

# Adventurer's MK

## LOCATE AND ESCAPE

### **DETECTION**

#### **WHY THINGS ARE SEEN**

People are seen for a number of reasons, remembering these vital words that will help you to stay covered from the enemy at all times; the ability to observe effectively is an acquired skill. Things are seen because they contrast with their surroundings in one way or another. There are 11 reasons why things are seen:

1. shape;
2. shadow;
3. silhouette;
4. movement;
5. spacing;
6. position;
7. texture;
8. colour;
9. scale;
10. noise; and
11. shine.

#### **SHAPE**

Experience teaches one to associate an object with its shape or outline. At a distance, the outline of an object can be recognized long before the details that make it up can be determined.

#### **SHADOW**

Against a dark background, the light surfaces of an object will be distinguishable, while against a light background, the dark or shadowed sides will show. In addition, an object may cast a shadow beside it that may be visible even though the object itself may be out of sight. Objects in a shadow may be missed because the eye tends to accept conspicuously dark or light areas as uniform and does not seek out minor differences in darkness or lightness within them.

#### **SILHOUETTE**

Anything silhouetted against a contrasting background is conspicuous. Any smooth, flat background, like water, a field or (most frequently) the sky, will provide such a contrast. Any object may be silhouetted simply by being seen against a background of a different colour. Choose clothing and camouflage to match the background, if possible.

#### **MOVEMENT**

Although movement by itself seldom reveals the identity of an object, it is the most important factor for revealing existence. Even though the other recognition factors may have been completely eliminated, an enemy observer will be attracted to an area if movement is not controlled. An enemy observer may be concentrating on one area, but he will not fail to detect movement in another area through peripheral vision. Do not move unless absolutely necessary and then only to the extent necessary.

#### **SPACING**

In nature, things are seldom regularly spaced. Regular spacing, therefore, usually indicates man-made objects and attracts the eye of the observer.

#### **POSITION**

An object is often identified by its position in relation to its surroundings. A long object on a railroad track is assumed to be a train; similar objects on a river and parallel to its banks are assumed to be

boats or barges. A large structure in a group of frame buildings might be a barn. Position is nothing more than the relationship in space of one object to another object or objects.

#### **TEXTURE**

Texture may be defined as the relative smoothness or roughness of a surface. A rough surface, such as a field of grass, reflects little light and casts many shadows on itself. It appears very dark to the eye or on a photograph. A smooth surface, such as an airstrip or the roof of a building, reflects more light in an aerial photograph.

#### **COLOUR**

Colour is an aid to an observer when there is contrast between the colour of an object and its background. The greater the colour contrast, the more visible the object. While colour alone will not usually identify an object, it is often an aid in locating an object or confirming a tentative identification. A secondary consideration is the tone of a colour. Usually, the darker shades of a given colour will be less likely to attract an observer's attention than the lighter, more brilliant shades.

#### **SCALE**

Objects that differ greatly in size from those around them will be more readily distinguishable than objects amongst others of approximately the same size.

#### **NOISE**

Sudden noises contrast with the normal quiet of the battlefield. Loud noises such as the firing of artillery weapons or the running of generators can pinpoint locations. During the Korean Conflict, sound ranging equipment provided the initial location of 80 percent of enemy indirect fire weapons.

#### **SHINE**

Flashes of light reflected off un-camouflaged materials such as glass and metal quickly attract the attention of ground and air observers.

### **THE ART OF HIDING**

Inpo, the art of hiding, is an integral part of the Ninjitsu system. It simply means that one must take advantage of every possible object, natural as well as manmade, to conceal oneself. Inpo gave rise to the legends that the ancient ninja could vanish at will.

Following are the five preferred inpo methods:

#### **EARTH METHOD**

The best example of this technique is hiding like a quail in small gaps between two larger objects. The primary consideration here is that one must be able to completely fill the space between the objects. In this way, one may escape detection, since an observer will scan past these as he walks. Of note also is the technique of hiding under overhanging brush or grass. Stay low to observe and look around the cover.

#### **AIR METHOD**

This refers to hiding like a racoon. It means that one should climb a tree or other high place and press oneself against the object so that one seems to be a part of it. The infamous jewel thieves, Alan Kuhn and Jack Murphy- who stole the Star of India from a New York museum- made frequent use of this tactic. They believed, and rightly so, that people seldom look up.

#### **WATER METHOD**

This means to imitate the actions of the fox by concealing oneself in water. Not only does this aid in erasing one's trail, but also allows only poor footing for the pursuing enemy. This method is also extremely useful when one can spring on an enemy out of the water.

#### **FIRE METHOD**

This is perhaps the most difficult of the inpo arts. It refers to the erasing of sound and shadow. Always move behind a light source to avoid casting a shadow or silhouette which might betray you. Learn to move silently. Only practice in the nine steps can develop this skill.

## **WOOD METHOD**

Pu Neng Mu is the term used to mean "invisibility in plain sight". When no cover is at hand, one must hide behind nothing. This is accomplished by distorting the silhouette. It is possible to form the body into many shapes by means of yogic exercises. In the old days of ninjitsu, one excellent tactic involved replacing a scare crow and standing in the centre of a ploughed field. By kneeling and wrapping the arms around the knees, one assumes a position like a stone or bush.

## **SEARCHING GROUND NORMAL METHOD**

The usual method of scanning is to divide the ground into foreground, middle distance and distance. One scans from the right to the left. Where the ground is fairly open this is the best method. When scanning is done horizontally, it is not necessary to continually alter the sense of scale

## **CLOSE COUNTRY**

In close or broken country, different types of ground require different treatment. First, carefully examine areas likely to contain enemy positions, either because of their tactical value, slope and relation to crests or because of the possibility of good cover. Then, look along the junctions between such areas and other areas. Next, examine all areas visible through any screen, trees or foliage. Then, examine all remaining areas of light or sunlit ground. Finally, examine all areas of dark or shadowed ground. The sequence adopted depends on the terrain and range of observation.

## **MINIMAL LIGHT CONDITIONS**

At dusk or in half moonlight or starlight, naked eye scanning is slower than in full light. The observer pauses for a few seconds looking in one direction, paying attention to objects off the direct line of vision. Then he shifts his line of vision by about 110 to 170 mils (approximately a fist's width at arm's length) and again pauses until objects become visible near his line of vision. He rests his eyes for 10 seconds every minute or two. With binoculars, a similar "move and stop" method is used, with attention paid to objects visible "out of the corner of the eye".

## **SEEING THROUGH**

When attempting to see through a nearby screen, foliage, etc., the observer looks at the area under observation and ignores the screen. A small head movement automatically extends the area to be observed.

## **VISUAL INFERENCE**

Even when seemingly insignificant portions of an object are visible, the identity of the complete object can be inferred. It is possible to determine that a person or a piece of equipment is present from the fact that small parts are in their correct relative positions.

## **OFF THE LINE OF VISION**

Incidents rarely occur at the exact spot at which the observer is looking. The highly trained observer is said to have "eyes in the back of his head." This ability to note incidents off the line of vision can be developed by practice.

## **PERSONAL FACTORS**

A good observer does not depend on eyesight alone to carry out the task efficiently. Given reasonable sight, any member can learn to become a good observer.

- **Interest.** All observation is selective. In order to become good observers, Troop members must know what they should be interested in and what they should look for. Interest may be stimulated by knowledge. Interest, knowledge and observation are closely related. Troop members begin by learning about the equipment and methods of their own army before becoming familiar with those of the enemy;
- **Under and Over Expectation.** Troop members learn to recognize when their judgement can be trusted. In routine observation, the Troop member rarely starts fully alert. When there are long periods without incident, the observer is lulled into a false sense of security or may become bored. Conversely, if observers are nervous or over- excited, they may imagine the things they are expecting to see; and

- **Comfort.** A Troop member in a cramped or awkward position does not observe as efficiently as one who can see with ease and comfort. The importance of ease of observation should be continually borne in mind when selecting an observation post, although other considerations such as concealment and protection also affect the choice.
- **Use of Binoculars.** When using binoculars in open country, the sector should be covered systematically and the eye examines the whole of each field of view, both horizontally and vertically. In close country where the naked eye alone is inadequate, binoculars are used to examine suspicious objects, areas of good cover, hedges, ground seen through trees and distant areas.

### **JUDGING DISTANCE**

It is important that an observer be able to judge distances accurately for the following reasons:

- to set weapon sights accurately;
- to report locations accurately;
- to prepare range cards; and
- to call for supporting fire.

### **UNIT OF MEASURE METHOD**

A known accurate distance is visualized (e.g., a football field or the distance between two telephone poles), and that unit is applied repeatedly between the observer and the target until the range is determined.

This system of judging distance requires practice and a good knowledge of the ground. Observers must be able to see all the ground between themselves and the target, otherwise there would be nothing to which they could relate the unit of measure. This method is not accurate beyond 400 metres because it is too difficult to relate increments beyond that distance.

### **APPEARANCE METHOD**

When there are hills, woods or other obstacles between the observer and the target that conceal most of the ground from observation, it is impractical to apply the unit of measure. The appearance method compares the way an object looks at 100 metres and at greater distances. By comparing the appearance of a man in several positions—at 100, 200, 300, 400 and 500 metres—observers can establish a series of mental pictures. They will find that, as distances increase, a man's figure becomes smaller, his outline becomes increasingly blurred and his other features gradually fade out. The following may be used as a rough guide to determine the distance a Troop member is from the observer:

- 200 metres—all parts of the body are distinct;
- 300 metres—outline of the face becomes blurred;
- 400 metres—outline of the body remains, but the face is difficult to distinguish;
- 500 metres—the body appears to taper from the shoulders; movement of the limbs can be observed; and
- 600 metres—the head appears as a dot with body details invisible and tapering noticeably.

In the same way, the appearance of other familiar objects can be learned.

### **CONDITIONS THAT AFFECT ESTIMATION OF RANGES**

Objects can seem nearer than they really are:

- when the object is in bright light or the sun is shining from behind the observer;
- when the colour of the object contrasts sharply with the colour of the background;
- when the observer is looking over water, snow or a uniform surface;
- in the clear atmosphere of high altitudes;
- when there is dead ground between the target and the observer; and
- when they are larger than other things around them.

Objects can seem more distant than they really are when:

- the observer is looking over a depression, all of which is visible;
- there is poor light or fog or the sun is in the observer's eyes;

- c. only a small part of the object can be seen;
- d. looking down a street or tree-lined road;
- e. the object tends to blend in with the background;
- f. objects are smaller than other things around them; and
- g. the observer is lying down.

#### **OTHER METHODS OF DETERMINING RANGE**

Ranges may be determined by other methods such as:

- a. measuring from a map or an air photograph;
- b. pacing the distance;
- c. using the mil formula;
- d. looking at range cards; and
- e. using range-finders.

#### **AIDS TO JUDGING DISTANCE**

There are four basic aids to judging distance:

1. Halving. A point is chosen halfway to the target and the distance is estimated to the point and doubled;
2. Bracketing. If the target is known to be located between two reference points of known distance then the bracketing method may be used. Simply add the two known distances (X and Y) and then halve the sum for a close approximation of the range. For example, if X is 1000 metres and Y is 600 metres, the sum is 1600 metres, halved is 800 metres, which is the range. The further away the target, the larger the bracket should be;
3. Key Ranges. If the range to any point in the arc is known, the distance to other objects from it can be estimated; and
4. Unit Average. Several personnel judge a distance and an average is made of their estimates.

#### **MOVEMENT RULES**

Follow these general rules to move without being seen or heard by the tracked target:

- Camouflage yourself and your equipment.
- Wear soft, well-fitting clothes. Starched clothing swishes, baggy clothing is likely to snag.
- Use ankle ties to blouse the trousers. Do not tie them too tightly as this restricts circulation.
- Do not carry unnecessary equipment.
- Look for your next point of concealment before leaving your position.
- Change direction when moving through tall grass; a straight path cause's unnatural motion which attracts attention.
- If you alarm birds or animals, remain in your position and observe. Their flight may attract attention.
- Take advantage of distractions provided by natural noises.
- Cross roads and tracks where maximum cover exists, look for a low spot or curve, cross quickly and silently.
- Follow the furrows when crawling over ploughed land, crossing the furrows at low spots.
- Avoid steep slopes and areas with loose gravel or stone.
- Avoid cleared areas and prevent silhouetting.
- Avoid heavily trafficked areas.
- Avoid areas that are not trafficked at all, they could be dangerous and impenetrable.
- Always move downwind whenever possible.
- When in doubt, don't move.
- Learn the patterns used to see, that you may move outside the field of view.
- Learn to move without disturbing your surroundings.

## **INDIVIDUAL MOVEMENT**

### **THE KITTEN CRAWL**

The kitten crawl is simply crawling on hands and knees. It is useful behind cover about sixty centimetres high. If silence is required, a safe place without twigs must be chosen to place the hands. When the hands are moved, the knees should be placed exactly where the hands have been. The back and head must be kept low but observation must be maintained.

### **THE LEOPARD CRAWL**

The leopard crawl is crawling on the elbows and the insides of the knees, alternating from one to the other, rolling the body a little as each knee is bent. It is useful behind very low cover. An alternative method is to let one leg trail behind and use only one knee. The heels, head, body and elbows are kept down. Observation is continued during the move.

### **THE STOMACH CRAWL**

This crawl is slow and tiring, and it should only be used when the utmost caution is necessary. It is particularly useful when the stalker is forced to use very low cover or crawl in the open. The whole body is pressed as close to the ground as possible. Movement is obtained by pulling with the forearms and at the same time pushing with the insides of the feet with the heels kept on the ground.

### **THE MONKEY RUN**

The monkey run is movement from a crouched position with a single hand on the ground. The Troop member is in a position to either drop to the ground or break into a run or sprint.

### **THE ROLL**

The roll is often the quickest way of getting away from a spot, such as a crest line. This method works only on level ground or downhill. The arms should be kept as close to the side as possible. It is difficult to control direction during the roll. After completing a roll, personnel may be confused as to the direction of the enemy and may feel dizzy.

### **THE WALK**

The whole attitude of the Troop member must be alert, head up and observing. To move quietly on hard ground, the edge of the sole of the boot should be placed down first. To maintain balance, the knees should be slightly bent.

### **THE RUN**

The run is faster than the usual double. It is normally a zigzag movement but may be a dash. Bounds are short to maintain breath control.

### **TURNING**

To turn to the right in the prone position, ease the body as far to the right as possible keeping the legs together. The left leg is then moved as far to the left as possible; the right leg is then joined to the left leg and the body moved still further to the right. These movements are repeated until the body is facing the desired direction. Reverse the movement to turn to the left.

## **INDIVIDUAL TACTICAL MOVEMENT**

### **LOOKING THROUGH COVER**

Look through cover, rather than around or over it. If cover must be looked over, do not break a straight line (fence lines, skylines, etc.). Choose background to match the clothing and camouflage worn

### **SHADOWS**

Troop members should keep in the shadows and remember that shadows move as the day progresses. When observing from a window, Troop members must ensure they are far enough back from the window to be in the shadows

### **SKYLINES**

Skylines should be avoided. If a skyline must be crossed, the Troop member should move across slowly in the lowest possible position

## **USE OF GROUND COVER AND CONCEALMENT COVER FROM VIEW**

Cover from view is concealment from enemy observation. Cover may be natural or artificial. Natural concealment (e.g., bushes, grass and shadows) is provided by surroundings and needs no change to be used. Artificial concealment is made from materials such as burlap or nets. It can also be made from natural materials, such as bushes, leaves and grass, which have been moved from their original location.

## **OBSTACLE CROSSING**

Obstacles should be crossed as quickly as possible with the least silhouette showing. The crossing of obstacles is practised to achieve required efficiency. A covering group is to be deployed, if possible, when obstacles are crossed.

## **WIRE**

Creep under wires, face up, if possible. It may be possible for one man to lie on the wire and flatten it, while others climb over his body. If wire must be cut, it should be held on both sides of the cut to avoid noise and injury from flying ends.

## **GATES AND WOODEN FENCES**

There are different ways to cross gates and wooden fences (in order of priority):

- a. to crawl under them;
- b. to go through an opening that is either made or identified; or,
- c. to go over as quickly and with as low a silhouette as possible.

## **WALLS**

Teams are formed to assist each other up to the top of the wall. One then rolls across the top, keeping flat, and jumps down the other side.

## **DITCHES, STREAMS, HEDGES, GAPS**

Should be crossed as quickly as possible, preferably in groups, at irregular intervals.

## **OPEN AREAS**

Open areas should be avoided except when absolutely necessary. One lies concealed on the near side and examines the area before crossing.

When going through tall grass, moving in a straight line causes the grass to wave in an unnatural motion. Without changing the final destination, the direction of movement should change (i.e., zigzag) from time to time in order to avoid compromising movement. The best time to move is when the wind is blowing the grass. One must, however, weigh both the enemy threat and time factor when confronted with such obstacles.

Isolated and conspicuous cover should be avoided, as it will attract the enemy's attention.

When crawling across ploughed fields, furrows should be followed as much as possible. Cross furrows in a low part of the field.

## **ROADS AND TRAILS**

Roads and trails should be crossed near a bend, or where the road is narrow, so that the enemy's observation is limited and the time of exposure is as short as possible.

## **STALKING**

Stalking is the application of fieldcraft to locate and approach.

## **CONDUCT OF THE STALK**

The following considerations are important for success:

- be alert, never relax;
- conduct careful observation after each bound;
- continually select possible viewing positions;
- avoid isolated and conspicuous cover;

- take advantage of noises, e.g., aircraft, trains;
- avoid disturbing other animals and birds as it attracts attention; be especially wary of dogs especially in villages, towns, etc.;
- take risks earlier rather than later; and
- remember, if you are spotted, the mission is a failure.

## **AVOIDING DETECTION**

### **INDIVIDUAL CAMOUFLAGE**

Effective concealment of the individual depends primarily on the choice and use of background. It is the controlling element in individual camouflage and governs every concealment measure. One's clothes must blend in with the predominant colour of the background. The tone and colour of the hands, neck and face, and the shape, surface and silhouette of the helmet and personnel equipment must not contrast with their background. The individual Troop member practises blending in with the background by hiding in shadows and avoiding contrast between his silhouette and the background. The Troop member avoids movement against static or stationary background, follows hidden routes and conceals spoil, tracks, equipment and installations. The Troop member must be equally concerned with the ground and air observer and must constantly remember why things are seen.

Camouflage discipline is essential because surroundings change, shadows move and foliage wilts.

### **SKIN**

Camouflage cream, mud, burnt cork or wood, or something similar, is used on the face (nose, tips of ears, forehead), neck and hands. More is applied for night work.

### **PERSONAL EQUIPMENT**

Clothing and personal equipment should be dark in colour and non-reflective, it must be darkened to reduce contrast. Pieces of camouflage netting, or similar materials, may be tied to the equipment to disrupt the shape and mask any fading.

### **NIGHT VISION**

The eye has two sets of light sensitive cells that are used for seeing: one set by day (cones) are in the center of the eye, and the other set by night (rods) are placed around the day cells.

**The cones (day cells)** need strong light to allow one to see. They work in moonlight, but under lesser conditions of light they are useless.

**The rods (night cells)** are very sensitive to light and work when the day cells can no longer see. The changeover from the employment of cones to rods, known as night adaptation, is a slow process that takes approximately 35 minutes to complete. An alternative to sitting in darkness and waiting 35 minutes is to remain under red light for the same period of time. This will produce almost complete adaptation and allows work to be done during the waiting period. Constant training and practice improves night vision.

The night cells are weak and tire quickly. The ability to see at night is affected by colds, headaches, sleepiness or physical fatigue. Once adaptation has taken place, it is not possible to stare at an object for longer than four or five seconds without vision becoming blurred. The angle of sight should be changed often to allow the cells to perform effectively.

### **OFF-CENTRE VISION**

As mentioned previously, the cones are in the centre of the eye. At night, if one looks directly at an object, one will see very little because these cells cannot work in poor light. To see at night, one must use the rods, which are around the cones. This means looking at an angle (about 100 to 170 mils) away from the object. This is called off-centre vision.

Once an object has been identified using off-centre vision, it is possible to look directly at it for a few seconds before its image disappears. This is a useful aid to shooting at night.

When observing at night, it is possible to scan the In order to study an object or a piece of ground in greater detail, it is better to scan using a "figure eight" technique, which makes full use of off-centre vision



When observing at night, the following should be kept in mind:

- a. all objects are seen by silhouette, so the observer must be close to the ground to obtain a skyline;
- b. no detail or colour can be seen; and
- c. judging distance is difficult.

### **PROTECTION**

Bright lights spoil night adaptation. A match flame or a flash light spoils night adaptation for several seconds. It must become an instinctive reaction to cover one eye when faced with any light at night. If it is necessary to observe in the area of a light, one should look off to the side.

### **STARING**

If any single point of light or a prominent object is stared at for too long, it will seem to move. This is the reason why sentries imagine that they see trees moving at night and fire their weapons without apparent reason. "Placing" the object against something else, such as a finger at arm's length, can prevent this.

### **BINOCULARS**

Binoculars have some light gathering capability depending on objective lens diameter and magnification. A diopter scale, marked on each eyepiece, is used to measure the degree of focus. To determine the best focus during daylight, close each eye in turn and adjust each eyepiece for best focus while observing a distant object. Note the reading on each eyepiece. For night use, set each gradation for one less than daylight use.

### **NIGHT SOUNDS**

Sounds can be heard better at night because there are fewer noises to interfere and cooler, damper night air carries sound better. Practice improves the ability to hear and identify sounds.

### **OPTIMUM HEARING**

To hear better at night, the Troop member must keep quite still, lean forward a bit, half open his mouth and turn one ear towards any sound.

### **TRACKING YOUR TARGET**

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 is 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**

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. Number of people can also be determined by differences in footprints, i.e., size, tread pattern, sole and heel, and other differences between shoeprints.

### **Direction**

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.

### **Age**

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 toe prints 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.

### **Type**

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 colour. Freshly broken twigs and leaves will be lighter and greener in colour. The pulp will begin to turn brown within 10 hours.

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

## **Scat**

Scat (animal poop) getting to know the shape and consistency of the poop from the animal you will be tracking will always benefit the tracker whilst out on the hunt.

There are two key ways scat helps hunters track wildlife:

Poop can tell hunters what type of animal species are occupying a wild area or potential hunting spot.

1. The shape and texture of droppings can offer clues about what an animal has been eating.
2. Often a hunter selects his hunt site based on the concentration of scat in an area. If the concentration is high, that's an indicator of a high-traffic area.

## **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 discolour light coloured litter in two or three 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 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 its 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 indicate number in party. Look for discarded items, litter can reveal much about the group or individual.