



Thoughts on Rapid Assessment Team Techniques

Following the Mount Evans inventories and after entering a bunch of the data collected, I have a few observations to offer and, if worthwhile, pass on to the local folks that we'll have working with us.

1. Vehicles

Working in pairs seemed a safe and efficient way for doing inventories. The first week we used a single vehicle for both teams. The second week, each team staged a vehicle at one trailhead, then began at another trailhead - walking through to the staged vehicle.

Using a single vehicle for both teams is workable, but coordination can be difficult. Our communication between the teams was worse than expected (FS handhelds) and could not be established until noon on the last day.

Staging a vehicle, then walking through to it, was not particularly efficient in terms of vehicles, but provided each team with the autonomy to modify their own plans as needed. This is particularly helpful, where one team had to leave much earlier than the other at the end of the week in order to provide time to return to their home units. Pairing folks with similar travel times improves efficiency.

2. Communications

Spot units were relied on for check in and emergency contact, rather than rely on the FS radio system. Each team carried one SPOT. The first week, each team carried one FS handheld, but communication between teams was poor. Our expectation of being able to hit the repeater was not borne out in the field. On the second week of inventory, the teams did not expect to be able to hit any repeaters.

FRS radios were available to the teams for short-range communication, but were not used the first week by either of the pairs. I wasn't in on the second week's inventories and I'm unsure whether they were used or, if they were used, what the results were.

3. Inventories and photos

Inventories went well on the whole. There was some variation in technique between team members, but it was generally insignificant.

Campsite numbers are likely to be reassigned by the manager after submission, so the numbers assigned in the field don't really matter as long as they're unique. For simplicity in the field, working in pairs, I'd recommend one person use odd numbers beginning with 001, and the other use even numbers beginning with 002, then number incrementally throughout the trip, regardless of changes in trail numbers (165-040-015, 165-040-017, 165-043-019, 165-043-021, etc). Most of us used some variation of this.

After entering campsite data into spreadsheets/GIS, there were a couple things that were done by some members of the team that I might recommend for future use by all team members.

First, most folks wrote the waypoint name from the GPS unit on the whiteboard in the photograph and/or on the inventory sheet along with the UTM coordinates. For example, Carol named her campsite waypoints on the GPS with an abbreviation for the trail or area, and the number (i.e. LOST126 for site 126 on the Lost Creek Trail) and wrote it on the form. This was very helpful when I downloaded from the GPS units directly into GIS. Coordinates on the form can be matched to the coordinates of the waypoint, but matching the waypoint name is much easier. If team members do their own downloading into a Garmin GDB file or a Topo! TPO file for submission to the manager, the waypoint names will be retained.

Second, some folks took a photo of the inventory sheet itself rather than using a whiteboard for photographic campsite identifiers. Nathan had done this previously in the Weminuche. I see a lot of advantages to using this technique:

Cuts out the weight of carrying the board and markers.

Doesn't have the potential drawback of sunlight bouncing off the whiteboard or the site numbers being washed out. The sheet can be photographed for best readability.

Provides a more direct tie between the campsite and the inventory. Even if a number gets duplicated (which happened 2-3 times), the image can be positively tied to the paper form.

Although many of the photos of the inventory form used as the photographic campsite identifiers did not show the entire inventory form for the site, I would recommend that this be done, providing a full digital backup to the paper copy. All the cameras being used have high enough resolution for this. Worst case, if the photo is blurred to badly to be readable, it provides a marker defining the next campsite and the form can be re-photographed and renamed to replace the bad photo.

This technique does mean determining and writing down the direction of your initial campsite photo before taking the photo, since the photos will be taken after completing the form. Please record the direction/azimuth of your first photo only. Try to tie subsequent photos of the campsite to features in that initial photo, if possible.

4. Data transfer

I think it's important to establish how the hosting unit wants to get the data from the team. If they want to download it from the GPS units and cameras before you go, leave time for this. If they want a file of GPS tracks and waypoints, find out what format is wanted (.gdb, .tpo, shapefiles, etc) and be sure you can supply it. If you can't supply the format desired, it should be downloaded by the hosting unit and you need to allow time for this. Although the coordinates are on the forms, I recommend downloading site waypoints from a GPS unit as a quality control measure. One incorrect digit can throw a site location way off.

Summary

Ideally, each team should have a vehicle waiting at the end of the tour.

Utilize SPOT units for reliable check in and emergency use. Contacts must be established and programmed in prior to going to the field.

Work in pairs and assign campsite numbers using odd for one person, even for the other.

Write the waypoint number you use on the inventory form.

Consider taking a photo of the inventory form for photographic campsite identifiers rather than using a whiteboard.

Know what data the hosting unit wants and how they want it. Allow time to get them what they need.