

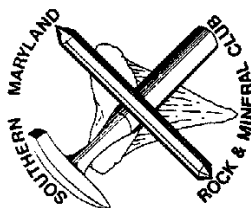
March 2009



SOUTHERN MARYLAND ROCK AND MINERAL CLUB



RockTalk



Message from the President

By the time you read this, it will be less than two weeks until our rock show. Things are moving along nicely, and we resolved a lot of the problems at the February meeting. Unfortunately, Dave Lines took excellent notes and reminded me that I volunteered to be the traffic cop for the loading/unloading zone. Not only that, but I guess my son Sam and I will be running the door prize drawings as well-I don't remember that job, but I guess that will give us something to do all day. I don't have a table at this show, and I had planned to float around all day anyways, so I don't really expect any major problems.

We have one more club meeting on Tuesday March 24th before the show. This will be our last chance to get it right. I am probably worrying too much about the show, but it is the first time for me and I am slightly nervous. At the last meeting I signed a lot of membership cards for the SMRMC from the Eastern Federation and Michael Patterson filled out the other details on them. We passed them out to all members that were present, but several members were not there. Remember, you need to show your current membership card to go on field trips, otherwise our insurance will not be in effect. Michael has these extra cards at the Nature Center.

Did you hear about the Bahia Emerald? It was in the news lately. It is an 840 pound emerald encrusted rock valued at \$400 million that was dug up in Brazil in 2001. It is being fought over in court right now, and the rock has already started to accumulate a reputation and superstition. For more information, go to google and search for Bahia Emerald.

See you at the next club meeting.

Alex Schuman

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Meetings

...are held the 4th Tuesday of each month at 7:00pm.

Clearwater Nature Center 11000 Thrift Road
Clinton, MD.

For more information, call Michael at (301) 297-4575.

March Birthstone

By Lorna Larson, photo courtesy of Yahoo!



For years, I thought that the birthstone for March was aquamarine. Then when it became too expensive, the blue (particularly the lighter shades of blue) topaz was substituted. It was several years before I discovered that bloodstone could also be used as March's birthstone. Then I discovered that the Jewelers Ass. actually established aquamarine and bloodstone as March's birthstones in the 1920s.

Then much to my amazement, I read *The Curious Lore of Precious Stones* by Kunz which listed several different lists of birthstones, such as the one used by the Romans, and found that bloodstone (a subset of Jasper), but not aquamarine, had been March's birthstone for centuries. Jasper (do not know what type) was included in Aaron's breastplate and the foundation stones of the New Jerusalem as recorded in the Bible.

Bloodstone, a jasper, belongs to the quartz family. According to Arem's, its formula is a simple SiO_2 , and it is one of the most common minerals in the world occurring in a wide range of rock types and geological formations. The colors are due to impurities, inclusions, and staining post formation. It has a hardness of 7 on Mohs hardness scale, has no cleavage, develops conchoidal fractures and breaks unevenly.

The family is subdivided into two categories: crystalline quartz which occurs as visible, distinct crystals and cryptocrystalline quartz with crystals too small to be seen without assistance. Colors and patterns designate the names of the chalcedonies, jaspers and agates in this latter group. According to Arem's, bloodstone is very dark green due to densely packed actinolite crystals which is called plasma and blood red/orange spots of iron oxides. I have also seen specimens which include yellow spots as well. Good quality in this material will be strong and have a greasy, waxy luster. For a long time, this material was difficult to find and was more expensive than the average quartz material. Recently there have been some fair cut beads coming out of India. This material is also called heliotrope.

Lee stated that the bible referred to the blood of Christ spilling on the stone which makes this a wonderful stone for Lent and Good Friday. He also noted that it was electromagnetic due to its high iron content. He went on to stated that the people of ancient Egypt used it to help them revitalize, calm and ground themselves (p. 11). He also noted that it could be used for anything that had to do with blood or related organs.

Therefore, this is a stone that has had a long history of use by various people for various purposes. It is a stone well worth having in any collection because of its history and the many stories that can be found regarding its use by people. Do you have one in your collection?

References:

- Arem, Joel E. *Color encyclopedia of gemstones*. Van Nostrand Reinhold Co., New York, 1977.
- Lee, John. . *The crystal and mineral guide*. Aeon Press, Ireland, 1998.
- Schumann, Walter. *Gemstones of the world*. Sterling Publishing Co., New York, 1977.

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***If corrections or additions are needed, please contact Rocktalk Editor

Minutes...

Polly Zimmerman

February 24th 2009 - Meeting was called to order at 7:00 pm.

Secretary *The minutes were approved as printed in the newsletter.

Treasurer *The treasury increased to \$86.00, due to the rock sale at last meeting.

Membership *New membership cards were sign and handed out. They should be used for proof of membership. If you did not receive yours, they will be given out at next meeting.

Programs *March, April and May are still open. If anyone would like to give a program, please contact Larry. We also need some volunteers for snacks.

Webmaster *New web site is SMRMC.webs.com. Do visit if you have a minute.

Field Trip *Smithsonian trip was cancelled due to not enough participation.

*Short notice fossil trip due to extreme low tides. Those who went found some great fossils.

*March 14/15th trip to Lingon mine. Will be short notice and weather depending.

*Members voted on the list of possible trips. We will find out the interest at next month's meeting.

*Dave again stressed trips are for paid "card carrying" members only, due to insurance.

*Possible trip to florite museum and scheduled dig. It will be private and for 10 participants only.

Old Business *Members signed up to purchase \$5.00 magnetic name tags.

New Business

Discussion of Rock and Mineral Show

Members set-up on Fri. night

Friday open noon to 7pm open 7am Sat morning

May set up a tent for out door tables

Need to coordinate demonstrations

Lorna will do library display

Bob has sent e-mail flyer and asked each member to pass on the flyer to their friends

Dave suggested the 3x5 cards for registration for door prize drawings.

Any new members that sign up will receive a "special" deal. Michael or Glenda will take care of new memberships.

All members are asked to help on Sat. with Vendor Drop-offs as at least 20 vehicles will be needing space.

Other New Business

*Nation Children's Museum needs volunteers

* Volunteers needed September 26th Nature Fair at the center to represent our Rock Club.

Meeting was recessed for break and program at 8:20 pm.

Program was provided by Bob Davidson. "Electronic Rock Hound Library"

Rockhound Bait

Story and Photo by Dave Lines

Question: What do you use to catch a mouse? Answer: cheese. Well, it is a LOT more complicated when you are trying to catch --- a person's attention. And not just "any person", but the sort of person who is, perhaps, ... discriminating ... friendly ... smart ... a bit of a do-it-yourselfer ... enjoys other people ... and likes rocks. Whoa-a-a ... what's that last part about "liking rocks"?

Yep! They have to like rocks. And they may not even know it yet. It might take someone else, like a friend, or even their own kid, to start that latent spark of interest. And each person who likes rocks, may like different kinds of rocks than other people like --- maybe fossils, or jewelry, or gem stones, or crystals, or even rocks for their garden.

It gets MUCH more complicated ... you are trying to catch the attention of someone who may not know that he or she likes rocks. And most people have many other interests and thoughts filling their lives, anyway.

So the "bait" for this person has to be really good. And, because most human beings don't really have a great sense of smell, you have to put the bait where that person is likely to see it.



Some of all this thinking went into Dave Lines' display that he set up at the Charles County Public Library in La Plata. It is located in the locked glass case on the right hand wall as soon as you enter the foyer area inside the library entrance. It BOLDLY advertises the Southern Maryland Rock and Mineral Club with a six foot long banner across the top. It has dozens of sparkly, shiny, colorful mineral specimens --- all labelled with name and location --- and some with short paragraphs explaining further. Four crystal structures of golden pyrite; a fist-sized cluster of long, water clear quartz crystals; native copper; shimmering blue and yellow polished labradorite; pink dolomite crystals; sparkly light green prehnite; bright blue chrysocolla; a flashy silver galena chunk; a purple cluster of amethyst crystals; a deep reddish brown cluster of shiny sphalerite crystals; a huge chunk of natural, robin-egg-blue turquoise; a chunk of red petrified wood; gem quality pink rose quartz; a piece of blue, blue lapis lazuli; sparkly Herkimer diamonds --- and even precious minerals like a gold nugget, deep green emeralds in matrix; an aquamarine crystal; and precious opal. And for those with very exotic tastes --- a meteorite from outer space!

There are fossils --- beginning with a huge great white shark's tooth; and including many varieties of sharks teeth; and other fossil teeth like porpoise and crocodile. Even a polished dinosaur coprolite. Fossilized bones, shells and coral.

And for the person who likes to wear their rocks --- jewelry galore (on loan from another club member) --- beautiful faceted stones; examples of silversmithing and wirewrap-

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Rockhound Bait

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ping; colorful neclaces, bracelets and rings --- all handcrafted.

And exquisite examples of lapidary projects --- polished spheres of rose quartz and unakite --- a gem tree of amazonite --- gembox of polished agate --- gorgeous cabochons of many colors and variety --- examples of "before" in the rough and the "after" in the polished, finished forms.

And special eye-candy like a huge slab of polished gold and red tiger iron; a fabulous piece of green scenic larsonite; a baseball-sized chunk of blue-green amazonite; bright yellow sulfur crystals covering a 10 inch specimen; and a ten pound Arkansas quartz cluster.

All this and more --- photos of club members in action --- at our rock show --- on field trips --- in mines, quarries and prospects. Pictures of our young club members, too --- we are trying to attract kids. Examples of our club's newsletters. Rock and mineral books and magazines; and a long list of recent club activities as well as a prominently placed flyer advertising our upcoming 19th Annual Jewelry, Mineral and Fossil Show.

Something for everyone. That's what we use for rockhound bait.

Upcoming shows and events

Submitted by Ralph Gamba

March 21 (10-6) March 22 (10-5) - 45th Annual Gem-Mineral-Fossil Show. Sponsored by the Gem, Lapidary, and Mineral Society of Montgomery County, MD. Montgomery County Fairgrounds, 16 Chestnut St. Gaithersburg, MD. Adults:\$6, Under Age 12 - Free

March 28 Southern Maryland Rock and Mineral Club Show - Clearwater Nature Center, Thrift Road, Clinton, MD 10:00 to 4:00 Admission \$2.00, under 6 free. For directions, see <http://www.freewebs.com/smrmc/2009rockmineralshow.htm>.

April 17-19 Charlottesville, VA – Treasures of the Earth Gem & Jewelry show Charlottesville National Guard Armory, 1640 Avon St. Fri: 10-6, Sat 10-6, Sun 11-5 adults \$3 (good for all three days)

May 2-3 Oregon Ridge Nature Center's Primitive Technology Weekend 10 AM to 4 PM each day. Oregon Ridge Nature Center, 13555 Beaver Dam Road, Cockeysville, MD 21030 410-887-1815. www.oregonridge.org.

If anyone has information on any other local shows or rock events, contact Ralph Gamba at rgamba@verizon.net, so they can be included in this list.

"Field trip to Rockville Quarry on Sunday April 5th --- limited to 10 slots. Details by email, and signup at March meeting."

Blow Out Tide Bonanza

By Dave Lines, Photos by Al Raucheisen

The perfect storm --- two days of gale force northwest wind combined with a new moon. In Maryland's Chesapeake Bay region, these uncommon conditions can cause "blow out tides" and set the stage for fabulous fossil hunting. In the best cases, the strong north winds literally push the water to the south --- out of the entire Bay --- and wide stretches of bay bottom become totally uncovered --- exposing a huge variety of Miocene and other fossils for which the Calvert Cliffs are world famous. On February 24th, 2009, the low tide on the Bay was exceptional --- a full two feet below normal.



With this scenario developing, an email was sent to the Southern Maryland Rock and Mineral Club for a Short Notice Fossil Field Trip. Four members responded --- Al, Carole, Dave and Flo. We met at Western Shores Estates in Calvert County on the Bay at 7 a.m.. Of course, the downside of a late February fossil hunt is cold weather --- and, boy, we had plenty that morning. The thermometer read 22 degrees (F) and the wind chill was around 10. B-r-r-r-r!!! But since we were dressed in many layers of winter clothing, it was both safe and doable.

When we reached the beach parking lot (*) at Flo's, the scene was incredible --- the tide was super low --- up to 100 yards of tidal bay bottom was fully exposed. This low tide was rare --- I had never seen it that low. We were like ... "Wow!"



Expecting to find fossils laying everywhere, we hurriedly put on our rubber knee boots and headed to the beach. But --- and this was a significant 'but' --- the beach and all the shallow water were frozen solid. We could see sharks teeth, but they were trapped in ice. But not to worry --- we were ready with hammers and screwdrivers --- pretty handy tools for chipping out ice-bound fossils.

Almost immediately, I spotted a nice tooth in the ice laying among the sand and shell fragments. After showing Al and Carole, so they knew what to look for, I used my tools to free the tooth by carefully chipping away the ice around its perimeter. It was a one inch specimen from the upper jaw of a snaggletooth shark (*hemipristis serra*) --- clean, no chips or cracks and little wear. Ice chipping works well for sturdier fossils like teeth and vertebra, but the more delicate items like shells had to await the predicted warm-up later in the day.

Before long, Carole started finding teeth, too, but not Al, who had walked out 50 yards on an icy sand bar. Instead of finding fossils, Al called back to us that he had found a "warm spot". He said..."it was really warm out there ---almost 70 degrees...." [Nice try, Al]. Meanwhile, Flo arrived and walked further north, closer to the cliffs --- and found some nice chesapeecten clam molds and some bone fragments.

(*) Note: Western Shores Estates is a private community with a locked beach parking area and access is limited to residents and guests only.

At about 8 a.m., we greeted another fossil hunter who arrived --- a big, gregarious fellow named "Dougie". Dougie is a professional. He has been selling fossils, especially large sharks' teeth, from the back of his truck parked along the highway every summer for over 20 years. He has a great eye for spotting fossils. Said he had picked up 64 teeth just the day before --- right in the same area where we were looking --- including a three inch mako (*isurus hastalis*) tooth --- (that is huge). He showed us



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Blow Out Tide Bonanza

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a two inch giant white shark (carcharodon megladon) tooth hanging around his neck. We talked awhile and he took our group picture. Then he headed north along the cliffs --- well past Flo.

Meanwhile, the temperature slowly began to climb in the bright sunshine. By 10 a.m. or so, Dougie returned with a couple of nice fossil barnacles --- both over two inches tall and in excellent condition. He left and headed elsewhere, saying he would come back when the ice melted more.

We decided to take a break and had some snacks and water. Flo left to eat lunch. Then we decided to walk south along the beach. The beach was much wider and sandier along this stretch. We could see the tall cliffs at Matoaka (pronounced Mat - toe - wock - a) Cabins about 2 and ½ miles to the south. Calvert Beach was just beyond that.

As we searched southward, the 5 to 10 feet of exposed bottom just outside of the normal low tide zone seemed to be the most productive. We found a few teeth at first, but the best finds were small porpoise vertebra, fish vertebra (probably tuna) and the Maryland State Fossil --- the ephora. During the next two hours, we walked about 2 miles south and picked up at least a half dozen vertebra and about 10 small, but fairly complete, ephora to 2 and 1½ inches long. Also, we found several pieces of fossil sand dollars (abertella aberti). Large barnacles and fossil bone fragments were abundant. Carole was very happy because she had found several nice ephora --- (she had been unsuccessful on several previous trips).

By the time we returned to the beach at Western Shores Estates, it was after 1 p.m. and the ice had completely melted. We started re-examining the same areas that had been frozen and covered in ice earlier. Bingo! I found a beautiful two inch tooth --- (probably a short-finned mako [isurus desori (oxyrinchus)]) --- no chips or cracks and little wear. It was the "find of the day". In the shallow water (about two inches deep), I found eight teeth in as many minutes. Both Carole and Al also began to find numerous teeth. The key seemed to be to "look for black" --- then investigate each piece further. Sometimes, it was just a stick or leaf or piece of brown glass or black shell --- but often, it was a tooth. The contraption consisting of a small wire scoop on a stick worked well in these conditions (and saved dipping our hands repeatedly into the frigid water).

About 2 p.m., Dougie returned. He had been visiting the owners of Matoaka Cabins. The big news there was someone had found a 5 inch megladon tooth the day before --- just laying on top. Lucky .

At 2:30 p.m., we decided to call it a day as the wind had died down and the tide was coming in fast. In another hour, the beach would probably be under a foot of water. Besides --- we had to get home and clean up our finds in time to take them to our Rock Club meeting that evening.

It had been a great field trip --- blow out tides had paid off again.

References:

1. A Field Guide to the Fossil Shark's Teeth of Calvert Cliffs, February 2003
2. A Field Guide to the Fossils of Calvert Cliffs, February 2003
3. Neogene Fossils of North Carolina: A Field Guide, Richard Chandler and John Timmerman, The North Carolina Fossil Club. 1994



Junior Rockhound Science Report

By Jaret Williams

Treasures from the Smoky Mountain Region

By Junior Geologist Rock Hound,

Jaret Williams

Every summer I would go to North Carolina to visit my grandparents. One summer we planned to go to Sheffield Mine in the Smoky Mountain Region near Franklin, North Carolina. That's when I started getting interested in rocks and minerals. At Sheffield Mine it is very, very dirty. There is a long wooden structure with umbrellas over it. It gets water from a pond and pumps the water into the wooden flume structure. We buy buckets from the real mine. Then we dump the buckets into a sifter – a rectangle shaped box with screen on the bottom to sift out the sand and dirt – what's left are rock and minerals.

I also visited Morefield Mine in Amelia, VA, which is southwest of Richmond. The main rock you will find at Morefield Mine is Amazonite. It is a green color. The better quality Amazonite is a dark green shade. Most of the Amazonite, however, is a light green color. Morefield Mine is even dirtier than Sheffield Mine. It is one of those mines where you sit down in the dirt and search for rocks. I found more than just Amazonite. I also found Smoky Quartz, Amethyst, Feldspar, and several more. I also found a 6 ½ inch long chunk of Amazonite. I was able to find my 6 ½ inch piece of Amazonite when the big front loader got rocks from the underground mine and brought it to the surface and dumped it. I dove in under everybody's feet dodging shovels and I grabbed the first thing green which turned out to be my 6 ½ inch chunk of Amazonite. Other rocks and minerals that can be found in the Smoky Mountain Region are....

Tourmaline is a very beautiful mineral. It can come in all kinds of shapes, sizes, tints, and shades. The scientific group for tourmaline is silicates, and the hardness is 7 – 7 ½. Tourmaline can also be found in a lot of minerals including beryl, zircon, quartz, and feldspar. Tourmaline can be a dark black and is usually long but not very wide. Tourmaline can sometimes even be transparent. Usually when tourmaline is transparent it is the color pink and green, which is then called Watermelon Tourmaline.

Topaz can come in a lot of different colors including white, gray, yellow, orange, brown, bluish, greenish, purple and pink. The hardness for Topaz is 8. The hardness for rocks is determined by Moh's Scale.

- | | | | | | | |
|-----------|-----------|-------------|-------------|------------|-----------------|---------------|
| 1) Talc | 2) Gypsum | 3) Calcite | 4) Fluorite | 5) Apatite | 5.5) Steel Nail | 6) Orthoclase |
| 7) Quartz | 8) Topaz | 9) Corundum | 10) Diamond | | | |

Pyrite is another rock that can be found in the Smoky Mountain region. The hardness is 6 – 6 ½ and its scientific group is sulfides. The yellow color in Pyrite makes miners think that it's gold so that's how it got its nickname Fool's Gold. Also, when pyrite is struck by a hard metal object it makes sparks.

Rose Quartz is a very beautiful pink mineral. Microscopic needles of the mineral rutile cause the pink color in Rose Quartz.

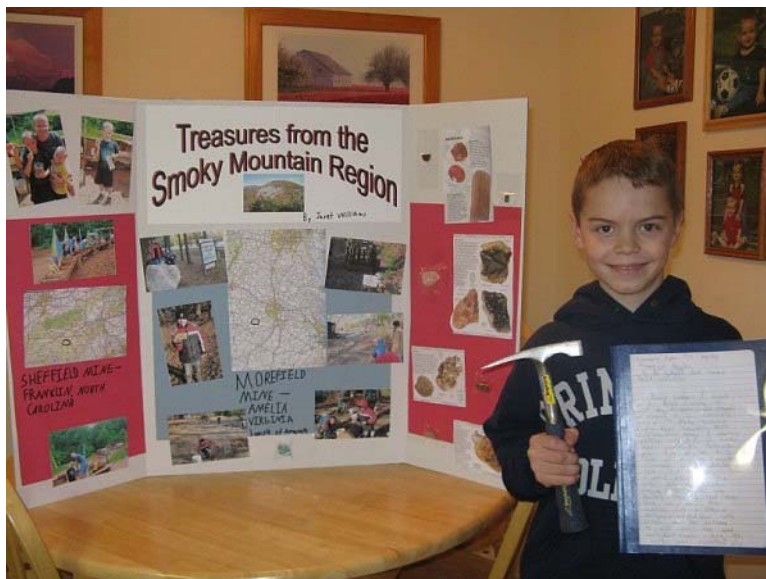
Amethyst is the purple variety of Quartz. It is a transparent mineral. Amethyst's color comes from small bits of iron within it. It has a long history as a gemstone. In early Christian church, Amethyst was believed to have sobering properties.

Garnets are used frequently in jewelry. On Moh's hardness scale Garnets are 6.5-7.5. Garnets can be found in most colors but not usually blue.

Rock samples I talk about in this report can be found on my display poster.

Sources

1. Usbourne Spotter's Guide Rocks and Minerals
2. National Audubon Society First Field Guide Rocks and Minerals
3. Eyewitness Handbooks Rocks and Minerals
4. My mom helped me organize my display poster.



Meet the Member

Submitted by Carole Raucheisen

Name: Paul Holden

Area live in: Cheltenham

Place of birth: Detroit, Michigan

Occupation: Retired teacher: English, Social Studies, Shop

Marital status/spouse's name: Linda

Number and ages of children: His son in Santa Cruz, Ca. is the official California State Astronomer; daughter-in-law is also an astrophysicist. The son has a theoretical background and the daughter-in-law comes from an engineering perspective, making some of their discussions interesting.

How became interested in rocks/minerals/fossils: At the age of 17 or 18 through his stepfather who did lapidary work and silversmithing.

How long a collector: For about 10 years. When he started traveling, a friend asked him to bring back a pretty rock, and he's been combining traveling and rock collecting ever since.

What you like to collect: Pretty rocks. When he and Linda travel and they see something interesting, they just stop by the roadside and start collecting. Once they collected some pretty rocks in Canada that turned out to be schist from the Canadian shield.

Favorite find and how found: Obsidian from an obsidian dome in the Tufa Lake area of California.

Favorite Rock Club experience: Collecting unakite at Rose River in Virginia.

Most memorable field trip: A year after Linda broke her leg in a muskrat hole in New Hampshire, Paul and Linda decided to take a follow-up trip to the scene of the crime. At a local gem and jewelry show, they met a fluorite mine owner who took them on a tour of the mine. The mine was not open to clubs, but Paul and Linda were considered clients, so were eligible for a tour. They collected many fluorite and quartz crystals.

What you have gained from the Rock Club: Knowledge about minerals: identification, formation, and chemistry.

What you would still like to find/collect: Opals from Nevada.

Other interests: Travel: they hope to explore more of the east coast in the future. They have recently been visiting covered bridge sites, and in early June, they hope to vacation in Vermont to hike and check out rock formations.



ROCKTALK

Clearwater Nature Center
 Maryland-National Capital Park &
 Planning Commission
 11000 Thrift Road



[We're on the web:]
www.freewebs.com/smrmc/

Message from the Editor

Spring springs upon us on March 21st and brings with it warmer weather and another season of rock hunting! Hopefully this will be the year you get your greatest find!

This month was packed full with great writing. I was thrilled to get the report from our junior member. I would love to have more things like it to put into the newsletter for everyone to experience. (Hint, hint!)

It was fun reading everything everyone submitted this month. I was so thrilled that in order to get everything in, I had to expand our newsletter 2 pages this month. I am able to be flexible in this, but would love to be able to fill this much space again next month.

Take a look at the previous 2 month's challenges. Also, take a look at this month's. I know I repeat myself often, but we can't get out a newsletter without member's submitting pieces. If you have an idea and would like to find out which direction to go, send me an email and we can figure out where to go from there. I won't write it for you, but I can try to give you some ideas.

Happy hunting and happy writing!

PROGRAMS/REFRESHMENTS

| | |
|--------|----------------------------------|
| March | |
| April | |
| May | Refreshments-Carole and Al R. |
| June | Refreshments-Jan and Bob Simmons |
| July | |
| August | Annual Potluck and Auction |

March's Newsletter Challenge.

This month, challenge yourself to share what you know. I am looking for tips for rockhunting. Anything that you can share with the rest of the club so everyone can have a fun, successful field trip: safety tips, digging tips, supply suggestions, etc. These will be added to the newsletter on a monthly basis to give a new piece to look for. New ideas are always great to read! Put your thinking caps on and share your tips today!