CHAPTER 8 TRACKING/COUNTERTRACKING

When a sniper follows a trail, he builds a picture of the enemy in his mind by asking himself questions: How many persons am I following? What is their state of training? How are they equipped? Are they healthy? What is their state of morale? Do they know they are being followed? To answer these questions, the sniper uses available indicators to track the enemy. The sniper looks for signs that reveal an action occurred at a specific time and place. For example, a footprint in soft sand is an excellent indicator, since a sniper can determine the specific time the person passed By comparing indicators, the sniper obtains answers to his questions. For example, a footprint and a waist-high scuff on a tree may indicate that an armed individual passed this way.

Section I TRACKING

Any indicator the sniper discovers can be defined by one of six tracking concepts: displacement, stains, weather, litter, camouflage, and immediate-use intelligence.

8-1. DISPLACEMENT

Displacement takes place when anything is moved from its original position. A well-defined footprint or shoe print in soft, moist ground is a good example of displacement. By studying the footprint or shoe print, the sniper determines several important facts. For example, a print left by worn footgear or by bare feet may indicate lack of proper equipment. Displacement can also result from clearing a trail by breaking or cutting through heavy vegetation with a machete. These trails are obvious to the most inexperienced sniper who is tracking. Individuals may unconsciously break more branches as they follow someone who is cutting the vegetation. Displacement indicators can also be made by persons carrying heavy loads who stop to rest; prints made by box edges can help to identify the load. When loads are set down at a rest halt or campsite, they usually crush grass and twigs. A reclining soldier also flattens the vegetation.

a. **Analyzing Footprints.** Footprints may indicate direction, rate of movement, number, sex, and whether the individual knows he is being tracked.

(1) If footprints are deep and the pace is long, rapid movement is apparent. Long strides and deep prints with toe prints deeper than heel prints indicate running (A, Figure 8-l).

(2) Prints that are deep, short, and widely spaced, with signs of scuffing or shuffling indicate the person is carrying a heavy load (B, Figure 8-l).

(3) If the party members realize they are being followed, they may try to hide their tracks. Persons walking backward (C, Figure 8-1) have a short, irregular stride. The prints have an unnaturally deep toe, and soil is displaced in the direction of movement.

(4) To determine the sex (D, Figure 8-1), the sniper should study the size and position of the footprints. Women tend to be pigeon-toed, while men walk with their feet straight ahead or pointed slightly to the outside. Prints left by women are usually smaller and the stride is usually shorter than prints left by men.

b. **Determining Key Prints.** The last individual in the file usually leaves the clearest footprints; these become the key prints. The sniper cuts a stick to match the length of the prints and notches it to indicate the width at the widest part of the sole. He can then study the angle of the key prints to the direction of march. The sniper looks for an identifying mark or feature, such as worn or frayed footwear, to help him identify the key prints. If the trail becomes vague, erased, or merges with another, the sniper can use his stick-measuring devices and, with close study, can identify the key prints. This method helps the sniper to stay on the trail. A technique used to count the total number of individuals being tracked is the box method. There are two methods the sniper can use to employ the box method.

(1) The most accurate is to use the stride as a unit of measure (Figure 8-2) when key prints can be determined. The sniper uses the set of key prints and the edges of the road or trail to box in an area to analyze. This method is accurate under the right conditions for counting up to 18 persons.

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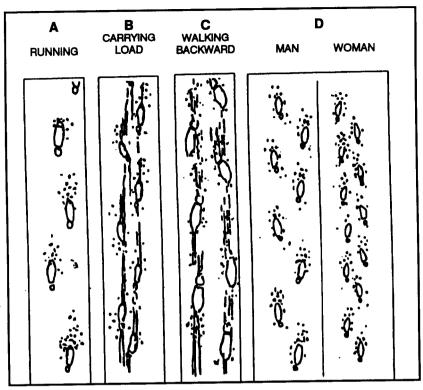


Figure 8-1. Different types of footprints.

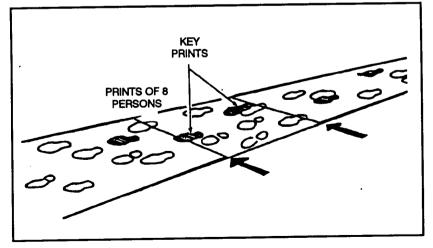


Figure 8-2. Stride measurement.

(2) The sniper may also use the the 36-inch box method (Figure 8-3) if key prints are not evident. To use the 36-inch box method, the sniper uses the edges of the road or trail as the sides of the box. He measures a cross section of the area 36 inches long, counting each indentation in the box and dividing by two. This method gives a close estimate of the number of individuals who made the prints; however, this system is not as accurate as the stride measurement.

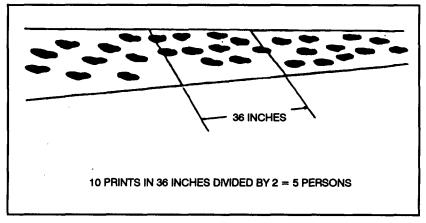


Figure 8-3. 36-Inch box method.

c. **Recognizing Other Signs of Displacement** Foliage, moss, vines, sticks, or rocks that are scuffed or snagged from their original position form valuable indicators. Vines may be dragged, dew droplets displaced, or stones and sticks overturned (A, Figure 8-4) to show a different color underneath. Grass or other vegetation may be bent or broken in the direction of movement (B, Figure 8-4).

(1) The sniper inspects all areas for bits of clothing, threads, or dirt from footgear that can be torn or can fall and be left on thorns, snags, or the ground.

(2) Flushed from their natural habitat, wild animals and birds are another example of displacement. Cries of birds excited by unnatural movement is an indicator; moving tops of tall grass or brush on a windless day indicates that someone is moving the vegetation.

(3) Changes in the normal life of insects and spiders may indicate that someone has recently passed. Valuable clues are disturbed bees, ant holes uncovered by someone moving over them, or tom spider webs. Spiders often spin webs across open areas, trails, or roads to trap flying insects. If the tracked person does not avoid these webs, he leaves an indicator to an observant sniper. (4) If the person being followed tries to use a stream to cover his trail, the sniper can still follow successfully. Algae and other water plants can be displaced by lost footing or by careless walking. Rocks can be displaced from their original position or overturned to indicate a lighter or darker color on the opposite side. The person entering or exiting a stream creates slide marks or footprints, or scuffs the bark on roots or sticks (C, Figure 8-4). Normally, a person or animal seeks the path of least resistance; therefore, when searching the stream for an indication of departures, snipers will find signs in open areas along the banks.

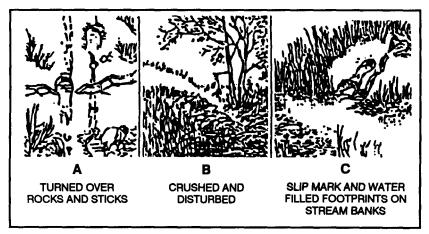


Figure 8-4. Other displacements.

8-2. STAINS

A stain occurs when any substance from one organism or article is smeared or deposited on something else. The best example of staining is blood from a profusely bleeding wound. Bloodstains often appear as spatters or drops and are not always on the ground; they also appear smeared on leaves or twigs of trees and bushes.

a. By studying bloodstains, the sniper can determine the wound's location.

(1) If the blood seems to be dripping steadily, it probably came from a wound on the trunk.

(2) If the blood appears to be slung toward the front, rear, or sides, the wound is probably in the extremity.

(3) Arterial wounds appear to pour blood at regular intervals as if poured from a pitcher. If the wound is veinous, the blood pours steadily.

(4) A lung wound deposits pink, bubbly, and frothy bloodstains.

(5) A bloodstain from a head wound appears heavy, wet, and slimy.

(6) Abdominal wounds often mix blood with digestive juices so the deposit has an odor and is light in color.

The sniper can also determine the seriousness of the wound and how far the wounded person can move unassisted. This proms may lead the sniper to enemy bodies or indicate where they have been carried.

b. Staining can also occur when muddy footgear is dragged over grass, stones, and shrubs. Thus, staining and displacement combine to indicate movement and direction. Crushed leaves may stain rocky ground that is too hard to show footprints. Roots, stones, and vines may be stained where leaves or berries are crushed by moving feet.

c. The sniper may have difficulty in determining the difference between staining and displacement since both terms can be applied to some indicators. For example, muddied water may indicate recent movement; displaced mud also stains the water. Muddy footgear can stain stones in streams, and algae can be displaced from stones in streams and can stain other stones or the bank. Muddy water collects in new footprints in swampy ground; however, the mud settles and the water clears with time. The sniper can use this information to indicate time; normally, the mud clears in about one hour, although time varies with the terrain.

8-3. WEATHER

Weather either aids or hinders the sniper. It also affects indicators in certain ways so that the sniper can determine their relative ages. However, wind, snow, rain, or sunlight can erase indicators entirely and hinder the sniper. The sniper should know how weather affects soil, vegetation, and other indicators in his area. He cannot determine the age of indicators until he understands the effects that weather has on trail signs.

a. By studying weather effects on indicators, the sniper can determine the age of the sign (for example, when bloodstains are fresh, they are bright red). Air and sunlight first change blood to a deep ruby-red color, then to a dark brown crust when the moisture evaporates. Scuff marks on trees or bushes darken with time; sap oozes, then hardens when it makes contact with the air.

b. Weather affects footprints (Figure 8-5). By carefully studying the weather process, the sniper can estimate the age of the print. If particles of soil are beginning to fall into the print, the sniper should become a stalker. If the edges of the print are dried and crusty, the prints are probably about one hour old. This varies with terrain and should be considered as a guide only.

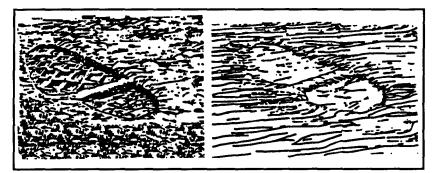


Figure 8-5. Weather effects on footprints.

c. A light rain may round the edges of the print. By remembering when the last rain occurred, the sniper can place the print into a time frame. A heavy rain may erase all signs.

d. Trails exiting streams may appear weathered by rain due to water running from clothing or equipment into the tracks. This is especially true if the party exits the stream single file. Then, each person deposits water into the tracks. The existence of a wet, weathered trail slowly fading into a dry trail indicates the trail is fresh.

e. Wind dries tracks and blows litter, sticks, or leaves into prints. By recalling wind activity, the sniper may estimate the age of the tracks. For example, the sniper may reason "the wind is calm at the present but blew hard about an hour ago. These tracks have litter in them, so they must be over an hour old." However, he must be sure that the litter was not crushed into them when the prints were made.

(1) Wind affects sounds and odors. If the wind is blowing toward the sniper, sounds and odors may be carried to him; conversely, if the wind is blowing *away* from the sniper, he must be extremely cautious since wind also carries sounds toward the enemy. The sniper can determine wind direction by dropping a handful of dust or dried grass from shoulder height. By pointing in the same direction the wind is blowing, the sniper can localize sounds by cupping his hands behind his ears and turning slowly. When sounds are loudest, the sniper is facing the origin.

(2) In calm weather (no wind), air currents that may be too light to detect can carry sounds to the sniper. Air cools in the evening and moves downhill toward the valleys. If the sniper is moving uphill late in the day or at night, air currents will probably be moving toward him if no other wind is blowing. As the morning sun warms the air in the valleys, it moves uphill. The sniper considers these factors when plotting patrol routes or other operations. If he keeps the wind in his face, sounds and odors will be carried to him from his objective or from the party being tracked.

(3) The sun should also be considered by the sniper. It is difficult to fire directly into the sun, but if the sniper has the sun at his back and the wind in his face, he has a slight advantage.

8-4. LITTER

A poorly trained or poorly disciplined unit moving over terrain may leave a trail of litter. Unmistakable signs of recent movement are gum or candy wrappers, food cans, cigarette butts, remains of fires, or human feces. Rain flattens or washes litter away and turns paper into pulp. Exposure to weather can cause food cans to rust at the opened edge; then, the rust moves toward the center. The sniper must consider weather conditions when estimating the age of litter. He can use the last rain or strong wind as the basis for a time frame.

8-5. CAMOUFLAGE

Camouflage applies to tracking when the followed party employs techniques to baffle or slow the sniper. For example, walking backward to leave confusing prints, brushing out trails, and moving over rocky ground or through streams.

8-6. IMMEDIATE-USE INTELLIGENCE

The sniper combines all indicators and interprets what he has seen to form a composite picture for on-the-spot intelligence. For example, indicators may show contact is imminent and require extreme stealth.

a. The sniper avoids reporting his interpretations as facts. He reports what he has seen rather than stating these things exist. There are many ways a sniper can interpret the sex and size of the party, the load, and the type of equipment. Timeframes can be determined by weathering effects on indicators.

b. Immediate-use intelligence is information about the enemy that can be used to gain surprise, to keep him off balance, or to keep him from escaping the area entirely. The commander may have many sources of intelligence reports, documents, or prisoners of war. These sources can be combined to form indicators of the enemy's last location, future plans, and destination.

c. Tracking, however, gives the commander definite information on which to act immediately. For example, a unit may report there are no men of military age in a village. This information is of value only if it is combined with other information to make a composite enemy picture in the area. Therefore, a sniper who interprets trail signs and reports that he is 30 minutes behind a known enemy unit, moving north, and located at a specific location, gives the commander information on which he can act at once.

8-7. DOG/HANDLER TRACKING TEAMS

Dog/handler tracking teams are a threat to the sniper team. While small and lightly armed, they can increase the area that a rear area security unit can search. Due to the dog/handler tracking team's effectiveness and its lack of firepower, a sniper team may be tempted to destroy such an "easy" target. Whether a sniper should fight or run depends on the situation and the sniper. Eliminating or injuring the dog/handler tracking team only confirms that there is a hostile team operating in the area.

a. When looking for sniper teams, trackers use wood line sweeps and area searches. A wood line sweep consists of walking the dog upwind of a suspected wood line or brush line. If the wind is blowing through the woods and out of the wood line, trackers move 50 to 100 meters inside a wooded area to sweep the wood's edge. Since wood line sweeps tend to be less specific, trackers perform them faster. An area search is used when a team's location is specific such as a small wooded area or block of houses. The search area is cordoned off, if possible, and the dog/handler tracking teams are brought on line, about 25 to 150 meters apart, depending on terrain and visibility. The handler trackers then advance, each moving their dogs through a specific corridor. The handler tracker controls the dog entirely with voice commands and gestures. He remains undercover, directing the dog in a search pattern or to a likely target area. The search line moves forward with each dog dashing back and forth in assigned sectors.

b. While dog/handler tracking teams area potent threat, there are counters available to the sniper team. The beat defenses are basic infantry techniques: good camouflage and light, noise, and trash discipline. Dogs find a sniper team either by detecting a trail or by a point source such as human waste odors at the hide site. It is critical to try to obscure or limit trails around the hide, especially along the wood line or area closest to the team's target area. Surveillance targets are usually the major axis of advance. "Trolling the wood lines" along likely looking roads or intersections is a favorite tactic of dog/handler tracking teams. When moving into a target area, the sniper team should take the following countermeasures:

(1) Řemain as faraway from the target area as the situation allows.

(2) Never establish a position at the edge of cover and concealment nearest the target area

(3) Reduce the track. Try to approach the position area on hard, dry ground or along a stream or river.

(4) Urinate in a hole and cover it up. Never urinate in the same spot.

(5) Bury fecal matter deep. If the duration of the mission permits, use MRE bags sealed with tape and take it with you.

(6) Never smoke.

(7) Carry all trash until it can be buried elsewhere.

(8) Surround the hide site with a 3-cm to 5-cm band of motor oil to mask odor; although less effective but easier to carry, garlic may be used. A dead animal can also be used to mask smell, although it may attract unwanted canine attention.

c. If a dog/handler tracking team moves into the area, the sniper team can employ several actions but should first check wind direction and speed. If the sniper team is downwind of the estimated search area, the chances are minimal that the team's point smells will probably be detected. If upwind of the search area, the sniper team should attempt to move downwind. Terrain and visibility dictate whether the sniper team can move without being detected visually by the handlers of the tracking team. Remember, sweeps are not always conducted just outside of a wood line. Wind direction determines whether the sweep will be parallel to the outside or 50 to 100 meters inside the wood line.

(1) The sniper team has options if caught inside the search area of a line search. The handlers rely on radio communications and often do not have visual contact with each other. If the sniper team has been generally localized through enemy radio detection-finding equipment, the search net will still be loose during the initial sweep. A sniper team has a small chance of hiding and escaping detection in deep brush or in woodpiles. Larger groups will almost certainly be found. Yet, the sniper team may have the opportunity to eliminate the handler and to escape the search net.

(2) The handler hides behind cover with the dog. He searches for movement and then sends the dog out in a straight line toward the front. Usually, when the dog has moved about 50 to 75 meters, the handler calls the dog back. The handier then moves slowly forward and always from covered position to covered position. Commands are by voice and gesture with a backup whistle to signal the dog to return. If a handler is eliminated or badly injured after he has released the dog, but before he has recalled it, the dog continues to randomly search out and away from the handler. The dog usually returns to another handler or to his former handler's last position within several minutes. This creates a gap from 25 to 150 meters wide in the search pattern. Response times by the other searchers tend to be fast. Given the high degree of radio communication, the injured handler will probably be quickly missed from the radio net. Killing the dog before the handler will probably delay discovery only by moments. Dogs are so reliable that if the dog does not return immediately, the handler knows something is wrong.

(3) If the sniper does not have a firearm, one dog can be dealt with relatively easy if a knife or large club is available. The sniper must keep low and strike upward using the wrist, never overhand. Dogs are quick and will try to strike the groin or legs. Most attack dogs are trained to go for the groin or throat. If alone and faced with two or more dogs, the sniper should avoid the situation.

Section II COUNTERTRACKING

If an enemy tracker finds the tracks of two men, this may indicate that a highly trained team may be operating in the area. However, a knowledge of countertracking enables the sniper team to survive by remaining undetected.

8-8. EVASION

Evasion of the tracker or pursuit team is a difficult task that requires the use of immediate-action drills to counter the threat. A sniper team skilled in tracking techniques can successfully employ deception drills to lessen signs that the enemy can use against them. However, it is very difficult for a person, especially a group, to move across any area without leaving signs noticeable to the trained eye.

8-9. CAMOUFLAGE

The sniper team may use the most used and the least used routes to cover its movement. It also loses travel time when trying to camouflage the trail.

a. **Most Used Routes.** Movement on lightly traveled sandy or soft trails is easily tracked. However, a sniper may try to confuse the tracker by moving on hard-surfaced, often-traveled roads or by merging with civilians. These routes should be carefully examined; if a well-defined approach leads to the enemy, it will probably be mined, ambushed, or covered by snipers.

b. Least Used Routes. Least used routes avoid all man-made trails or roads and confuse the tracker. These routes are normally magnetic azimuths between two points. However, the tracker can use the proper concepts to follow the sniper team if he is experienced and persistent.

c. **Reduction of Trail Signs.** A sniper who tries to hide his trail moves at reduced speed; therefore, the experienced tracker gains time. Common methods to reduce trail signs areas follows:

(1) Wrap footgear with rags or wear soft-soled sneakers, which make footprints rounded and leas distinctive.

(2) Brush out the trail. This is rarely done without leaving signs.

(3) Change into footgear with a different tread immediately following a deceptive maneuver.

(4) Walk on hard or rocky ground.

8-10. DECEPTION TECHNIQUES

Evading a skilled and persistent enemy tracker requires skillfully executed maneuvers to deceive the tracker and to cause him to lose the trail. An enemy tracker cannot be outrun by a sniper team that is carrying equipment, because he travels light and is escorted by enemy forces designed for pursuit. The size of the pursuing force dictates the sniper team's chances of success in employing ambush-type maneuvers. Sniper teams use some of the following techniques in immediate-action drills and deception drills.

a. **Backward Walking.** One of the basic techniques used is that of walking backward (Figure 8-6) in tracks already made, and then stepping off the trail onto terrain or objects that leave little sign. Skillful use of this maneuver causes the tracker to look in the wrong direction once he has lost the trail.

b. **Large Tree** A good deception tactic is to change directions at large trees (Figure 8-7). To do this, the sniper moves in any given direction and walks past a large tree (12 inches wide or larger) from 5 to 10 paces. He carefully walks backward to the forward side of the tree and makes a 90-degree change in the direction of travel, passing the tree on its forward side. This technique uses the tree as a screen to hide the new trail from the pursuing tracker.

NOTE: By studying signs, a tracker may determine if an attempt is being made to confuse him. If the sniper team loses the tracker by walking backward, footprints will be deepened at the toe and soil will be scuffed or dragged in the direction of movement. By following carefully the tracker can normally find a turnaround point.

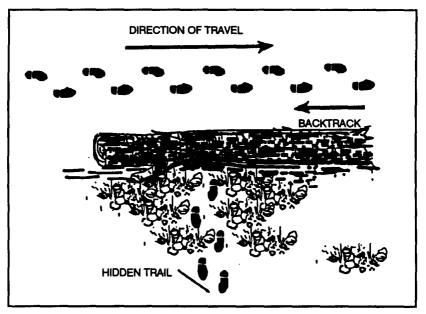


Figure 8-6. Walking backward.

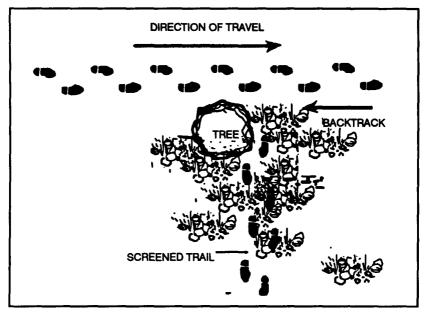


Figure 8-7. Large tree.

c. **Cut the Corner.** Cut-the-corner technique is used when approaching a known road or trail. About 100 meters from the road, the sniper team changes its direction of movement, either 45 degrees left or right. Once the road is reached, the sniper team leaves a visible trail in the same direction of the deception for a short distance on the road. The tracker should believe that the sniper team "cut the corner" to save time. The sniper team backtracks on the trail to the point where it entered the road, and then it carefully moves on the road without leaving a good trail. Once the desired distance is achieved, the sniper team changes direction and continues movement (Figure 8-8).

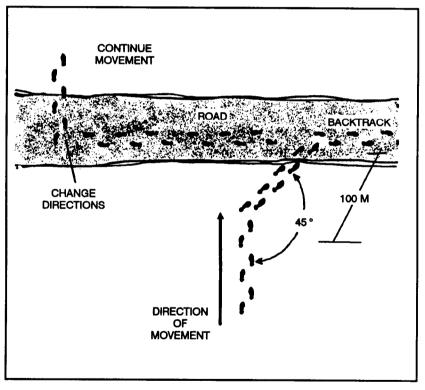


Figure 8-8. Cut the corner.

d. **Slip the Stream.** The sniper team uses slip-the-stream technique when approaching a known stream. The sniper team executes this method the same as the cut the comer technique. The sniper team establishes the 45-degree deception maneuver upstream, then enters

the stream. The sniper team moves upstream to prevent floating debris and silt from compromising its direction of travel, and the sniper team establishes false trails upstream if time permits. Then, it moves downstream to escape since creeks and streams gain tributaries that offer more escape alternatives (Figure 8-9).

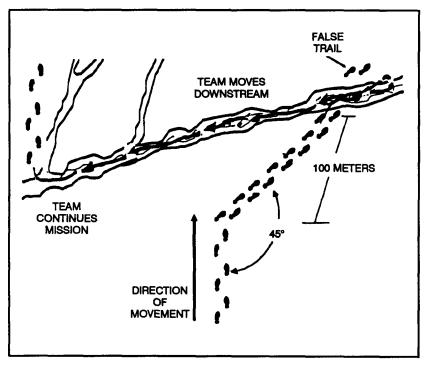


Figure 8-9. Slip the stream.

e. Arctic Circle. The sniper team uses the arctic circle technique in snow-covered terrain to escape pursuers or to hide a patrol base. It establishes a trail in a circle (Figure 8-10, page 8-16) as large as possible. The trail that starts on a road and returns to the same start point is effective. At some point along the circular trail, the sniper team removes snowshoes (if used) and carefully steps off the trail, leaving one set of tracks. The large tree maneuver can be used to screen the trail. From the hide position, the sniper team returns over the same steps and carefully fills them with snow one at a time. This technique is especially effective if it is snowing.

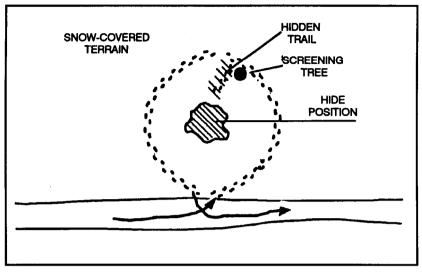


Figure 8-10. Arctic circle.

f. **Fishhook**. The sniper team uses the fishhook technique to double back (Figure 8-11) on its own trail in an overwatch position. The sniper team can observe the back trail for trackers or ambush pursuers. If the pursuing force is too large to be destroyed, the sniper team strives to eliminate the tracker. The sniper team uses the hit-and-run tactics, then moves to another ambush position. The terrain must be used to advantage.

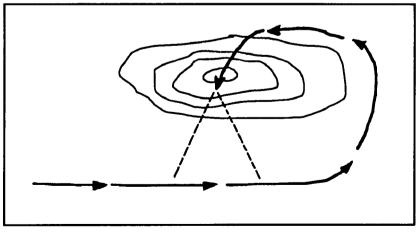


Figure 8-11. Fishhook.