

Tracking Techniques

by Eugene Nielsen

Tracking, or "reading sign", is an ancient skill. Tracking involves looking for deviation in the way things are supposed to look. If you see something that looks out of place, stop and examine it further. Try to determine what occurred. Not all sign is caused by humans or animals. Look for spoor that is unlikely to be caused by nature (when Tracking).

Two basic kinds of Spoor --ground spoor and aerial spoor. Ground spoor is any sign found on the ground...footprints, vehicle tracks, overturned rocks, blood stains, burn marks, etc. Aerial spoor is all above ground sign-- trampled vegetation, broken cobwebs, broken brush, and blood stains above the ground are examples. Spoor is further categorized as confirmed and unconfirmed spoor. Confirmed spoor is finding an actual footprint. Aerial spoor or other types of ground spoor are considered unconfirmed. Whenever possible, start tracking with confirmed spoor, and study it to further identify it and distinguish it from other prints. (Like, he walks heel to toe, and drags left foot... the footprint has a notch on the right side of the right heel) It is easiest to spot tracks on trails. If not following a distinct trail, look for footprints in areas where it's easiest to place a foot.

Tracking easiest in soft, damp soil, in sand and heavy dust. Snow can help and hurt tracking efforts, because although it is easy to track footprints after a heavy snow, it covers up tracks before the snowfall.

Always track with head slightly up and looking 10-20 ft ahead of you. Try to track into the sun if possible...shadows will be cast into indentations on the ground. If you are having trouble tracking or you are tracking away from the sun, look back over your shoulder and down at the spoor to confirm (and use shadows to your advantage). **DON'T WALK ON SPOOR.** Caution those in your party not to do so either. Move from track to track to confirm spoor, and be certain of your last confirmed spoor before moving on to the next. If you lose trail, go back to last confirmed spoor and walk in concentric circles until you find new spoor. Spoor should be carefully examined to determine 4 things:

- 1) Approximate number of people in group you are tracking
- 2) their direction of travel
- 3) the age of the spoor
- 4) the type of spoor

Easily remembered in acronym **NDAT**--Number, Direction, Age, Type

Number of people tracked-- simplest method takes the length of average stride and measure on ground between tracks, between two points. Draw 2 lines across the tracks perpendicular to the direction of travel. Count the number of footprints between the two lines. reasonably accurate for small groups (less than a dozen). Number of people can also be determined by differences in footprints, i.e., size, tread pattern, sole and heel, and other differences between shoeprints.

The direction of travel, as well as age of spoor, can be determined by a variety of factors, which constitutes the basic science of tracking. Basic factors include displacement, staining, littering, and weathering. You can tell a great deal about the party tracked by determining these factors. It is also important to know the terrain in the area you are tracking in. Get a map and study the terrain. Weather effects are also important, determining such factors as the history of wind and rain in recent days.

Footprints tell a lot. Men weigh more than women and have larger feet. Women and children have a smaller stride. Their footprints will not be as deep. Deep toe marks in smaller spaced steps indicate a heavier load. Deep toeprints in wide spaced steps mean someone was running. A person walking in someone else's tracks will leave deeper impressions and have less distinct edges. The last person in the party will generally leave a clear set of footprints. Drag marks could indicate injured or wounded.

Sunlight will cause crumbling of the dirt ridge which outlines a footprint in moist soil. This generally happens within 1 hour. Rain will round out or obliterate the edges of a footprint. In low marshy areas water will remain in a footprint muddied for 1 hour. Wind will displace leaves and other small debris into footprints. As time passes, footprint outlines will become less distinct.

Vegetation bent blades of grass show direction. but it springs back Grass freshly walked on will be slightly damp from the plants juices. grass blades will remain green for about a day after being broken. If there is dew on the ground, parties passing by will leave a darkened trail for a few hours.

Overtured leaves will have a darker underside. Scuffed foliage and bark will display a lighter color. Freshly broken twigs and leaves will be lighter and greener in color. The pulp will begin to turn brown within 10 hours.

Rocks overturned rocks will leave a darker underside, if soil is underneath. the part that was originally exposed may have moss and lichen growths on it. overturned rocks take a few days to dry in the direct sun.

Mud Mud carried from one place to another may indicate where the party came from. Water will always be muddied downstream from fording sites.

Blood Stains Blood will be red when fresh, quickly oxidize and turn brown. Look for stains on leaves and underbrush as well as the ground. Height of blood off the ground may indicate location of wound. Amount of blood indicates severity.

Litter Look for discarded litter. Sunlight will discolor light colored litter in two or 3 days. Compare differences in sides exposed to the sun against the sides not. Rust spots may occur in as little as 12 hours in some geographic regions.

Animals and Insects Look and listen for for wildlife and insects. Most animals will flee areas when man goes. Listen for fleeing animals; note their direction. Animal tracks superimposed on party's tracks indicate spoor was made during or before nightfall, since animals are mainly nocturnal. Spoor over animal tracks indicate spoor was made after sunrise. It generally takes 1 hour for a spider to repair it's web.

Campsites Campsites can reveal a great deal. Check campfire's heat. The way the fire is laid out can indicate an experienced woodsman. The location and layout can indicate whether the party was trying to conceal presence. Marks on ground can indicate equipment or weapons. Can also indicate number in party. Look for discarded items, can reveal much. Last tip...you can't learn to track by reading about it. You can practice by having members of your party go in different directions and then trying to find them. Start slow...give them a ten minute lead. Eventually, you'll be amazed at what you learned to observe and accomplish.