

Arizona State Mine Inspector's Office

**Abandoned Mines:
Stay Out & Stay Alive!**

Safety Tips for Rock Hounds



This pamphlet is provided as a
public service by
Paul D. Marsh
Arizona State Mine Inspector



Arizona State Mine Inspector's Office

Abandoned Mines Program
1700 West Washington, Ste. 403
Phoenix, Arizona 85007-2805

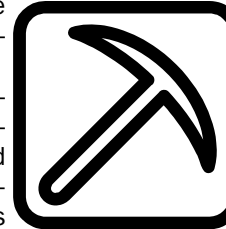
Phone: 602-542-5971
Fax: 602-542-5335

Email: publicinfo@asmi.az.gov

Safety Tips for Rock Hounds

Arizona is the site of some of the nation's richest mineral deposits. Prized semi-precious and precious gemstones abound, as do collector specimens, beautiful crystals and valuable ores. Tourists and rock hounds avidly seek the gemstones and minerals.

Mineral and gem collecting can be enjoyable, relaxing, and sometimes profitable. Many collectors have gathered specimens museums would be proud to display. However, unlike most other hobbies, rock hounding can be hazardous. Rockhounds in Arizona have suffered serious injuries and even death because they failed to follow commonsense safety precautions. As more newcomers take up the hobby, the potential for accidents increases. The following list of "Always" and "Never" spotlights some important safety concerns.



Always:

1. Get the landowner's permission.

Good manners as well as common sense are necessary for successful rockhounding. Always ask permission before going on private property. By doing so, you show respect to the landowner and his rights. This also provides an opportunity for him to tell you about any known hazards on the property.

2. Plan ahead.

Outline a work plan in advance

and follow it when you go into the field. Make sure your family and rock-hounding partner know your agenda. Provide a copy of your schedule and route to the owner of the property you will be visiting for your mineral search. Planning serves two purposes: it helps you clarify your objectives and speeds the rescue process if you do not return on time.

3. Know the territory.

Familiarize yourself with the area where you plan to search. Locate sources of emergency aid and the nearest telephone. Knowing how and where to get help quickly might mean the difference between life and death.

4. Find a good guide.

A competent guide who knows the area well can help you select the best rock hounding sites and protect you from many dangerous conditions. Ask for and check the guide's references.

5. Contact the operators of active mines.

Mining operations use explosives to break rock. The equipment used in these operations is dangerous. Mine workers must concentrate fully on their rigorous duties; they should not have to worry about trespassers. A mine employee or official should go with you when you search for rocks at an operating mine.

6. Always use personal protective equipment.

Proper attire for rock hounding includes safety glasses, hard-toed shoes or boots, hard hats, and gloves. Rugged clothing provides protection from flying fragments and sharp rocks as you pick or chisel stone.

7. Carry a first aid kit.

Keep it stocked with fresh supplies as the desert climate is particularly tough on adhesive bandages, hydrogen peroxide, and other medicines. A thorough and competent knowledge of first aid is invaluable in an emergency. If possible, become certified in first aid.

8. Use caution in underground mining areas.

Caved workings and openings hidden by undergrowth are potential hazards. This is another good reason for hiring an experienced local guide.

9. Watch children and inexperienced companions.

If inexperienced family members or friends accompany you, be sure that their safety is considered at all times. Inform them of potential hazards and have regular break times so that everyone can be accounted for. It is best to have an adult supervise children at all times.

Good Rock Hounding is Safe



Rock Hounding!

The following list of cautions focuses on the hazards peculiar to the hobby of rock hounding. Most refer to the dangers of working in the earth, which, though it seems solid and inanimate, can move, shift, fall, and kill. Only the foolhardy ignore Mother Nature. Disturbing the earth, even for such a seemingly innocent thing as rock hunting, is a disruption of the natural process.

Never:

1.Never work alone.

The difference between life and death in an emergency situation can be the presence of absence of someone who can assist you or summon additional help.

2.Never enter a trench, cut, or excavation unless the walls have been sloped to a safe angle.

All rock hounding excavations greater than 42 inches deep should be dug on a two-to-one slope (one that is four times as wide as it is deep). Any cut or excavation less than 42 inches deep should be done on a one-to-one slope (one that is twice as wide at the surface as it is deep). Incorrect sloping is dangerous. Improperly sloped walls may cave in without warning, resulting in serious injuries or death.

3.Never work under or near high vertical walls.

These walls may be found in or around open pits or quarries. Digging below fractured or loose walls may cause rock to fall without warning.

4.Never dig into mine dumps.



This may create steep or vertical walls to cave in without warning. They can also present hazards from large rolling or falling materials.

5.Never work or go near the edges of high steep walls.

The edge of the mine wall may cave-in. Slipping on the ledge of a wall may cause a serious injury or fatality if a fall occurs.

6.Never pile dirt or rocks near the edge of an excavation.

All waste material should be piled away from the excavation. If it is piled too near the edge of a pit, it can contribute to the collapsing hazard by adding weight.

7.Never enter underground workings.

Mine shafts, raises, winzes, and adits may be very dangerous no matter how safe they seem. Unstable ground in the mine roof and walls may fall or cave in. Decayed timbers or loose material may hide hazardous openings. Underground mine workings can also contain harmful gases or oxygen-deficient air which cannot easily be detected.

8.Never attempt to go underground with any

diggings.

Many hazards exist in underground workings. Adequate ground control, ventilation, and stabilization must be provided. Working underground demands the skills and knowledge of a trained professional miner. It is not a place for amateurs.

9.Never use explosives.

Only professionals should use explosives. Improper use can result in death or serious injury to the user and onlookers. Most rock hounding sites prohibit the use of any explosives.

