Wear long trousers and long-sleeved shirts.  
If anyone has symptoms of heatstroke, get the victim out of the sun, lying down, feet elevated slightly; cool the extremities and trunk with cool wet clothing or even pour cool water over the victim. It is imperative to lower the body temperature as soon as possible. Seek help immediately.

#### b. Thunderstorms

Lightning is a common occurrence with thunderstorms, and flash floods may accompany them. Both can be dangerous.

##### Prevention/Response

Get off exposed ridges and hills when such weather threatens; until the storm has passed, take shelter away from exposed areas (but not in the bottoms of gullies because of floods).

Even if the storm is not overhead, do not stand or walk in dry stream beds.

Never camp along stream courses.

#### c. Elevation

The field program is conducted at elevations between 5,000' and 12,000'.

Temperatures can be 30°F colder at the high elevations.

##### Prevention/Response

Take clothing for the conditions which at high elevations, even in summer, can include cold (possibly snow), heavy rain, and high winds.

#### d. Dehydration

Utah has a dry climate and dehydration occurs much more rapidly than in a humid climate.

##### Prevention/Response

Always take water in the field, as much as a gallon a day.

Do not drink water from streams and rivers unless it has first been purified.

### 4) Terrain

#### a. Steep slopes

Talus cones, rubble covered slopes and rock ledges and cliffs may all be encountered in the field.

Loose debris on slopes may move underfoot and lead to falls. Rolling boulders can lead to serious injury or even death for those below you.

##### Prevention/Response

Do not run down slopes.

Do not try any mountaineering; always take the easiest path around an obstacle.

Always watch out for people above and below you.

Be especially careful not to dislodge boulders. If boulders are dislodged, warn those below you. If you are below, move laterally along the slope and out of the path of the boulder.

#### b. Barbed wire

There are numerous fences, both old and new, in the field areas and most are made of barbed wire.

##### Prevention/Response

Use a gate before trying anything else; go under a fence if you possibly can, or through it by parting the wires; only as a last resort, go over the fence.

### 5) Biota

#### a. Snakes

Rattlesnakes and other snakes may be encountered anywhere in the field. Normal fieldwork in which people are walking, talking, and pushing through the brush may give snakes enough warning that they

can seek cover. Very few animals attack unless provoked or cornered. Treat snakes with the respect they deserve.

Prevention/Response

If you hear a rattler, stop, locate it, then back off slowly. If you taunt a rattlesnake, you may regret it. Never put a hand on top of a rock ledge if you cannot see what is there - a rattler may be curled up awaiting you. Turn rocks over using your hammer and roll the rock toward you - the rattler will be that much further away.

Wear leather boots and long trousers to minimize the possible effects of a snake attack.

If bitten by a rattler, don't run, don't panic, try to stay as calm and still as possible, get in the shade - all these actions will tend to slow the spread of the venom. If envenomation has occurred, there will be almost immediate pain, swelling and perhaps a rubbery or metallic taste in the mouth. Seek immediate help to get the victim to a doctor. Do not let the victim walk out of the field unless absolutely necessary. **DO NOT** use a tourniquet or pressure wrap to constrict the flow of blood. **DO NOT** use the "cut and suck" technique. **DO NOT** try the use of antivenins in the field - if the victim is allergic to the serum, the cure may be more life-threatening than the snake bite.

b. Scorpions

Scorpions are relatively common in some of the very dry areas in valley bottoms.

Prevention/Response

Look before you put your hand on any rock or before you sit down on the ground. You may save yourself much pain and discomfort.

c. Ticks

Ticks can transmit Rocky Mountain Spotted Fever and Lyme disease, both of which can be serious if not treated at once.

Prevention/Response

Check clothing and bare skin for ticks, particularly after walking through long grass.

Check for ticks after showering back at the apartments.

Ticks can be removed by using tweezers and pulling gently straight up off the skin. Be careful not to leave the head embedded; if it is, get a doctor to cut it out - don't try any amateur surgery.

c. Cacti, mesquite, etc

Cacti and some other vegetation have sharp spines or prickles. Although only a nuisance, look before putting your hand on the ground or sitting down.

d. Giardia

The parasite *Giardia* is found in untreated waters throughout the West.

Prevention/Response

Do not drink untreated water from springs, streams, brooks, rivers, even those that appear clean and pristine. Always carry enough water in the field.

6) Predators

a. Anti-coyote and other devices

All manner of devices have been used at one time or another for predator control. Seemingly harmless canisters may be full of cyanide and rusted through, just waiting to explode.

Unexploded dynamite, wires, and fuses may be encountered, particularly near old mining and quarry sites.

Prevention/Response

If you encounter metal objects on the ground, do not touch them, not even if you think you know what they are. Do not pull on pieces of fuse or wire protruding from a rock pile - unexploded dynamite may be at the other end.

b. Firearms

Firearms are not permitted at field camp.

7) Clothing

The use of proper clothing will minimize discomfort and even injury in the field. It helps against sunburn, sunstroke, abrasions, snake bites.

Long trousers, long-sleeved shirts, a hat with a brim, and durable boots. Leather boots are best. A hard hat is mandatory for work in quarries and mines.

8) Stupidity/horseplay

The inherent difficulties and hazards of field work means there is a price to pay for stupidity and horseplay.

Always think about the consequences of any action you take.