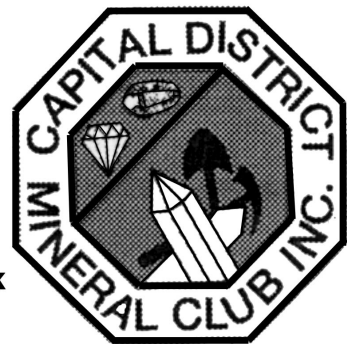


# THE CAPITAL ROCKHOUNDER



Publication of the Capital District Mineral Club, Inc.  
Chartered by the Education Department of the State of New York  
P.O. Box 12814, Albany, New York 12212-2814

**AUGUST 2004**

## Summer Break

No meeting during July or August. You will, however, receive a newsletter which will keep you up-to-date on field trips and other important information. Please note the change of email address for the editor, Anne Woods. Send submissions to: <schmanie@albanyrockclub.com>.

## Upcoming Field Trips for August

**SATURDAY, AUG. 14 OR 21. PATTERSON MATERIALS CORP. QUARRY, PATTERSON, NY**

There is the possibility that the quarry will be working on the earlier date. Decision will be made approximately one week in advance. PLEASE CALL if interested in attending.

Meeting Place: Patterson Commons Shopping Plaza

Meeting Time: 9:45 AM. (Driving time: 2 hrs. from downtown Albany)

Materials to Collect: quartz, mountain leather, diopside (fluorescent blue in shortwave (SW)), pyrite, white limestone. Other minerals present depending on mining level and spot.

Safety: Working quarry rules apply.

Equipment: Hard rock mining tools, ultraviolet (UV) light, tarp or blanket to make tent

Lunch/Drinks: Bring some of each. Quarries get HOT in mid-summer.

Trip Leader: Rich Stein (518)355-4423  
Cell phone: (518)330-1966 [on trips only]

Directions: From downtown Albany, take I-90 East to NY Thruway, then Thruway East to Exit B-2 (Taconic Parkway). Drive South to Poughkeepsie/Pawling Exit (81 miles from Hudson River in Albany). Take NY 55 East to NY 22 (approx. 12 miles). Take NY 22 South to 2nd traffic light (approx. 2 miles). Patterson Commons Shopping Plaza is on the right. Please gather in the parking lot. The quarry is just 10 minutes away.

## EFTA August 2004 Field Trips

*more at <www.nefta.us/>*

Please note, I could not access the EFTA website, but I was able to grab this information off another club's website. Please verify this information with Bob Hartig <rockbob@nycap.rr.com> before showing up at the various locations.

Aug. 7-8. Capital Mineral Club, Vag Mines, Eden Mills, VT (garnet, diopside, clinoziosite, epidote).

Aug. 15. North Shore Rock and Mineral Club, Topsham, ME (magnetite crystals, other pegmatite minerals). Directions: Jct. US Route 201 & Route 24 in Topsham. Turn onto Winter Street (across from church), west 0.45 mi., left on Bridge Street 0.4 mi., right (west) on Oak Street 0.1 mi. to end of street. Park. Meet at 10:00 AM on Standpipe Hill at the water tower. 5 minute walk.

Aug. 21. Saco Mineral Club, Lord Hill, Stow, ME; Pearl Lake, Lisbon, NH (minerals to be found?).

Aug. 28. Lapidary & Mineral Society of Central CT, Clark Hill Quarries, East Hampton, CT (pegmatite minerals). <<http://www.lmscc.org>> for details. No need to coordinate, just show up!

Aug. 28. Mineralogical and Lapidary Society of Raritan Valley, NJ, Binkley & Ober, north of Lancaster, PA. 9AM meeting point to be announced.

## Upcoming Shows

**July 31-Aug. 1. ST. JOHNSTOWN, NEW YORK.** Show, "Tail-Gate Mineral Show;" Crystal Grove Diamond Mine & Campground, 161 County Hwy. 114; Sat. 10-5, Sun. 10-5; admission \$2, children under 5, miners and campers free; contact Evan Myers, (518) 568-2914; <[show@crystalgrove.com](mailto:show@crystalgrove.com)>.

**Aug. 7-8. CANANDAIGUA, NEW YORK.** 5th annual show and sale, "The Many Facets of Quartz;" Finger Lakes Gem & Mineral Society; American Legion, 454 N. Main St.; Sat. 10-6, Sun. 10-5; adults \$4, children under 12 free with adult; contact Finger Lakes Gem & Mineral Society, <[flminerals@netzero.net](mailto:flminerals@netzero.net)>.

**Aug. 7-8. WATERVILLE, MAINE.** 34th annual show; Water-Oak Gem & Mineral Society; Mount Merici School, 152 Western Ave.; Sat. 10-5, Sun. 10-4; free admission; contact Ellery Borow, P.O. Box 47, Waterville, ME 04903-0047.

**Aug. 7-11. PHILADELPHIA, PENNSYLVANIA.** 22nd annual conference; National Association of Jewelry Appraisers; Double-Tree Hotel, Broad St. at Locust; admission \$5.75; contact NAJA, P.O. Box 18, Rego Park, NY 11374-0018, (718) 896-1536, <naja.appraisers@netzero.net>.

**Aug. 13-15. WEST SPRINGFIELD, MASSACHUSETTS.** Show; Martin Zinn Expositions; Better Living Center, Eastern States Exposition, 1305 Memorial Dr.; Fri. 10-7, Sat. 10-7, Sun. 10-5; adults \$6, seniors and students \$5, children 12 and under free with adult; more than 200 domestic and foreign dealers, door prizes, guest speakers, museum quality exhibits, gold panning, large wholesale section, collection of Dan and Dianne Kile; contact Martin Zinn Expositions, P.O. Box 999, Evergreen, CO 80437, (303) 674-2713; <MZ0955@aol.com>; <www.mzexpos.com>.

**Aug. 20-22. LEBANON, PENNSYLVANIA.** 7th annual show, "Gem Miner's Jubilee;" Mid-Atlantic Gem & Mineral Association; Lebanon Expo Center, Rte. 72 and Rocherty Rd.; Fri. 10-6, Sat. 10-6, Sun. 10-4; contact Mid-Atlantic Gem & Mineral Association, (301) 565-0487; <beadware@erols.com>; <www.gem-show.com>.

**Aug. 27-29. CANTON, NEW YORK.** 38th annual show; St. Lawrence County Rock & Mineral Club; The Canton Sportsman Club; Fri. 8 p.m., Sat. 10-5, Sun. 10-5; contact Sky Alverson, (315) 344-7926; <speedyjake@aol.com>; <http://stlawrenceco.com>.

**Aug. 28. PARAMUS, NEW JERSEY.** Show; J&C Marketplaces; Elks Lodge, 200 Rt. 17 N; Sat. 10-4; contact Cissy Giatanella, J&C Marketplaces, P.O. Box 7148, North Arlington, NJ 07031, (201) 998-8331; <www.jcmarketplaces.com>.

**Aug. 28-29. FREEPORT (LONG ISLAND), NEW YORK.** Annual show; Village of Freeport Recreation and Parks Dept.; Freeport Recreation Center, 130 E. Merrick Rd.; Sat. 10-5, Sun. 10-5; adults \$3.50, children under 12 free with parent; contact J. Andersen, P.O. Box 551, N. Bellmore, NY 11710, (516) 781-8410.

## **Rock Cutting Machine for Sale**

Bruce Murray is selling a Raytech 10-inch rock-cutting saw machine. Diamond saw, non-flammable cutting fluid, plexiglass cover and automatic feed. Works well. Asking \$325. Call Bruce at 355-2146 or speak to him at the monthly meeting.

## **Syracuse Gem & Mineral Show Review**

*Submitted by George Gearhardt*

The Syracuse show is now history, at least for this year. Barb and I attended as delegate/alternate at the combined AFMS/EFMLS convention that went along with the Syracuse show. The dealers arrived on Thursday to set up for the three day show at the field

house of the state fairgrounds (the one with no air conditioning for the whole three days). On Friday, we toured the amazing displays and dealer counters. There were lots of display cases to be judged and some just for looking. We discovered Rich and Clair Stein had set up the mineral meals table on the main floor near the Dealers Only section of the room. As usual, his table got a lot of attention from everyone for the whole three days.

Two of the dealers, whom we had met about two weeks ago at the EFMLS workshop in western North Carolina, were Bob and Joanne McGuire who had the Ultraviolet Tent set up to display quite a variety of both fluorescent and phosphorescent minerals. I traded some of the samples Barb and I had collected a couple of years ago at the Conklin Quarry, located in Lincoln, Rhode Island. Incidentally, I learned later that the Conklin Quarry is now flooded and no longer available to collectors (except possibly on the surface).

Friday evening brought about the "Cracker Barrel" session of the EFMLS. In these proceedings, any delegate or alternate can bring up local matters for consideration, clarification, or just to make the officials of the club aware of what is going on in their local clubs. Naturally, the co-existence of EFTA with the EFMLS was one of the topics, and we also discussed the matter of "club insurance" and "authorized field trips" language in the by-laws. These findings will be reported to our Board of Trustees for consideration at the next Board Meeting.

Saturday morning, the annual meeting was brought to order and the various areas and sectional reports were made and discussed. It ended with the acceptance of the budget proposal and the election of officers. After that, everyone headed off to the show.

As usual, at least for Barb and I, we ended up at the New York State Museum table assisting Mike Hawkins in his efforts to raise money for the state museum mineral collection. We managed the table while Mike was 'wheeling and dealing' with the other dealers and attendees who had minerals of interest found in New York State.

Saturday evening was the EFMLS award dinner. It was the final event for us. Hopefully, someday our club may decide to submit entries for consideration.

Many members were seen making the rounds at the show, including: Bob Ballard, Anne Woods, Amy Sternstein, and Gerald Boileau. Also, Mark Kilmer was there with his booth set up. There may have been more, but we were busy tending to the table and buying a few minerals for ourselves. The Carnegie Museum had donated minerals for use in a series of silent auctions. I will have to tell Paul Van Schaick about how it was done so he can consider this technique for our future annual auctions.

## **AFMS Eastern Federation Rockhound of the Year**

The AFMS Rockhound of the Year from the Central Pennsylvania Rock and Mineral Club is Don Kauffman. They say that the number one fear among humans is speaking in public. I really think it may well be writing. It is like pulling teeth to get folks to write articles for the newsletter, but Don Kauffman has blessed this club with

interesting article after interesting article. He has also provided leadership in other areas, including our involvement with the "Newry Park" project. [Nominated by R.J. Harris, President] (AFMS Newsletter, May 2004, p. 6)

## **Thunder Bay Agate Mine**

*by Dr. Bill Cordua, U. Wisconsin-River Falls*

Last spring, I led a group of undergraduate geology students around Lake Superior. One of the best stops we had was at the Thunder Bay Agate Mine. As it is right on the way to the better-known amethyst mines, I recommended that we all head up that way and stop for a visit.

The mine is a dig-your-own fee area. It is located just a few miles north of Thunder Bay, just northeast of the Terry Fox Monument (another place that is worth a stop). A mile or so east of the monument on Hwy. 11-17, turn left on highway 527. There is an agate mine sign at the intersection, so it is hard to miss. The mine is about 1/2 mile up 527, on the left. That turn-off is also well marked. There is a big parking area by their shop. From there, you can walk or drive a short distance down a well maintained dirt road to the mine.

We were greeted and given a tour of the shop and the deposit. The students then got to go to work. The fee was \$8 per pound, with the price pro-rated to reflect the poundage of agate rather than the surrounding matrix. There was a reduced rate for clubs. There was agate all over the place, and it could be collected without much in the way of tools. If you wanted to pound, well, there was opportunity for that, too. The agate is a seam or vein agate, formed in brecciated iron carbonate of the Proterozoic Gunflint Formation. It isn't the classic Lake Superior agate, which formed in gas bubbles in Keweenaw basalt lavas extruded about 1.1 billion years ago, but it sure is pretty.

Agate had been collected from a nearby river and in gravel pits for years, but its bedrock source was unknown. In the early 1980s, a new logging road uncovered the agate-bearing bedrock. After some drilling and years of negotiating property rights, agate mining began in 1997.

The agate thickly veins the rock, with stalactitic growths giving nice patterns. There are open vugs with later quartz crystals (white to yellow, no amethyst though). Some pyrite, a black hydrocarbon and yellow micro sprays of goethite (?) were also seen in the cavities. The agate was well banded, with red, brown, white, and gray colors dominating.

The origin of the agate is a bit problematic. It occurs as open space filling in the Gunflint. It likely formed when this formation was close to the surface, being weathered and dissolved. Since the host rock is a carbonate rock, caves and sinkholes could develop and allow pore spaces for silica-rich solutions to penetrate. The fluids could have circulated through these fractures during faulting or spurred by the heat of later volcanic rocks. It could have formed from the same fluids that elsewhere in the area formed the amethyst veins and local silver deposits.

Once you have enough agate (it doesn't take long to get a bunch), you can stop by the shop. I could hardly get my students away from the shop, and they certainly learned a lot about lapidary in a short period of time. There is also a gift shop with items made from the agate. They have a nice website, too at <[www.agatemine.com](http://www.agatemine.com)>.

Keep this in mind if you are traveling north this summer. It's easy to find, with good hunting for all. What more could one want of a summer trip?

## **Return to Island in the Green: Brookdale, a Mineral Oasis**

*Submitted by Don Kauffman, Reading, PA*

With mineral collecting sites dwindling rapidly and gasoline prices heading for stratospheric highs, there is a critical need to pool resources. Sometimes we have to take another look into our own backyard, and not our neighbors'. In mineral collecting, as most anything else, most often the grass looks greener in another far off or out-of-state location. Recently, for something stimulating to do on one of my weekdays off, we chose to visit a local collecting site. The purpose was two-fold: (1) to drive a reasonable time and use a minimum of gas; and (2) to revisit a once-collected location. The destination was Chester County's Pickering Golf Course and the little oasis of the Brookdale Mine.

With a tech check, we reviewed directions via Mapquest <[www.mapquest.com](http://www.mapquest.com)>. Remembering our one past experience there, we took a minimum of equipment and comfortable walking boots. The drive from Reading, PA, to Phoenixville's mineral locality was only about an hour by the main roads.

For those of you who have never collected at this location, it is hidden within a copse of trees surrounded by greens of a public golf course. Sources have said that the establishment's owner (or a relative) has a collection of minerals which helps keep their interest in allowing experienced collectors to enter the old lead mine. In return for checking in at the Pro Shop and donation of a collected mineral specimen, individuals or small groups from mineral clubs have the privilege to explore the area near the 15<sup>th</sup> and 16<sup>th</sup> greens. For the price of a piece of Wise Mine fluorite, a pleasant afternoon of rediscovery was guaranteed.

Time had not completely erased the route to the mine from our memories, as we had visited it only once nearly ten years ago. Looking much like an island of trees in a sea of greens and sand traps, our short walk from the Pro Shop was a relatively easy over hill and down dale to reach the site. The old mine was fenced off for safety concerns and bloated by water from recent May rains. The looming stack from the old smelter was nearly hidden by many surrounding trees. Ground cover was scarce to low, and light. We had no trouble in our search for collectible materials. Our greatest challenge was not to duplicate our first expedition that resulted in our collecting more than we could reasonably identify or carry. Way back then, we were just novice rock collectors.

Minerals found in past sorties by our many collecting friends and club associates comprise quite a list: angelsite, cerussite, chrysocolla, dolomite, hemimorphite, malachite, mimetite, pyrite, pyromorphite, quartz and sphalerite. The Pennsylvania Geological Survey listings include rare finds of azurite, copper, cuprite, silver, and sulphur.

The afternoon was sunny. The air temperature was upper 70's, with humidity not quite at an uncomfortable level. Annoying bugs or mosquitoes were easily kept at a distance with repellent. At least six different types of birds were noticed chirping in trees above us. A woodpecker tap, tap, tapped on one of many trees surrounding us, and a slight breeze caused the trees to shush above us. The complete setting was one of nature at peace.

Our first observation was the abundance of quartz. Kicking over large pieces or investigating smaller sparkling pieces usually quickly revealed sprays. My first sample on this journey of rediscovery was a quarter-sized cluster of crystals. Dead center was a terminated crystal nearly ½ inch across with six sides.

Later additions to our inventory of samples included a rough quartz plate with thumbnail hematite or sphalerite covering the surface. Soon several rough looking quartz chunks were picked up. They had a surprising heft to them. Characteristic of the location, we determined they were loaded with galena or lead.

Probably one of our most pleasant surprises was the discovery of several hand-sized plates that appeared to be predominantly quartzite. Blebs of pyrite, terminated crystals of quartz or perhaps angelsite were noted scattered across the surface. Closer examination produced recognizable platy barite tufts. This discovery ended (for me) a long six-year quest for a barite find in the field. The discovery was an exciting find for Linda, who first noted and picked the plates up. So with a valuable donation from my expedition partner, there was now collected barite for my mineral specimens display case.

As any experienced Pennsylvania collector knows, the most notable and recognizable mineral feature of the Brookdale Mine site is bright green lead chlorophosphate. It is more commonly called "pyromorphite" by collecting connoisseurs. In spite of intensive scouring by mineral club expeditions throughout past years, green clusters of this leached lead derivative are easily identifiable. Almost as easy as picking up fossil clams from an ancient clam bed, one piece of polymorph speckled quartz appears after another once a sample is recognized. Linda achieved honors on our trip by finding a hand-sized flattened piece of limonite-covered quartz with a line of notable green pyromorphite stringing a good 2 inches across the surface.

All in all, this day's rediscovery of what we have come to refer to as "golf course rock" provided several exciting finds upon our return. If you could equate our mineral findings with golf terms, most likely our day in this golf course mineral oasis would have scored us several holes-in-one and a couple of birdies.

(Writer's Note: If you want an outstanding account of a visit to Brookdale Mine and also its historical background, locate a copy of *Rock & Gem* magazine from February 2001. Central PA's own Robert Beard wrote an excellent account of his visit to the location in 1995 and his subsequent return in 2000.)

#### SOURCES:

BEARD, ROBERT, 2001, Pennsylvania pyromorphite: a rare mineral found just behind a golf course: *Rock & Gem*, February, p. 40.

GEYER, ALAN, SMITH II, R.C., and BARNES, J.H., Brookdale and Chester county mines of the Phoenixville lead-zinc district. Mineral Collecting in Pennsylvania. General Geology Report, no. 33, 4<sup>th</sup> Edition Commonwealth of Pennsylvania, p. 69-70.

## Even the Most Seasoned Rockhound Gets Fooled Sometimes

*Submitted by Richard Hartnett.*

I have been collecting minerals and fossils, on and off, for about 50 years now. I try to collect specimens from around the world and, so far, I have specimens from about 60 different countries.

In 1997, on my trip to the British Isles, while touring Stonehenge, the Roman Baths, Cambridge University, and The Crown Jewels of Scotland, I found myself looking around for specimens to bring home. Around the approach to Buckingham Palace, on the gravel sidewalks, I found nicely polished pieces of chalcedony. My interest piqued, and I continued to scour for specimens elsewhere with no luck.

On hiking up to the Observatory in Edinburgh, Scotland, however, I happened to see what appeared to be a pink and black mineral. The pink looked like plagioclase feldspar, but I couldn't identify the black. So I took several small specimens back to my hotel to pack, to be identified when I got home. Once home, I eagerly examined my finds. Chalcedony, check. Gulp, the pink was feldspar, nicely embedded in **tar!!**

## The Art of Display

*by June Culp Zeitner*

June Culp Zeitner, well known author, collector, and recipient of the first AFMS Recognition Award, has written many articles during her career. Many readers will know her from articles which appeared for years in *Lapidary Journal* and, more recently, in *Rock & Gem* magazine.

Written in 1971 and most recently reprinted in *Pickin's & Diggins*, newsletter of the Williamson Co. Gem & Mineral Society (Georgetown, TX), this article is still as valid today as it was when written.

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To show off minerals and gems, one need only learn and apply a few rules of art. Some are so elementary that most pebble-pups, as well as advanced rockhounds, know them. Nevertheless, they are all important.

## Cleanliness

A dusty or fingerprinted specimen or case detracts from any display.

## **Arrangement**

A pleasing arrangement has balance, good proportion, pleasing color harmony, rhythm, design and suitable background. Generally speaking, there are two types of balance in art: formal and informal. If you can draw a line through the center of a design and find that each half is a mirror image of the other, that design is formal. If the two halves are not the same, the balance is informal. An old fashioned garnet brooch is usually formal in design. A modern free-form brooch set with a garnet baroque would probably be informal in balance.

Formal balance is well suited to arrange cabochons for display. A group of slabs of dissimilar sizes and shapes lend themselves to informal balance. Why strive for balance? We want to show it off to the best advantage. Just as we would never lay a "picture agate" upside down, so we would not lay it in a row with bigger or brighter stones.

Trained to take in things at a quick glance, our eyes naturally seek the center of interest. If you have any prized specimens which you are anxious to show off, give them plenty of space. Overcrowding is a sin of which most of us are guilty.

According to the strict rules of art, a display should have most of its weight toward the bottom. This means apparent weight rather than actual weight. A good display can't have the most massive or the brightest pieces at the top. It would appear too heavy. The eye is upset at seeing a display with a high center of gravity which looks as if it would topple over. In a display all on one level, the larger items naturally go to the background, the more spectacular specimens toward the center, and the smaller items in the foreground.

Every good display, like every good picture, should have margins. The rules governing margins in art call for the widest at the bottom, the second at the top, and the two sides either equal to, or a little narrower than, the top.

Remember that bright colors strike the eye before dull colors. They tend to come forward. They can be used in smaller amounts and still attract attention. The placing of bright colors must be watched carefully. For example, if you placed a slab of electric blue chryso-colla in each corner of your showcase, they would tend to draw the eyes in four directions at once. Whatever you had planned for the center of interest in the middle of the case would be lost. Bright colors placed in a hit or miss manner spoil any feeling of balance and rhythm by causing the eye to jump.

One large specimen can be balanced by a group of smaller ones. One bright specimen can be balanced by several duller ones. The subject of color is important to rockhounds and we should know and understand the color wheel, the primary, secondary and tertiary colors, and the basic color harmonies. A very bright color should be used in smaller amounts than muted shades or tints. The center of interest of any arrangement should be toward the center where the eye naturally falls first. If too many bright colors other than the center of interest are used, the result is a "busy" or jumpy arrangement.

It is definitely worth the effort in arranging a gem or mineral display to carefully consider the color of every piece before deciding where to place it. The artful use of color can make an average collection

spectacular, while the poor use of color will make a superb collection seem like a dull jumble.

## **Background**

In the successful display of gems, the background against which the gems are placed should be in keeping with the value of the gems. It should not detract from the color of your gems, but should flatter every stone in the display. Tweed or calico would not be used to set off a faceted collection. Velvets, velours, silks and satins are more appropriate. However, as beautiful as red velvet is, it would not be an appropriate background because red is a detracting color. After much experimenting, we have found that a pale blue satin, a grey tone of blue, is the most versatile of background material for mineral display. There is just enough color in this to set off tints as well as shades. Another wonderful background for gems or jewelry is the use of mirrors. A sparkling mirror multiplies the beauty of your gems.

Snowy white styrofoam is another suitable background. It can be cut in various shapes to enhance the beauty of a specimen and is useful in creating split levels of display. A specimen can also be made to stand in the precise position it looks best. Besides the ordinary background material, many rockhounds with imagination use other devices to add interest. A piece of silvery driftwood against a sea-blue drop may be used to set off a collection of beach agates. A piece of ibduan pottery adds interest to a turquoise display. Under no circumstances should the background be so big, bright, or unusual that it detracts from the real purpose of the exhibit.

## **Lighting**

Good lighting is essential. Scenic agate slabs are best viewed with a light behind them. Spotlights are suitable for large spectacular pieces, but in most cases, tube lights directly above or inside each display case are best. Natural light is a big help for home display. A big north or south window opposite your display will give a good light.

## **Flair**

For want of a better word, I use flair to describe that something extra which the personality of the rockhound stamps on his display. A beginning artist should learn the rules of art. However, we all know artists who have broken rules and come out on top. Not all great gem displays follow the artist's display rules, but you should learn the rules before you build up enough faith in your flair to learn when it is right to break a rule or two if gem dealers and collectors would greatly be enriched with very little expenditure. Display cases are not hard to build. With a little effort, every hidden box of specimens could graduate into a real artistic display. (AFMS Newsletter, May 2004, p. 8)

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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.