

MANTRACKING



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Considerations for Tracking Training

Historical Background:

Traditionally, human tracking has been learned by an apprenticeship to a journeyman tracker. By working with an accomplished tracker one may gather the knowledge, practice the skill, and develop the ability to follow the physical evidence left by a specific person. In modern societies, this has become very difficult. By the late 1960's the United States Border Patrol had a developed program of working agents, 'sign cutters', who spent their shifts just following 'sign lines' left by illegal aliens, to apprehend them.

Albert Taylor was the Station Chief at the Chula Vista Station when he assisted the San Diego Search and Rescue Unit find a lost child. Recognizing that the tracking skill could improve their chances of finding lost persons the San Diego Mountain Search and Rescue Unit formally requested the Border Patrol to teach them tracking. At the time, there was no formal training program and new Border Patrol agents learned the skill from accomplished 'sign cutters' as apprentices. Ab Taylor was overwhelmed by volunteer search and rescue members wanting to work with Border Patrol trackers. He sent agents J.D. Burns and Joel Hardin, both 'sign cutters', to San Diego to teach a tracking class. Their effort developed into a program that could be documented and the first Border Patrol tracking class was born. As the program continued, Ab Taylor coined the 'step-by-step' phrase. Agent Jack Kearney, a 'sign cutter', gave the class some structure, format, and wrote a book, Tracking: A Blueprint for Learning How, Pathways Press, 1978. SAR volunteers came up with the idea of the tracking stick to help focus one's eyes on the most probable area of the next footfall.

Other tracker training programs have also evolved, usually by instructors, often with military backgrounds, who have learned the skills from working with an indigenous culture group somewhere in the world.

Human tracking can be performed on any land terrain feature, in any conditions, limited only by the tracker's ability. Following is a formal outline of topics to be mastered that will assist anyone to begin to learn how to track using best practices.

Specific Knowledge and Skills for Tracking:

1. Definitions of skill specific terms a tracker needs to know:
 - a. Track, n – the physical evidence of a person's footfall;
 - b. Track, v or Tracking, v – the systematic and methodical identification of physical evidence which thereby allows one to follow a specific person or persons;

- c. Tracker, n – a person with specialized knowledge and training who can locate, identify, interpret, and systematically follow the evidence of passage of a specific person;
 - d. Sign, n – the physical evidence of the presence or passage of a person or persons;
 - e. Prime, adj – sign or area: ...sign or evidence that has the highest probability of being made by the specific person being tracked; ...area that has the highest probability of containing evidence from the specific person being tracked;
 - f. Sign cutting, v – the systematic and regimented procedure used to locate and identify the physical evidence of the passage of a specific person;
 - g. 'Step by step' method, n – a process of identifying contiguous tracks, sign, or both in succession, and acknowledging each one, as first described by Albert Taylor, United States Border Patrol;
 - h. Step interval, n – normal walking distance between footfalls measured between a toe dig and a heel strike (normally 14 to 16 inches)
2. A tracker shall explain the significance, as it relates to the mission, of the following:
 - a. How track evidence supports the initial information regarding the search subject;
 - b. How establishing the direction of travel affects search efforts;
 - c. How trackers can limit a search area.
 3. A tracker shall demonstrate the ability to identify and describe a track by:
 - a. Measuring the overall length, width of the sole, width of the heel, length of the heel, or if no heel is present, some other visible feature;
 - b. Determining the type, shape, and condition of the footgear being worn;
 - c. Drawing a sketch of a track including all unique marks and designs.
 4. A tracker shall demonstrate the ability to set up a tracking stick by:
 - a. Placing the point of a stick on the heel strike of the next print, mark the stick over the existing toe dig, and place a second mark over the existing heel strike.
 - b. The distance between the point of the stick at the next heel strike and existing toe dig is referred to as the step interval.
 5. A tracker shall demonstrate the ability to use a tracking stick to find the next track when using the 'Step-by-Step' method as follows:
 - a. Place the observed track between the markings;
 - b. Pivot the point of the stick left and right in a sixty-degree arc;
 - c. Focus your eyes in the prime sign area, at the end of the stick, for the next track;
 - d. Locate the track evidence;

- e. Mark the track by placing an indicator or marker behind the heel strike;
 - f. Move on to the next track.
 - g. Show the trend of the direction of travel by occasionally placing visible indicators above ground level.
6. A tracker shall demonstrate the ability to utilize the sun or another light source to reveal sign using following:
- a. A mirror reflection;
 - b. A handheld light that provides illumination, but does not contribute to eye fatigue.
7. A tracker shall demonstrate the ability to recognize, identify, and describe the following types of sign under actual conditions and be able to articulate how the sign is related to the track:
- a. Bruising – footfall damage to vegetation, usually indicated by color variation contrasting with surrounding areas of the same vegetation;
 - b. Disturbance – any disturbance of the natural state of the ground surface, including leaf litter, loose debris, duff, dislodged or embedded objects probably caused by footfall movement;
 - c. Flagging – vegetation turned in the direction of travel;
 - d. Flattening – a part of the ground compressed in a manner consistent with that of a human footfall and the flattened area may appear a different color due to surface moisture;
 - e. Scuff or scrape – a mark caused by footfalls contacting firm ground indicating movement in a determinable direction of travel;
 - f. Shine – light reflected from within the human footfall damage;
 - g. Transfer – any substance inadvertently collected by footgear in a footfall and deposited by succeeding footfalls;
 - h. Unnatural marks – straight lines, curves, parallel lines, or marks not related to the natural world;
 - i. Weeping – the natural exudation of vegetation fluids resulting from footfall damage.
8. A tracker shall demonstrate the ability to observe and explain simple sign aging characteristics and estimate the time elapsed since the sign was left:
- a. The tracker shall include factors of vegetation damage, rain, sun, and other natural effects.
9. A tracker shall demonstrate the ability to recognize and explain footprint characteristics related to the manner and movements of the specific sign maker.
10. A tracker shall demonstrate the ability to function in any position in a recommended three-person tracking team:

- a. Point person – using a tracking stick to follow track evidence;
 - b. Right or Left flanker – one step behind the point person, each of whom assists the point person from a different perspective and watches for approaching sign from either side;
 - c. A tracker shall identify the rationale for frequent rotation among the positions, including issues of back strain, eye strain, and focused attention cognitive fatigue.
11. A tracker shall understand and explain the concept of 'sign cutting' including the following:
- a. How natural and man-made barriers can help locate human sign;
 - b. How multiple tracking teams can be used to advance a specific line of sign in an organized and regimented manner;
 - c. How a tracker can advance to another location to detect sign or tracks based on the probable movements of the search subject.
12. A tracker shall be able to complete a written report that will document the tracker's efforts and provide other trackers with a summary of the relevant information. An example for documentation is offered on a following page.

Evaluation:

After a tracker can document several hundred hours of practice one should seek out a third-party evaluation of their knowledge, skills, and abilities. Knowledge may be determined by a written or oral test, and ability by performance in scenarios for various skills. Preferably any evaluation should be done by an independent third party.

Equipment Recommended for Tracking:

- 1. Clothing appropriate to conditions;
- 2. A broad brimmed hat for protection, provide shade, and to reduce glare;
- 3. Tracking stick, about 42", with two rubber bands or "O" rings;
- 4. Measuring device, as a small tape measure that locks open;
- 5. Small notebook as rain proof style;
- 6. Tracking cards, examples are offered on a following page;
- 7. Writing instrument;
- 8. Flagging material, preferably bio-degradable, or scraps of toilet paper;
- 9. Pins, powder, or other track identification material;
- 10. Hand held light that provides illumination, but does not contribute to eye fatigue;
- 11. Mirror, as 3" by 5" recommended;
- 12. Compass, to establish a direction of travel trend.

Documentation:

This documentation outline presents thoughts that become a sentence in your narrative report. As each reference line is addressed, a statement is written, and the thought line is deleted. This outline can be placed in a Microsoft Word format to facilitate its completion. This report is primarily for a tracker to use to improve the skill set, communicate with other trackers, and document the event.

1. Heading Section:

- a. Report writer's name, address, telephone number, and email address;
- b. Date and time report is written;
- c. Incident, mission name, or reference number;
- d. Date and time of incident;
- e. Incident subject name or names.

2. Preliminary Information Section:

- a. Who made the call that initiated your response, including name, position, and contact telephone number;
- b. Brief narrative of information that generated the call out including dates, places, and times;
- c. Description of the incident given;
- d. Where and when you are requested to meet, and with whom;
- c. Why they are requesting your assistance, and your objective as a tracker resource;
- d. Any other preliminary contributing information.

3. Incident Arrival Section:

- a. Time, date, and location of your arrival;
- b. To whom you reported to upon arrival;
- c. Confirm preliminary information for call out;
- d. Additional information, provided at the scene, and by whom, to insure you are fully informed and understand all available facts of the incident;
- e. Witness names and/or statements;
- f. Weather, soil types, and other factors affecting tracking;

- g. Your objectives;
- h. Description of all sign evidence relative to this incident.

4 Narrative Description of Actions Taken and Decisions Made:

- a. Actions taken should correspond to previously included information;
- b. List tracking definitions;
- c. Provide complete description of sign evidence, using terms and references related to tracking factors;
- d. Does physical evidence found support information provided;
- e. Was PLS and LKP located;
- f. Direction of travel, if determined, including explanation of determining factors;
- g. Times, places, descriptions, who saw, who did, where it happened, why, conclusions based on what you and fellow team members saw and did;
- h. List actions, locations, team member or assignment changes;
- i. Descriptive narrative should be a culmination of team member personal notes;
- j. Writer's inclusive narrative description should agree with all contributing team members, but not compromised if they differ.

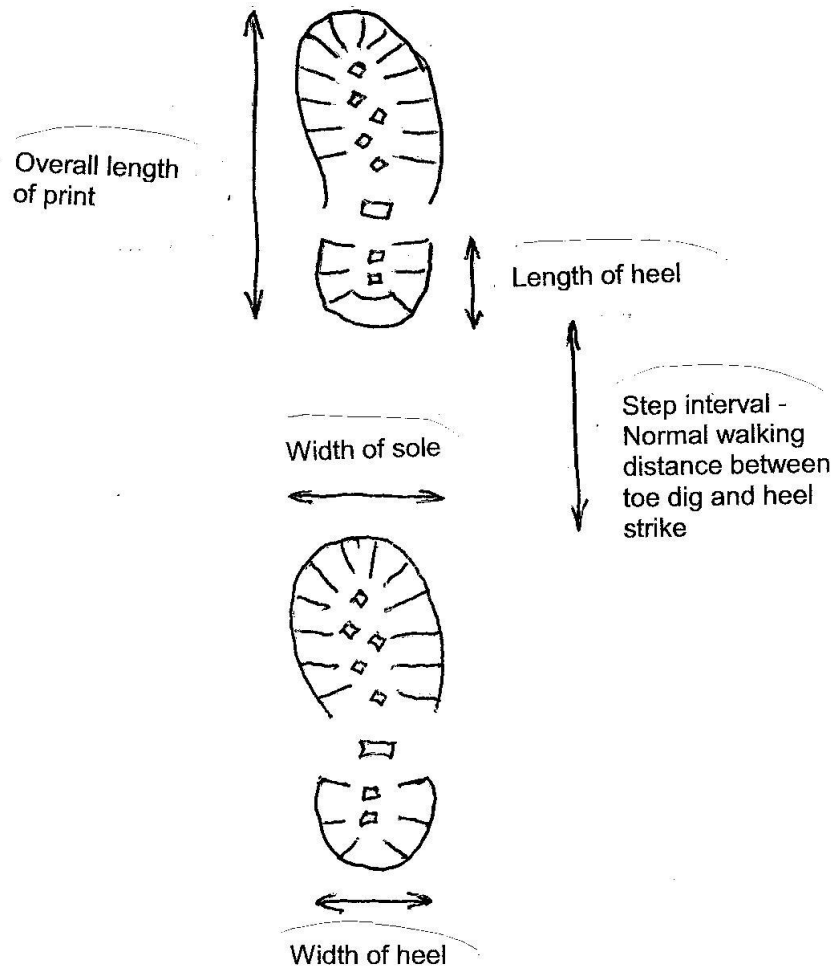
5. Summary Section:

- a. Include a brief summation of actions taken and conclusions reached;
- b. Did the evidence support the information as provided;
- c. Distribution list for report;
- d. Sign and date.

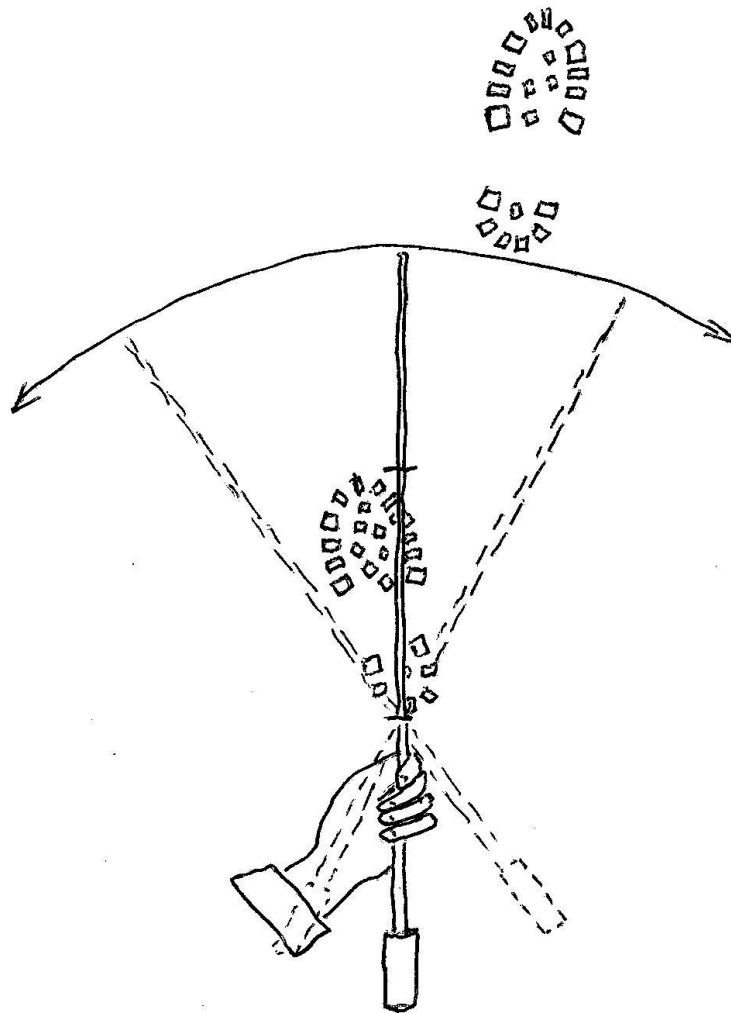
6. Map and Graphics:

- a. Attach footprint card or cards, maps, photos, and drawings described in report.

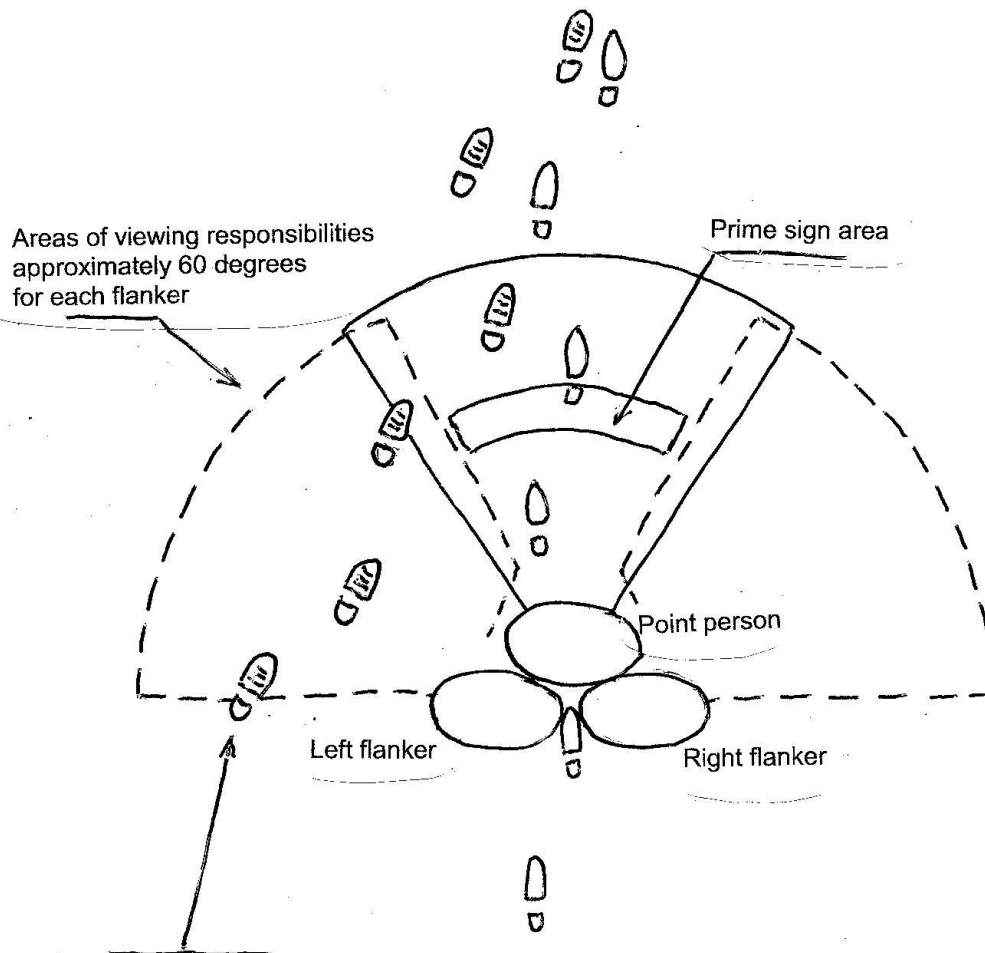
Measuring a Track:



Using A Tracking Stick:



Operation of a Three Person Tracking Team:



The flankers are in a position to assist the point person from a different perspective and to see any intersecting or contaminating sign which may enter the prime sign area from the side

Samples of Completed Tracking Cards:

TIME: 1041 *LOCATION: POWER LINE *SUBJECT HEADING: EAST *BASIC TYPE: BOOT *PATTERN: LUG DIMENSIONS - OVERALL: *L 13½ W 4¼ HEEL: *L 4½ W 3½ STRIDE (TOE TO HEEL): GROUND: FOREST REMARKS: DRY *REPORT TO BASE	TIME: 0829 5-24-91 *LOCATION: RACCOON *SUBJECT HEADING: SW *BASIC TYPE: BOOT *PATTERN: LUG DIMENSIONS - OVERALL: *L 13 W 4½ HEEL: *L 4 W 3¾ STRIDE (TOE TO HEEL): GROUND: GRASS/WOODS REMARKS: *REPORT TO BASE
*LOCATION: HORSE CAMP TIME: 1422 DATE: 4-20-91 *SUBJECT HEADING: NORTH *BASIC TYPE: BOOT *PATTERN: LUG DIMENSIONS - OVERALL: *L 13 W 4½ HEEL: *L 3½ W 3¼ STRIDE (TOE TO HEEL): GROUND SURFACE: GRASSLAND REMARKS: *REPORT TO BASE	TIME: 1300 DATE: 9-20 *LOCATION: SPARKS, NV *SUBJECT HEADING: EAST *BASIC TYPE: BOOT *PATTERN: DIMENSIONS - OVERALL: *L 11 W 3¼ HEEL: *L 3½ W 3½ STRIDE (TOE TO HEEL): GROUND SURFACE: DESERT REMARKS: *REPORT TO BASE

Completed tracking cards courtesy of author's case files

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