

## OJT Training Module Cover Sheet

**Title: Know what environmental issues exist in your soil survey area and how to deal with related emergencies**

**Type:**      Skill      Knowledge

Performance Objective: Trainee will be able to...

- Identify environmental issues of concern in the soil survey
- Prevent confronting the issue or issues
- Act appropriately if confronted with one or more of the issues

Trainer Preparation:

- Review attached examples of concerns
- Secure existing or prepare list of environmental concerns for your soil survey area - Terrain (mud, sand, rocks, slope, etc.), Climate (cold, hot, wet, dry, storms, floods, etc.), Wildlife (snakes, bears, mountain lions, etc.), Insects & Arachnids (spiders, ticks, bees, fire ants, etc.), Other
- Include prevention, what to do, listing of contact information, where to go for assistance for each concern

Special Requirements:

None

Prerequisite Modules:

None

Procedure:

- Face to face discussion with employee

Notes/Purpose:

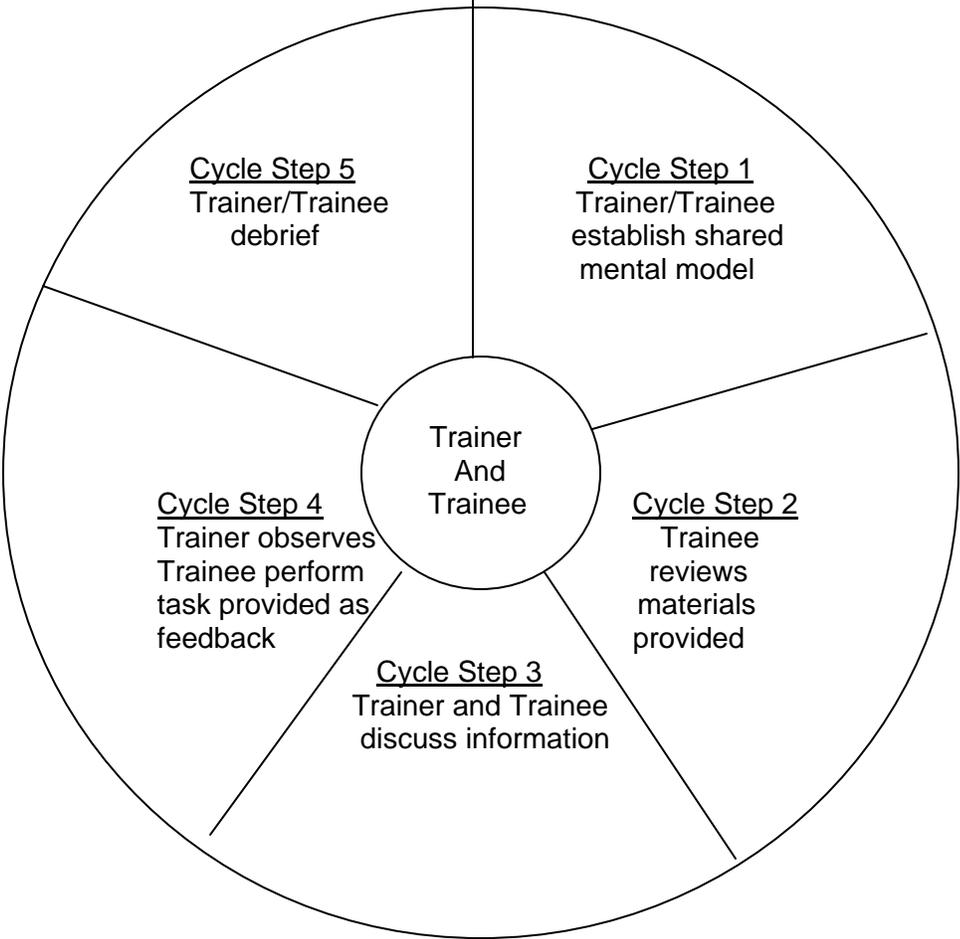
Authors:

- Marc Crouch, NSSC

Approved by:

- Marc Crouch, NSSC

# The Five Step OJT Cycle for Declarative Training



## OJT Module Lesson

Title: <b>Know what environmental issues exist in your soil survey area and how to deal with related emergency issues</b>	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step #1	Discuss objectives of the module
What are the issues of concern in your soil survey area	Review lists prepared showing local issues related to: <ul style="list-style-type: none"> <li>▪ Terrain (mud, sand, rocks, slope, vegetation, etc.)</li> <li>▪ Climate (cold, hot, wet, dry, storms, floods, etc.)</li> <li>▪ Wildlife (snakes, bears, mountain lions, etc.)</li> <li>▪ Insects &amp; Arachnids (spiders, ticks, bees, fire ants, etc.)</li> <li>▪ Other</li> </ul>
Address each issue on your list(s) separately	Why is each a concern
	Where in the area is it a concern
	How to avoid the issue (prevention)
	What to do if confronted with the issue
	Where to go for help if confronted with the issue
	How and who to contact for help if confronted with the issue

## OJT Measurement of Learning

Address each issue of concern	For next several days, SSO Leader presents a scenario addressing an issue of concern and asks employee to respond as to: <ul style="list-style-type: none"> <li>▪ How to prevent</li> <li>▪ What to do</li> <li>▪ Where to go for help</li> <li>▪ Contacts for assistance</li> </ul>
Repetition	Repeat until satisfied that employee knows what to do in all scenarios presented for the soil survey area

# Trainee OJT Performance Report Form

---

Trainee's Name: \_\_\_\_\_ Job Title: \_\_\_\_\_

Trainer's Name: \_\_\_\_\_ Date: \_\_\_\_\_

Task (module title)	Date(s) of Training	Rating		Trainer's Comments
		Acceptable	Unacceptable	

Additional Trainer's comments:
Trainee's Comments:
Action to be taken if unacceptable:

### Signatures

Trainee	Date
Trainer	Date
Supervisor, if different	Date

## Example Environmental Concerns

### ***HEAT STROKE***

#### **What is heat stroke?**

Heat stroke is the most severe form of heat illness and is a life-threatening emergency. It is the result of long, extreme exposure to the sun, in which a person does not sweat enough to lower body temperature.

#### **How can heat stroke be prevented?**

There are precautions that can help protect you against the adverse effects of heat stroke. These include:

- Drink plenty of fluids during outdoor activities, especially on hot days. Water and sports drinks are the drinks of choice; avoid tea, coffee, soda and alcohol as these can lead to dehydration.
- Wear lightweight, tightly woven, loose-fitting clothing in light colors.
- Schedule vigorous activity and sports for cooler times of the day.
- Protect yourself from the sun by wearing a hat, sunglasses and using an umbrella.
- Increase time spent outdoors gradually to get your body used to the heat.
- During outdoor activities, take frequent drink breaks and mist yourself with a spray bottle to avoid becoming overheated.



### ***Black Widow Spiders***

#### **Habitat**

On the underside of ledges, rocks, plants and debris, wherever a web can be strung. Cold weather and drought may drive these spiders into buildings

The venom of the female black widow spider is 15 times as toxic as the venom of the Prairie Rattlesnake. Only a minute amount of the toxin is injected in a single bite by the spider however, so they are rarely fatal. By comparison, the relatively large amount of injected rattlesnake venom results in about 15 to 25 percent mortality among those bitten.

The bite itself is often not painful and may go unnoticed. But the poison injected by the Black Widow bite can cause abdominal pain similar to appendicitis as well as pain to muscles or the soles of the feet. Other symptoms include alternating salivation and dry-mouth, paralysis of the diaphragm, profuse sweating and swollen eyelids.

Persons with heart conditions or other health problems may require a hospital stay. (Heart and lung failure may result in death.) A physician can evaluate the severity of the bite, and give specific antivenin or calcium gluconate to relieve pain if necessary. Healthy people recover rapidly in two to five days.

First aid measures: Apply an ice pack over the bite location and keep the affected limb elevated to about heart level. Try to collect the spider specimen in a small jar or plastic bag for examination by a spider expert, even if you have crushed it. Treatment in a medical facility may be necessary. **Call the Poison Center for additional information.** Poison Centers across the country now have a new national emergency phone number - 1-800-222-



Male Tarantula with a cricket.

## ***Tarantulas***

The Desert Tarantula (*Aphonopelma chalcodes*) grows 2 to 3 inches long and is colored gray to dark brown. It is common to the Sonoran, Chihuahuan and Mojave deserts of Arizona, New Mexico and Southern California. Although the tarantula is frightening in appearance, the chances of being bitten by it are rare and, because it has a rightful place in the outdoors, it should not be wantonly killed or persecuted

### **Cautions**

If a bite should occur, the venom when injected into humans usually causes only slight swelling, with some numbness and itching which disappears in a short time. The bite has been compared in intensity with a bee or wasp sting. Caution should be used when handling or near a tarantula, as with any wild creature

**First Aid:** Clean the bite site with soap and water and protect against infection. Skin exposures to the urticating hairs are managed by removing the hairs with tape. Any sign of allergy or breathing problems should be cause for concern - seek medical attention.

## ***Rattle Snakes***



### **Description**

Rattlesnakes come in 16 distinct varieties. There are numerous subspecies and color variations, but they are all positively identified by the jointed rattles on the tail.

### **Watch your step:**

Rattlesnakes are superbly cryptic animals. Their colors and patterns allow them to blend with their surroundings so that they often seem to be invisible. When in the desert it is always best to look where you place your feet. A flashlight should always be carried at night, especially on warm nights when rattlesnakes are very active. Around your home, walkways should be kept clear of brush, as rattlesnakes on barren earth or pavement are more visible. Walkways should be brightly lit.

### ***Rattlesnake Bites***

#### **Dos:**

- Remain calm and reassure the victim.
- Remove all jewelry, watches, etc. from the affected area.
- Immobilize extremity and keep at level below the heart.
- Decrease total body activity as is feasible.
- Move victim to medical facility without delay.

#### **Don'ts:**

- Do not apply ice to the bite area.
- Do not make an incision of any kind.
- Do not use a constriction band or tourniquet.
- Do not administer alcohol or drugs



**Scorpions**

### ***Bizarre body***

Scorpions strike fear in many people and have been both hated and admired since ancient times. This is probably due to their fearsome look, with pincers at one end and a stinger at the other. Scorpions are not **insects** but are arachnids, like **spiders**, and have eight legs and two main body regions, the prosoma and the mesosoma

The venom of the scorpion can cause severe pain and swelling at the site of the sting, numbness, frothing at the mouth, respiratory difficulties, muscle twitching, and convulsions. The sting is more dangerous to infants, small children and the elderly. Death is rare, especially in more recent times.

## **FLASH FLOODS**

### ***During a Flood***

Flash floods can occur in Arizona with no rain in sight. A storm that's miles away can produce rushing water that can take you by surprise.

1. Listen to the radio or television for information.
2. Know flash flooding can occur. If there is any possibility of a flash flood, move to higher ground right away. Do not wait for instructions to move.

***Be aware of streams, dry riverbeds, drainage channels, canyons and other areas known to flood suddenly. Flash floods can occur in these areas with or without typical warnings like rain clouds or heavy rain.***

### ***After a Flood***

After a flood happens is when a lot of injuries take place. These tips will help to keep you safe.

- Stay away from power lines and electrical wires. The number two flood killer after drowning is electrocution. Electrical current can travel through water. Report downed power lines to the power company or the County Sheriff's office.

- Look out for animals, especially snakes. Small animals that have been flooded out of their homes may seek shelter in yours, or in debris left on your property. Use a pole or stick to poke and turn things over and scare away small animals.
- Look before you step. After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.
- Be alert for gas leaks. Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns, or open flames unless you know the gas has been turned off and the area has been ventilated.
- Wait before entering a structure damaged by flooding. Structures that have been damaged by flooding may not be safe to enter. Wait for the building to be inspected before entering. If the structure is deemed unsafe, arrangements will be made for you to be able to retrieve valuables left behind.

### ***If You Are in a Moving Vehicle***

1. Do not drive into flooded areas.
2. If floodwaters rise around your car, abandon it. Move to higher ground safely.
3. Know that 6 inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
4. Know that most vehicles begin to float in just 12 inches of water. 24 inches of water will sweep most vehicles (including SUVs and pick-ups) away.