

## CSI: Critter Scene Investigation

### BACKGROUND:

There in the dirt, tracks, scratches, disturbance, something happened here. What does it all mean? How do you determine who was involved and how? Now it is time to become a Critter Scene Investigator.

Animals leave signs behind. Man has always interpreted these signs to locate prey, watch animal movement, study behavior and not much has changed. Biologists, researchers, photographers and hunters all look for sign to find and study animals.

### MATERIALS:

- Flat bed sheets (white or light in color)
- Rubber, latex, or vinyl tracks
- Black acrylic paint
- Water
- Foam brushes
- Log or large tree branch
- Feathers (chicken, turkey or duck)
- Paper
- Clip board
- Pencils
- Field guides for animal tracks.

### PREPARATION:

Spread out the sheets. Determine what the scene will be. Some examples:

- Black bear walking finding a log, rolls it over looking for grubs and a mouse runs from the log
- Two jackrabbits are traveling one is caught by a raptor and the other runs away
- A mountain lion walks by then a grey fox walks in later, smells the mountain lion track, follows it for a while then the grey fox sees a jackrabbit and runs after it.



Pick out the tracks you need for your scene. Use the field guide to determine stride and gait for the animals. Mark the general scene on the sheet. Dilute the black paint with water and use the foam brush apply the paint to the track then practice on a piece of paper to determine the right amount of paint or how many times you will need to dab the track before moving to the sheet. Now use the track to make your scene. If you do not have the track of certain animal you can use a black permanent marker to draw the tracks. Allow the scene to dry.

**SUGGESTED PROCEDURES:**

Set the sheet out. In small groups, have the students try to figure out what happened. They need to try to identify which animals left the prints, what went on, and how many animals were there. Basically, they need to try to tell the story of the tracks.

Have the groups rotate through the different scenes. Once all of the groups have seen all of the sheets, ask each group to share their thoughts. What do they think happened? Write their responses on the board. Discuss the different hypotheses. Tell the actual story and determine which group is closest. Discuss the activity and how it relates to the real world. Inform them that in the field other indicators would be visible. If a log was rolled over, it likely would still be around. Brush or grass might be knocked down or trampled. You may find fur and feathers left at the scene. Not all the tracks will occur at the same time. Tracks can overlap and can happen at different times.



## Sample CSI Sheets

The pictures below show the three sheets that were used during the Deer Valley Science Rocks Summer Camp in 2008. The stories are included as well.



### **Sheet A:**

A mountain lion was walking along (tracks moving from the lower right to the upper left). Later, a grey fox was walking through (tracks in the middle right side) and smelled the former presence of the lion. The fox followed the tracks for a little while before noticing a jack rabbit (tracks in the middle left side). The fox then chases the jackrabbit and the rabbit jumped away.

**Sheet B:**

A black bear was walking through (tracks from the upper left to the lower right). At times, the bear would stop to sniff the ground looking for food (notice the nose mark towards the top of the sheet near the foot print). The bear smelled some food under a log and pushed the log out of the way (the large black mark in the lower left side). When the log was rolled over, a small mouse ran out of the log and scurried away (small tracks at the bottom left).

**Sheet C:**

Two jack rabbits were hopping along (two sets of tracks from the lower right). A great horned owl swooped down and grabbed one of the rabbits. Its wing hit the ground during this event (the feather imprints in the upper left). The other rabbit jumped off in the other direction to escape (longer spaced tracks leaving to the lower left).