

Unit 1
Welcome Opening
Missing Ginseng Hunter

Objective: Demonstrate that even without any statistical profiles or subject profiles, good investigation still allows developing a good plan.

Instructor's notes: Participants should be told that the purpose of the class is to learn about subject categories and the relevant statistics that help better define probable locations. However, statistics and profiles are simply tools. In some cases the subject may not clearly fit into an existing subject category. This map scenario illustrates a case where no subject category existed at the time for missing ginseng hunters. Therefore, to develop likely areas to look good investigation is required.

Participants should be given initial scenario information and then told if they wish additional information they need to ask. If they wish to search a certain feature, they need to specify where they want to look. The instructor should provide an appropriate response. Misleading information should not be given. The instructor may choose to conduct the map problem with the instructor leading the discussion with the map displayed as a PowerPoint slide, in groups (requires passing out maps), or with participants working individually.

The subject is a 76-year-old male. He has a known heart condition and he is on high-blood pressure and high-cholesterol medication. Otherwise he is in good physical shape. He is mentally sharp and has no cognitive problems. The morning of being last seen he complained of chest pains at church. He has hunted for ginseng his entire life. As typical for most ginseng hunters, he always goes out alone and never tells anyone where he gathers. He knows the area well and spends most of his time off-trail. Friends report he has mentioned going into the national park before. This is not uncommon for the area.

The wild ginseng root from Appalachia is highly valued in Asian market and a gatherer may receive approximately \$1000 per dry pound of the root. Therefore, it is typically only found deep in the forest. It is often over-harvested and many "hunters" will trespass onto others property. It is illegal to gather ginseng from the national park (red boundary line) but legal from the Rapidan Wildlife Management Area. Ginseng is not heat-tolerant, so in southern states it is usually found only in mountainous areas. It grows in well-shaded areas (north- or east-facing slopes) of moist hardwood forests, especially where tulip poplar, maple, beech, hickory, walnut, and, sometimes, oak trees are present. It prefers moderate slopes. The more mature the forest (with large hardwood trees and a full canopy that shades out most shrubs, briars, etc.) the better for the plant. Ginseng often grows where you also find trillium, cohos, jack-in-the-pulpit, wild yam, goldenseal, and Solomon's seal.

The subject is carrying a small day-pack with a cloth to wrap the roots in, a gardening trowel, a water bottle, two breakfast bars, and a 38 caliber handgun with six rounds. He is

dressed appropriately for the weather with tan pants, boots, wool shirt, black hat, and green coat.

Scenario: The subject is a 76-year-old male ginseng hunter. The wild ginseng root can be sold for around \$1000USD per dry pound. He was last seen by his wife Sunday right after lunch (13:00). He told her he was going ginseng hunting and would be back by dinner time (18:00). He did not return for dinner. After two-hours she reported him missing. His vehicle was soon located at the spot marked on the map as the IPP. It was parked on the side of the road across the street from a trailhead that leads to the north. The car is in working order. It is mid September, no rain in the forecast, temperatures in the mountains get to lows of mid 40F (7C) with daytime highs of 72F.

Clues:

- 1) **Print.** At a good track trap right on the trail, a boot print was found matching his size and type of boot. (38.4288823 N, 78.3954599 W)(WGS84)
- 2) **Find Location:** He was found at the point indicated on the map, by a sweep team sent to investigate a possible cave that was known to local residents. He was found deceased sitting against a tree. He had fired three shots from his firearm. (38.4393743 N, 78.4126873 W)(WGS84)

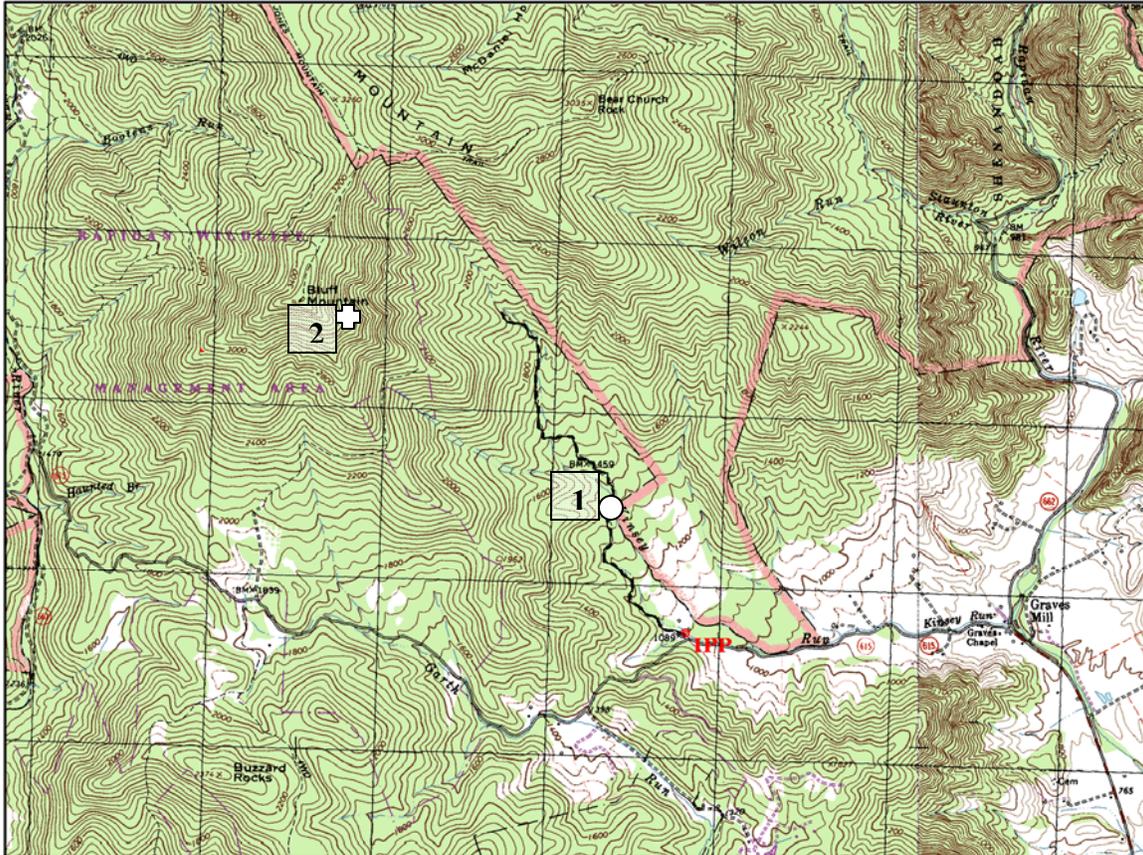
What actually happened: The search required five days. The find location was identified as an area of high probability early in the search but search efforts were hampered by steep terrain and the thick understory of mountain laurels and rhododendrons. Eventually 200 active duty marines were brought in and over 150 SAR professionals responded on a weekend. This allowed a mixed team of park rangers, SAR professionals, and local emergent volunteers to be tasked high enough on Bluff mountain. Local emergent volunteers were somewhat problematic since when they found ginseng they often harvested it during the search effort. Making dug up areas a less valuable clue.

Learning points: The keys to identifying the most likely search area were all based upon investigation. With a departure of 13:00 and expected return of 17:30-18:00, this only left 4.5 – 5 hours away from home. Subtract the 15 minutes of driving time one way and this leaves 4 – 4.5 hours to actually be out in the woods. Most gathers will spend at least two hours doing the activity, so that leaves 2-2.5 hours for movement to the site. This would limit the out range to about 2 miles. With the car parked at the trailhead (some discussion did occur at the time about the possibility he was trying to trick his friends about his location) it was felt he would start out by moving north up the trail. This was somewhat confirmed by the one print. Therefore, it was felt he would be located from 10 – 2 o'clock with north representing 12 o'clock. The eastern slopes did have a higher priority based upon local knowledge of ginseng habitat.

The identification of the medical scenario meant it was felt he would be found along his intended route of travel and not wandering outside the immediate area. Knowing the habitat of ginseng was also important from a planning perspective.

Topographic Map: Fletcher and Madison, Virginia USA. NAD27 UTM lines are hard printed on the USGS quadrangles.

IPP Coordinate: 38.4225032 N, 78.3903137 W (WGS84)



Resources:

- Powerpoint slides
 - Scenario
 - IPP close up
 - Scenario map
 - Photograph of ginseng
 - Illustration of high probability area
 - Find map
- 1ginsengLTR.pdf – PDF of letter size map
- 1ginsengLTR.png – PNG graphic format of map
- 1ginsengTbl.pdf – PDF of tabloid sized map
- For Sale: Letter sized map, color print
- For Sale: Letter sized map, color print, laminated
- For Sale: Tabloid sized map, color print
- For Sale: Tabloid sized map, color print, laminated

