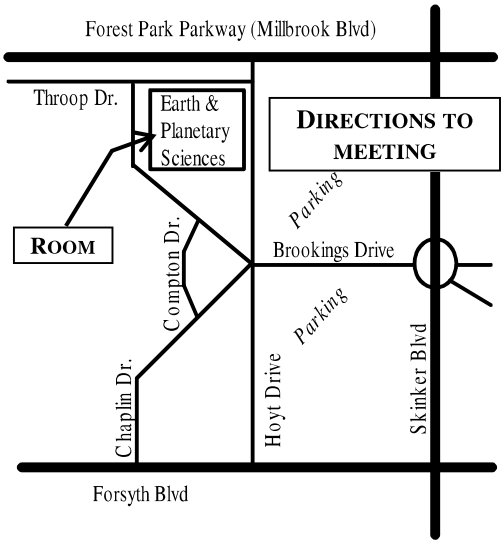
UPCOMING EVENTS

DECEMBER 2008

December 5—ST. LOUIS, MO: The St. Louis Mineral & Gem Society Meeting Christmas Party starts after the inauguration of club officers. The meeting starts at 7:30 PM, in Room 203 of the Earth & Planetary Science Building on Hoyt Drive, Washington University campus, St. Louis. NEW OFFICERS, SWAP STORIES, SILENT AUCTION!!! ***DELI TRAYS, BREAD, DRINKS, AND PLATES, etc. WILL BE PROVIDED BY THE CLUB, BRING YOUR FAVORITE SIDE DISH OR DESERT TO SHARE!*** Contact Harold Schlegel if you plan on attending and were not at the November Meeting!!



December 6, 2008—ST. LOUIS, MO: Rockhound Garage Sale, By Roy Hurlburt and Stan Perry. Piney Point Drive. (314) 846-0711 for more information.

December 12-14—SHARONVILLE, OH. GemStreet USA, Fine Gem, Mineral, Jewelry, Fossil & Bead ShowsSharonville Convention Center, 11355 Chester Rd, Sharonville, OH. Fri. 11 AM to 7 PM, Sat. 10 AM to 6 PM & Sun. 11 AM to 5 PM. Contact: Jane Strieter Smith, PO Box 770680; Lakewood, OH 44107, Phone and Fax 216-521-4367, spi@stratos.net

December 13-14—NORCROSS, GA. North Atlanta Gem, Mineral, Fossil & Jewelry Show. North Atlanta Trade Center, 1700 Jeurgens Court. Sat. 9 AM to 7 PM & Sun. 10 AM to 5 Contact: Richard Hightower, 7334 Quail Run Road, 478-935-9345, staff@mammothrock.com

MINERVA MINE #1

Since the late 1800s, southern Illinois has been the home of a number of fluorspar mines. Minerva Mine #1, located about five miles north of Cave-in-Rock, IL, began construction in 1941, had a 640 foot shaft sunk in 1942, and production begun in 1943. Mining and milling at the site, under various owners, continued until 1984. The facility was then idle until 1988 when the mining operations were purchased by the Ozark Mahoning Company. Mining resumed in 1989, but milling was performed in Rosiclare, IL. By this time, the mine was now 1,300 feet deep, and was the deepest mine in the district. Mining continued until 1995, until operations were again terminated. During 1996 and 1997, Ozark Mahoning demolished the mining buildings and capped the mineshaft. Atofina Chemicals, Inc., now owns the assets of Ozark Mahoning and the Minerva Mine #1 property, but the tailings pile, about a mile north of the mine site, were sold to a private individual in 1989.

Mindat identifies fifteen different minerals present at the site, though the most prevalent, based on personal experience, are calcite (calcium carbonate), fluorite (calcium fluoride), and sphalerite (zinc sulfide). This mine was also one of the few places in the world where Witherite (barium carbonate) could be found. As the buildings have been demolished, the mine site looks, from a distance, to be no more than a gravel-covered parking lot, partially overgrown with vegetation. Minerals, however, are abundant for surface collection, and a few remains of the mine operations are still present.

Figures 1 through 6 (back cover) illustrate items that have been found at the mine site, with all but the sample in Figure 5 collected by myself or my wife. Figure 1 shows two samples containing fluorite and calcite, and how they appear under long wave (380-385 nm) ultraviolet light. Calcite and fluorite we have found at the site tend to not have well-defined crystal forms, such as the amorphous, translucent calcite block shown in Figure 2, though occasionally a nicely-shaped crystal can be found. Figure 3 shows white calcite and a cubic purple fluorite crystal on sphalerite. The sphalerite found at the site tends to be found in two varieties. The first is dark (presumably due to high iron content) and massive, with few crystal planes visible. While this piece is about 3 inches long, I've found a piece 6 inches in diameter, and weighing four pounds. The other form that is common on the site is as small brown speckles, as shown in Figure 4, and often combined with calcite, fluorite, and other minerals. Figure 5 is a sample of Witherite, purchased at a rock show in Marion, IL, which originated from Minerva Mine #1. As milling was performed on the site, it is not surprising to have found one of the milling balls, as shown in Figure 6.

-Charles Calkins

References:
Health Consultation, Minerva Mine #1, Cave-In-Rock, Hardin County, Illinois, EPA Facility ID ILN000508903, Illinois Department of Public Health, 2007. http://www.atsdr.cdc.gov/HAC/pha/MinervaMine1/MinervaMineHC050407.pdf
Minerva No. 1 Mine, Mindat. http://www.mindat.org/loc-3754.html

John L. Dolde, Editor
936 South Second
Street

John L. Dolde, Editor
936 South Second Street
Festus, MO 63028-2007

See Story; Minerva Mine # 1, inside page 10

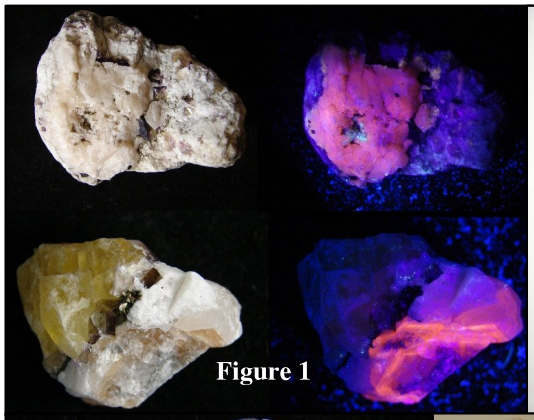


Figure 1


Figure 2


Figure 3

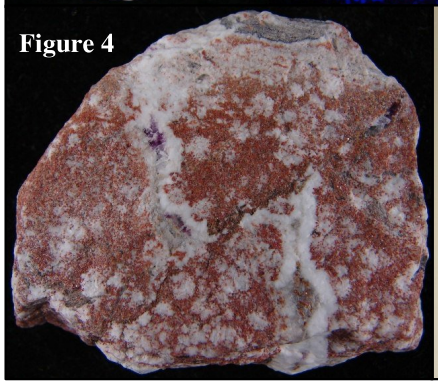


Figure 4

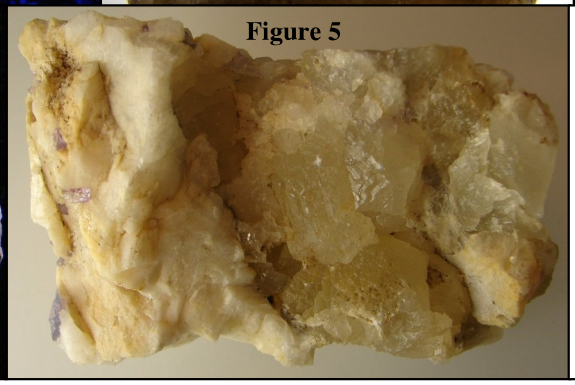


Figure 5


Figure 6