Tools & Tips for Fieldtrips

by C.R. Munson

When planning to go on fieldtrips often the question comes up, what do I bring? This can vary depending on the site, material to be collected, and weather conditions. So here are some tools and pointers for the new prospector.



Must Have Tools

Gloves

These should be rugged yet thin enough to feel through the dirt. I like garden gloves for this purpose.

Estwing Rock Hammer or a similar substitute.

This is a pick on one end and a hammer on the other. Used where you need to free rock from clay or material or to crack material with the hammer. With experience you can hear the ring of fine agate when struck as opposed to a dull thud. I have found that a brick masons hammer works really well as

the pick end is wider and moves more clay or dirt and is more affordable. Larger picks are available that will speed up the digging.

Containers

Depending on your appetite for material this will vary. What I like the best is a shoulder satchel of some rugged material the best being leather. It will free your hands as you collect and it can periodically be emptied. I don't know how many time I have found a choice specimen and lost it as I moved about because I didn't have a secure carrying bag. Also start gathering up 5 gallon

pails with handles. These are my all around favorite. Find a friendly neighbor with a pool and ask them to save the chlorine pails. As your collecting expands you can't have too many. You can drill holes in the bottom and use them as a rough sieve around streams. If you really get fancy you can glue in a bottom of clear plexi and use it to view the bottom of shallow streams. They also double to carry your bigger tools and can be stacked and bunged to a dolly in places like Graves Mt. where you have a quarter mile hike to collecting areas.

3-5 Lb Crack Hammer and some Chisels

Use these tools for breaking larger rocks or possibly fracturing off selected areas with the chisels. Many times you will find a large boulder with material you want. Get one of the round pointed tapered chisels for starting a crack and a standard wedge chisels to split. Preferably 2 of each if expecting this situation. Do not use nailing hammers as the temper is not safe for hitting chisels and rocks. Don't neglect to protect your eyes.

Safety Glasses or Face Shield

Any time you hit a rock be prepared for flying shards. Remember most of the nice material, quartz, agate and jaspers have similar characteristics to glass. You wouldn't be breaking up glass without some protection!

Shovels & Digging Tools

I like a special small shovel with the yoke handle as it stores easily and will fit in pail. The military folding shovels are also nice. These are great for creek bottoms when sieving and pulling looser material from walls. Since they are compact you will be able to pack them into remote areas. Stout trowels work great as well as the small hand rakes used in tilling your garden soil. These are used a lot when working tailing piles and help free up small material packed hard in traveled areas.

Optional Tools:

Large Sledge Hammer for heavy duty cracking. Don't attempt this unless you can handle it. Often times a well placed blow will crack a 50 lb. rock into several manageable samples.

Long Handled Shovels for extra reach or deep digging where a lot of dirt needs to be moved.

Potato Fork: Stiff pronged rake with long handle to reach and drag rocks from creeks or walls.

Sieves: I built some out of wood and hardware wire of different sizes. Essential for washing muddy creek material when searching for garnets, sapphires, rubies etc. Also use to dry sift material like that at Graves Mt. in search of Rutile crystals. As you get more experience you will know which sizes to use for the gemstones you want. Great too for sites with small fossils or artifacts.

Pry Bars: Come in useful when needing leverage to move rock or relieving deep pockets. Try to get one with a pointed end which helps to break hard clays and the other end for prying.

Extra Digging Tools: Screwdrivers, small picks etc. for probing and relieving crystals from clay or with some luck a vug where protecting the delicate specimens is paramount.

Knee Pads: If you like to hunt on your knees these will save them from the accumulated damage the rocks will do. Personally, I would suggest other ways that are more comfortable to collect.

Spray Bottle: This is very useful when working material covered with chalky powder or chert and gives you a clearer view of the material. Can also dip in bucket of water. Or if you get lucky you will hit a site after a fresh rain.

Zip Lock Bags, Old Newspapers, Plastic Garbage Bags: Used to protect more delicate samples in transport.

First Aid Kit: At least some way to wash and disinfect any scrape or cut. Eye wash is also good.

Clothing:

Dress for the weather conditions. Layering is very practical in the south as well as some water repellant outer garnet. I like a plastic poncho. A large garbage bag will convert into makeshift poncho in a pinch.

Dress for Protection: Wear Boots for foot and ankle protection. Some quarries require steel tip boots. Hard Hat as needed. Many quarries require these and for the added protection the small price of \$5-\$10 is nothing. You can get one on E-Bay or at big box hardware stores. Just make sure they meet safety standards. Some quarries have a few extras for visitors but don't count on enough to go around. I keep one wherever I go in case I need it. In the fieldtrip announcements special requirements and useful tips on tools and type of collecting are addressed. Review these prior to the trip.

Long Pants preferably jeans for their toughness and padding or other pants made from work grade materials. You will rub, climb, and sit amongst dirt and rocks many are very sharp and hard so it is better to be a little hot than to have an exciting trip go sour with an injury. Some kind of hat as many of the open areas are sunny and hot.

Personal Items:

Any **Medications** especially if you are allergic to stinging insects or have dust allergies.

Sun Glasses to cut glare and sunscreen for sun protection.

Wet Wash Rag in a Plastic Bag

Emergency Toiletries

Wash Water. 1-2 gallons for clean up and emergency drinking. Freeze a couple gallons and throw in cooler.

Extra Shoes, Shirts, Pants, Socks, Towels. At some sites you will end the day covered with dust dirt or worse mud. A quick change not only refreshes, but protects you or your rides car interior.

Fluids, preferably water or Gator Aid and salty snacks or fruit and sandwiches. Between the heat and exertion, you will burn up calories and something to eat will totally refresh and reinvigorate

your search. One of my favorite memories was sitting on Corrundum Knob with my thermos of hot mocha looking upon the mountains, frost and snow as others collected.

- Generally I will bring a small cooler for all foods and drinks. A small wooden crate or one of the many plastic containers with lids are ideal for storing all your equipment in a car trunk or at home between trips. I have an old wooden army locker that accommodates the longer tools well but is too long for cars. I keep my satchel, rock hammer and chisels available when traveling so if I spot an interesting cut thru, creek or gravel bar I'm not caught completely tool less.
- Don't feel embarrassed to ask any questions. We've all been there and I have found that the surest way to a safe and successful trip is by tapping the knowledge of those more experienced.
- Remember many of our collecting sites are remote. Most of the time cell phone service is spotty. Safety is an absolute must. Courtesy to your fellow collectors is more than recommended. Make sure all your gear and trash are collected, and holes are filled as needed. Report in as you leave so your leader knows, and make sure all material is secured in your vehicle and that your vehicle is properly operating for the trip home.