

THE CAPITAL ROCKHOUNDER



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MARCH 2005

March Meeting

mineral such as hornblende.

The March Meeting of the Capital District Mineral Club will be on Thursday March 3, 2005. We will once again hold our meetings in "Room B" on the concourse level (go down the escalator) at the state museum, on Madison Avenue, in Albany, NY. The doors will only be open from 7:00pm to 7:15pm. The meeting will begin at 7:30pm.

The speaker will be Bruce Murray. A short explanation follows:

"Testing, or Measuring the Hardness of a Mineral"

by Bruce Murray

Thursday night we will be testing, or measuring the hardness of an "unknown" mineral. We will be using nine minerals of known hardness and scratching them against an unknown mineral to see if the unknown mineral is harder or softer than the known hardness mineral. There are other ways to find out which mineral you have: crystal shape, chemistry, streak, specific gravity (weight), cleavage, luster, dilute acid drops, color, etc., but hardness is the most commonly used.

The hardness of a mineral is listed on a scale called the "Mohs Scale," a relative scale that ranks the hardness of minerals. From the hardest to the softness it is: Diamond = 10; Corundum = 9; Topaz = 8; Quartz = 7; Feldspar = 6; Apatite = 5; Fluorite = 4; Calcite = 3; Gypsum = 2; Talc = 1. The procedure is to find a clean surface on the unknown mineral and scratch it with the known hardness mineral. If there is an obvious scratch the unknown is softer than the known mineral.

You will have a flowchart of the minerals in your basket which you will follow to come to a conclusion. Two or more members can team up to examine the minerals in a box.

We will not be working with rocks this time. A rock is defined as a collection of one or more minerals; for example common granite is generally composed of quartz, feldspar and a dark

My background in geology started when I was in the Air Force in the 1950's. I was walking a trail in the mountains in North Carolina, when a man with a shotgun stepped out from a tree and said, "Where y'all going?" I said I was looking for a green rock which I had heard was down the trail. He said, "Best y'all turn back." Impressed by his politeness - and he was polite, - and his shotgun, I went back. Presumably he didn't want the fumes from his still to bother me. When I got out of the Air Force I went to Syracuse University, got a B.S. in Geology and met Charlyn, who was impressed by (tongue-in-cheek) an older and worldly-wise Air Force veteran. We went rock hunting together, cementing our relationship. We married and moved to Buffalo in the 1960's where we were able to go to Bancroft, Ontario, rock hunter's heaven, and to dig pounds of rocks and minerals, particularly the honey-colored feldspar. Peristerite, which has a blue schiller similar to Labradorite. We also found Apatite, Corundum, Sodalite, Actinolite, Tremolite, and Amazonite. But it was Peristerite which led me to making cabochons, a trial and error process at that time.

With a degree in microbiology from Syracuse University, while Charlyn started at the University of Buffalo, I taught high school biology. Later I went for my graduate degree in the measurement cognition of science students after Charlyn completed her graduate degree. The work on students was measurement and analysis of students, just as geology is measurement and analysis of rocks. Unknown to us there was a bed of Eurypterids east of Buffalo, a portion, I believe was accessible to the public. We never went there. We concentrated on the limestone quarries between Lockport and Rochester, where on weekends all you had to do was drive in and start digging up Fluorite crystals. There was a limestone quarry in Ontario, north of Niagara Falls, with cavities with very nice pink saddle-shaped dolomite crystals, but you did have to sign in with the weekend watchman. There was also a nearby quarry which had some good crystals of galena with associated minerals, such as pyrite. There were also the super-duper pyritized fossils at Alden and we still haven't gone there. So many rocks, so little time.

We moved to the Albany area in the 1970's, dug Herkimer Diamonds, and went to the CDMC meetings which then were held in the old state museum.

Review of February Meeting

Our February meeting consisted of Rich Stein showing us his extensive calcite collection and explaining to us when and where he got each one. Then we had time to look them over, but we weren't allowed to handle the specimens.

New officers for 2005 were elected and announced at the February meeting since the January meeting had been cancelled due to snow. They are Paul Van Schaick - President, Bob Stitham - Vice President, Helen Eckler - Secretary, and Ruth Schmidt - Treasurer.

March 2005 Show Announcements

March 4-6. Hachita, NM. Show; Hachita Community Center, Hwy. 9; Fri.-Sun. 8-5; Contact D.J. Schooler, P.O. Box 151, Hachita, NM 88040; (505) 436-2751; <hachita@vtc.net>.

March 5-6. New York, NY. Show; Excalibur Mineral Corp., New York Mineralogical Club; Holiday Inn-Midtown, 440 W. 57th St.; Sat. 10-6, Sun. 11-6; admission \$6; Contact Excalibur Mineral Corp., 1000 N. Division St., Peekskill, NY 10566, (914) 739-1134; <info@excaliburmineral.com>; Web site: www.excaliburmineral.com.

March 4-13. Imperial, CA. Annual show; Imperial Valley Gem & Mineral Society; Gem and Mineral Bldg., Imperial Valley Fairgrounds; Fri. 12-10, Mon.-Fri. 4-10, Sat.-Sun. 12-10; Contact Trey Handy, (760) 352-2273.

March 10-13. Deming, NM. 40th annual show, "Rockhound Roundup" Deming Gem & Mineral Society; Southwestern New Mexico Fairground; Thu.- Sun. 9-5; free admission; Contact Barbara Hamilton, P.O. Box 1459, Deming, NM 88031, (505) 544-8643.

March 11-13. Ogden, UT. 54th show, "Gemstone Junction 2005" Golden Spike Gem & Mineral Society of Ogden; Union Station, 25th and Wall Ave.; adults \$2, students \$1.50, children under 12 free with adult, student and scout groups free on Fri.; Contact Bonnie Glismann, (801) 392-7832; <bonniesyline@juno.com>.

March 12-13. Salinas, CA. Annual show; Salinas Rock & Gem Club; Spreckels Veterans Memorial Bldg., 5th and Llano St.; Sat.-Sun. 10-5; free admission; Contact Jim Bassett, (831) 758-5830, or Bob Brewer, (831) 758-6274; <jbmsc@sbcglobal.net>.

March 12-13. Sussex, WI. 43rd annual show; Kettle Moraine Geological Society; Sussex Armory, W237 N5678 Maple Ave.; Sat. 10-5, Sun. 10-4; Contact Liz Fuher, (262) 246-6684; <lfuher@att.net>.

March 18-20. Cottonwood, AZ. 29th annual show; Mingus Gem & Mineral Club; Mingus Union High School, 1801 E. Fir St.; Fri. - Sat. 9-5, Sun. 10-4; adults \$1 Fri., \$3 Sat. or Sun., 3-day pass \$5, children under 12 free; Contact Peter Martin, 1801 Kock Ranch Rd., Cornville, AZ 86325; (928) 649-0745, or Alice Christensen, 2222 Rockview Ln., Clarkdale, AZ 86324; (928) 634-6299.

March 18-20. Michigan Center, MI. Show, "Volcanoes Alive in ???" Michigan Gem & Mineral Society; Michigan Center Masonic Lodge, 355 Napoleon Rd.; Fri.-Sat. 10-7, Sun. 10-5; Contact John Hoskin, (517) 522-3396; <Michigangms05@yahoo.com>.

March 19-20. Chambersburg, PA. 28th annual show; Franklin County Rock & Mineral Club; Franklin County Career & Technology Center, 2463 Loop Rd.; Sat. 10-6, Sun. 10-5; Contact Chris or John Long; (717) 762-6671.

March 19-20. Old Westbury, NY. 33rd annual show; Island Rock Hounds; Westbury High School, Post Rd. and Jericho Tpke.; Sat.-Sun. 10-5; Contact John Anderson, P.O. Box 521, N. Bellmore, NY 11710-0521; (516) 781-8410.

Geological Terror(ism)

by Don Kauffman

Earth is not a safe place. Everyday lived here is a miracle of survival. Many areas of our planet are subject to annual geological upheaval and destruction.

In 1998, PBS television ran a series titled **Savage Earth**. The documentary illustrated violent dynamic events that are continually shaping and changing our planet. Main factors included roles of volcanoes, earthquakes and tsunamis.

With news streaming out of Sumatra, media hype has elevated international community fears of earthquake and tsunami. Countries are now competing in a political game of one-upmanship to see who can offer the most financial and logistical aid.

For the record, exclusive of remote biblical references, a tsunami may have occurred in the Aegean Sea about 479A.D. A little over ten centuries later the Mediterranean Island of Crete was pounded by what may have been a volcanically generated tsunami.

More devastation by earthquake-spawned tsunami erased human life from coastal Spain and North Africa after a geological event off Portugal in 1755. History's greatest volcanic eruption, Krakatoa Island in 1883, extinguished over 40,000 lives and helped alter world climate for over a year.

Scientists have estimated death tolls of 141 tsunami occurring in the last one hundred years exceeded 70,000. During the same time period at least 900 such events, although on a smaller scale, caused little or no damage at all.

Twentieth century earthquakes took between 1 to 1 1/2 million lives in that same 100-year period. For the vast Indian Ocean region to surpass loss of life of a 1976 Mainland Chinese earthquake alone, record of human loss will have to exceed 255,000 to 655,000.

Our Earth quivers and moves, very slightly, under our feet 30 to 50 times a day, perhaps up to 1 ½ million times annually. For a general public whose overall knowledge of such matters is low, a massive, “great” earthquake and a rare massive tsunami can easily become fear-generating news. News reporting of geological terror has suffixed the “ism” and now generates fear on a round-the-clock reporting basis.

Just a day after December’s disaster, WUSA reporter Kari Pugh queried,

“Could a Tsunami Drown, D.C.?” Shortly thereafter, CBS News online declared, “U.S. Vulnerable to waves, too.” New Hampshire’s *Nashua Telegraph* suggested, “East Coast isn’t clear from disaster.” To avoid falling into a rush of media induced fear, facts concerning geological terrors of nature must be known, planning, public awareness, emergency preparedness and just plain old fashioned information may provide balm for our fears of catastrophe. We can then respond accordingly.

The 9.0 earthquake rupturing coastal Sumatra’s adjacent 500-plus mile long fault was such an unusual event that scientists could not have predicted it. If science cannot predict earthquakes, how many sensors would be adequate for enough protection of a populace and provide warning of any tsunami? Perhaps believing, “the best defense to be a good offense” we can only attempt to protect ourselves and hope to save countless lives.

One geophysicist from the U.K. has suggested an “occasional tsunami generating earthquake is inevitable.” December 26, 2004 has shown it takes only one “occasional” event to create a modern media campaign of fear and geological terrorism to divert our attention from daily needs and issues of living on earth. Should it take a somewhat common natural disaster to make affluent people and corporations aware of needs of a constantly needy world?

Worldwide there are millions of desperate people trying to survive on a daily basis not just after an unforeseen natural disaster. Admittedly, we must do everything in our power to help survivors of earth’s geological catastrophes. We must try to do whatever is possible to foresee those events. But are our best efforts in vain?

Prior to post-Christmas 2004 geophysicists were concerned with foreseeing great quakes in other active areas of our world. Recent earth upheavals resulting tsunami proves that Nature cannot be predicted or outguessed.

An established warning system may aid tens of thousands in surviving a tsunami. But as one source stated, “the U.S. warning system might not be adequate... a quake too close to

shore for deep-sea gauges to register would be of no help.”

Is there any real proof or guarantee that such a system and millions or billions of dollars spent will offer protection to mass humanity? Perhaps the comment of a Northwestern University tsunami expert provides the best answer. “If it shakes big, then run like Hell away from the beach.”

Sources:

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Drawn by Ernest Barnhart, Rock Buster News,
1998, Central PA Rock & Mineral Club

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The purpose of our club is:

- To promote and encourage the study of mineralogy and other applied sciences.
- To cooperate with educational and scientific institutions in order to bring about a better and more general understanding of earth sciences.
- To provide a program with suitable speakers for scheduled meetings.
- To sponsor, direct, and assist in the planning of excursions to mineral localities and other places of geological interest.
- To cooperate with organizations whose purposes are similar to those stated in the foregoing items.