

Pharmaceuticals

A trip to your bathroom can be an instructive exercise on the importance of mining in your life. The main ingredient in numerous medicated powders is a mineral called talc; it is for this mineral that talcum powder was named.

The active ingredient in ointments for diaper rash, in anti-itch lotions, and in sunscreen lotions is zinc, while that for dandruff shampoos is either zinc or selenium. Antiperspirants contain zirconium. The fluorine in sodium monofluorophosphate ("fluoride"), the anticavity agent in toothpaste, comes from the mineral fluorite, and the main ingredient in many toothpastes is finely ground chalk (a rock). Vaseline (petroleum jelly) and the waxes in lipsticks are petrochemicals from oil wells. The list becomes much longer when prescription drugs are included.

Fuels and Electricity

Cars, trucks, trains, buses, airplanes--all are fueled and lubricated by products distilled from petroleum that came from oil wells.

Fuel oil, natural gas, and propane are used to heat our homes. More than 60% of this nation's electricity is generated by burning coal, a rock abundant in this country, and the balance is generated mostly by nuclear power plants, which use uranium from mines. Even hydroelectric power involves mining in large and necessary ways: for the concrete, rock, and steel in dams, the metal to make the turbines to generate electricity, and the copper wires to transmit that electricity elsewhere. Using wood as a fuel involves mining as well, for one has to cut the tree down somehow, and then size the logs into convenient lengths for burning. Even if you simply gather small branches to burn in your house, you likely burn them in a stone or brick fireplace, or a wood stove made from steel. And remember, if you took away the products of mining from a typical house, there would be no house at all: no foundation, walls, or roof, no brick facing or aluminum siding, no water or drain pipes, no electric wiring, no bathroom fixtures, no windows, no paved or gravel driveway.

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The Micromount Corner

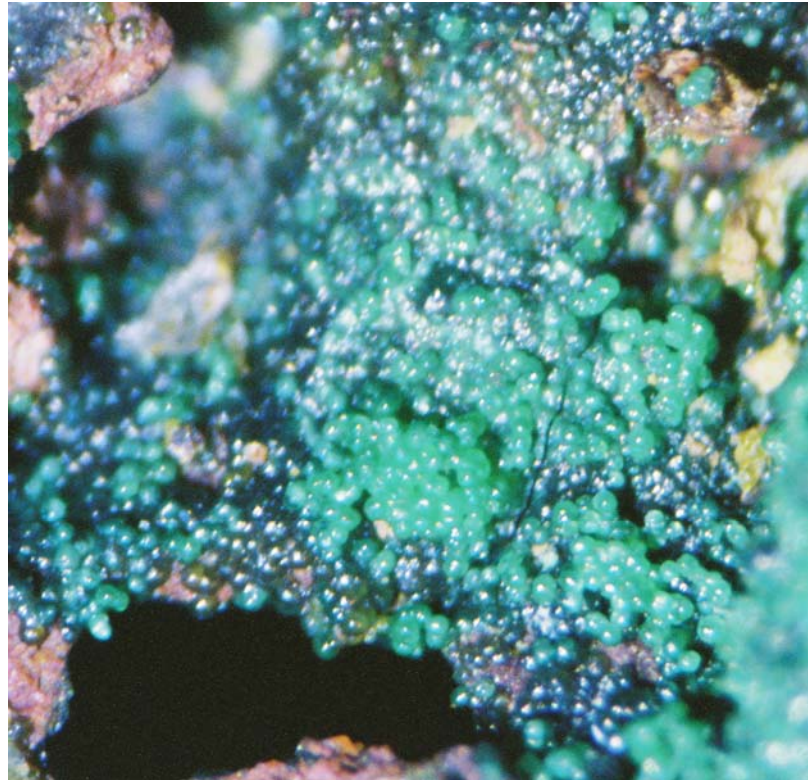
Dr. David Babulski



Greetings everyone. This month we will look at one of the more interesting "bubbly" minerals. By bubbly, I mean occurring in botryoidal or mammillary habit. The mineral I have in mind for this month is conichalcite, a calcium copper arsenate hydroxide. This mineral typically forms in the oxidation zone of copper ore bodies.

Conichalcite does occur in crystalline form but this a quite rare. This mineral is usually expressed as deep grass green botryoidal masses that look for all the world like bunches of green grapes all clustered together. Conichalcite was first discovered in 1849 at Hinojosa, Cordova, Spain. Shown below is a photomicrograph of conichalcite from the Gold Hill Mine in Tooele Co., Utah.

What is really cool is to find some of the conichalcite that is in a protected vug and expose the material. This usually yields some brilliant green and lustrous bubbly material. When strongly illuminated, the mineral will take on an eerie green glow.



(photo and specimen, David Babulski)

There is an added bonus for us micromounters. A second mineral species is in a solid solution series which is a mineral that is structurally identical to conichalcite but differs in chemistry. This second species is calciovolborthite. In this mineral species, the arsenic is replaced with vanadium. Where conichalcite is the pretty grass green, calciovolborthite is a really weird green yellowish green. Calciovolborthite also usually is manifest as masses of small crystals. This vanadium rich end member of the solid solution series is much more of a rarity. At the last three Atlanta mineral shows I found conichalcite at every dealers table. However I found only one specimen of calciovolborthite. With some judicious trimming, both of these mineral species can yield some fantastic micromounts. Until next month, may all your skies be blue and all your vugs be crystal filled.

SPRING COLLECTING TIPS

Spring is here and we sometimes forget that it is time for the sunscreen and insect repellent. Even though it is early in the year and the weather remains mild, the threat of sunburn and insect bites is very real. Nothing can ruin a fine day of collecting like sunburn and multiple insect bites. Remember the winter method of layering clothing. In the spring, the mornings may be quite cool with very warm afternoon temperatures. Remember this is the time that the snakes begin to come out and sun themselves in the afternoon. Take care and have a good time.

Joan White and Bill Waggener

The Apatite Group

Julian C. Gray

Group Definition: Hexagonal, monoclinic, or pseudo-hexagonal arsenates, phosphates, and vanadates with the following general formula: $A_5(XO_4)_3(F,Cl,OH)$, where: A = Ba, Ca, Ce, K, Na, Pb, Sr, Y, X = As^{5+} , P^{5+} , Si^{4+} , V^{5+} , (CO_3) may partially replace (PO_4)

Names (Blackburn and Dennen, 1997):

APATITE - The name sake of the apatite group is derived from the Greek word *apatan*, "to deceive", because it is easily confused with similar minerals

BELOVITE - (Named for crystallographer Nikolai Vasilievich Belov (b. 1891), professor of crystallography at the Moscow Lomonosov State University from 1961 until his death in 1982. The -Ce and -La refers to the dominant rare earth element occurring in the mineral.)

COLLOPHANE (a variety of apatite, not a species) - (Greek: *kolla* meaning glue and *phainestha* meaning to appear - alluding to its colloidal aspect)

MIMETITE - (Greek: *mimetes* meaning an imitator (similar to mimic) alluding to its resemblance to pyromorphite.)

PYROMORPHITE - (Greek: *pyr* meaning fire and *morphe* meaning form - alluding to the globules formed by heating then cooling the mineral. NO, you can not try this with my specimens.)

VANADINITE - (Its name reflects its chemical composition.)

General Information, applicable to all minerals of the apatite group:

Mineral Class: Generally phosphate, but also arsenates or vanadates.

Strunz Class - 8.BN.05 or 8.BN.10

Crystallography: These minerals are most commonly hexagonal, typically occurring as hexagonal prisms, {100}, with flat terminations, {001}. The termination is often modified by hexagonal dipyramids, {101}.

Specific species information:

Apatite

Physical properties: H 5 (it is the standard for the Moh's scale of hardness); G 3.15-3.20 (low - medium), Luster - non metallic, vitreous to subresinous; Color - variable, but usually some shade of green or brown, also blue, violet, or colorless; fluoresces orange or yellow in SW and LW ultraviolet. Fluorescence may be zoned. May be distinguished from beryl by hardness (apatite can be scratched by a [good] knife. Also, apatite has pyramidal faces on the termination.

Apatite is a group name and not an approved mineral

species name. If not specified, the term apatite generally refers to fluorapatite. The World standard of hydroxylapatite comes from the "Verde Antique" quarry near Holly Springs, Cherokee County, Georgia. Collophane is the cryptocrystalline variety of apatite. It makes up the bulk of phosphate rock (phosphate ore) and fossil bone.

Occurrence: Accessory mineral in wide varieties of rocks. Also occurs as euhedral crystals in pegmatites and hydrothermal deposits.

Famous locations: Ontario and Quebec, Canada; Kola Peninsula, Russia; Tyrol, Austria; Switzerland; Auburn, Maine; St. Lawrence County, N.Y; Alexander County, North Carolina; and San Diego County, California.

Uses: Apatite is used as a phosphate fertilizer. Transparent varieties are used as gemstones, although it is too soft for this purpose.

Pyromorphite

Physical properties: H 3-1/2 to 4; G 7.04 (heavy because of lead content); Luster - resinous to adamantine; Color - usually various shades of green, brown, yellow, and rarely orange-yellow, gray, or white; subtransparent to translucent. Easily distinguished by its crystal form, luster, and high specific gravity. Mimetite is the lead arsenic equivalent of pyromorphite, which explains why it mimics pyromorphite in its physical properties.

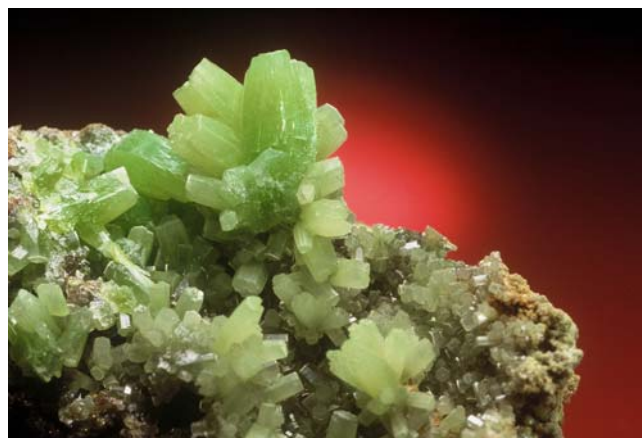
Occurrence: Pyromorphite is a supergene mineral formed in the oxidized portions of lead veins. It is commonly associated with other oxidized lead minerals.

Famous locations: Zschopau, Saxony, Germany; Ural Mountain, Russia; Cumbria, England; Leadhills, Scotland; Phoenixville, PA; and Coeur d'Alene, Idaho. Recently, exceptional dark green pyromorphite has been found in Guanxi Province, China.

Uses:

Less significant ore of lead.

Pyromorphite from Doaping, Guanxi Province, China. The main crystal is 3 mm wide. (Julian C. Gray, specimen and photo)



Vanadinite**Physical properties:**

H 3; G 6.9 (heavy); Luster – resinous to adamantine; Color – usually ruby red, orange-red, brown, or yellow; transparent to translucent. Endlichite is an intermediate mineral between vanadinite and mimitite; i.e. endlichite is a lead arsenate-vanadate chloride.

Occurrence: Vanadinite is a rare secondary lead mineral found in oxidized portions of lead veins. It is commonly associated with other oxidized lead minerals.

Famous locations: Oudjda, Morocco; Grootfontein, Namibia; and in various mining districts throughout New Mexico and Arizona.

Uses:

Ore vanadium and minor ore of lead.



*Vanadinite, Milbladen, Morocco (8 cm x 3.5cm)
Julian C. Gray, specimen and photo*

Species related to the Apatite Group:

Herderite – $\text{CaBePO}_4(\text{F}, \text{OH})$

Hydroxylherderite – $\text{CaBePO}_4(\text{OH})$

These are essentially the beryllium equivalents of apatite and occur in similar environments, especially pegmatites and hydrothermal veins.

Complete listing of Apatite Group mineral, varieties, and synonyms: Valid mineral species names in bold. Chemical formulas and crystal system from Mandarino and Back (2004). Comments on synonyms or varietal names from Blackburn and Dennen (1997).

Alforsite $\text{Ba}_5(\text{PO}_4)_3\text{Cl}$ Hexagonal

Apatite $\text{Ca}_5(\text{PO}_4)_3\text{F}$ Hexagonal – A group name. If not specified, generally refers to fluorapatite

Belovite $(\text{Sr}, \text{Ce}, \text{Na}, \text{Ca})_5(\text{PO}_4)_3(\text{OH})$ Trigonal

Belovite-(Ce) $\text{Sr}_3\text{Na}(\text{Ce}, \text{La})(\text{PO}_4)_3(\text{F}, \text{OH})$ Trigonal

Belovite-(La) $\text{Sr}_3\text{Na}(\text{La}, \text{Ce})(\text{PO}_4)_3(\text{F}, \text{OH})$ Trigonal

Britholite-(Ce) $(\text{Ce}, \text{Ca})_5(\text{SiO}_4, \text{PO}_4)_3(\text{OH}, \text{F})$ Hexagonal

Britholite-(Y) $(\text{Y}, \text{Ca})_5(\text{SiO}_4, \text{PO}_4)_3(\text{OH}, \text{F})$ Hexagonal

Carbonate-apatite $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3(\text{F}, \text{OH})$ Hexagonal.

Carbonate-fluorapatite or carbonate-hydroxylapatite

Carbonate-fluorapatite $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3\text{F}$ Hexagonal

Carbonate-hydroxylapatite $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3(\text{OH})$

Hexagonal

Chlorapatite $\text{Ca}_5(\text{PO}_4)_3\text{Cl}$ Monoclinic

Clinomimetite $\text{Pb}_5(\text{AsO}_4)_3\text{Cl}$ Monoclinic

Collophane $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3(\text{F}, \text{OH})$ Hexagonal. a massive fine-grained member of the apatite group, usually refers to carbonate-fluorapatite or carbonate-hydroxylapatite

Dahlite $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3(\text{OH})$ Hexagonal. Synonym for carbonate-hydroapatite

Dehrnite $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3\text{F}$ Hexagonal. Synonym for carbonate-fluorapatite

Endlichite $\text{Pb}_5(\text{AsO}_4\text{VO}_4)\text{Cl}$ Hexagonal. Intermediate between mimetite and vanadinite.

Fermorite $(\text{Ca}, \text{Sr})_5(\text{AsO}_4, \text{PO}_4)_3(\text{OH})$ Hexagonal

Fluorapatite $\text{Ca}_5(\text{PO}_4)_3\text{F}$ Hexagonal

Hedyphane $\text{Pb}_3\text{Ca}_2(\text{AsO}_4)_3\text{Cl}$ Hexagonal

Hydroxylapatite $\text{Ca}_3(\text{PO}_4)_3(\text{OH})$ Hexagonal

Johnbaumite $\text{Ca}_5(\text{AsO}_4)_3(\text{OH})$ Hexagonal

Lewistonite $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3\text{F}$ Hexagonal. Synonym for carbonate-fluorapatite

Mimetite $\text{Pb}_5(\text{AsO}_4)_3\text{Cl}$ Hexagonal

Morelandite $(\text{Ba}, \text{Ca}, \text{Pb})_5(\text{AsO}_4, \text{PO}_4)_3\text{Cl}$ Hex/Trig

Pyromorphite $\text{Pb}_5(\text{PO}_4)_3\text{Cl}$ Hexagonal

Strontium-apatite $(\text{Sr}, \text{Ca})_5(\text{PO}_4)_3(\text{OH}, \text{F})$ Hexagonal

Svabite $\text{Ca}_5(\text{AsO}_4)_3\text{F}$ Hexagonal

Turneaureite $\text{Ca}_5[(\text{As}, \text{P})\text{O}_4]_3\text{Cl}$

Vanadinite $\text{Pb}_5(\text{VO}_4)\text{Cl}$ Hexagonal

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The Georgia Mineral Society
 Georgia's Oldest Gem and Mineral Society - Founded in 1935
GMS APRIL Mineral Field Trip
Standard Mineral Company
Glendon, North Carolina
Saturday, April 9th, 2005
8:00 AM till Noon
Free Trip

Trip: The Georgia Mineral Society has again been invited to participate in one of the best and most interesting field trip opportunities in the Southeast. If you have not collected here in the past, you should not miss an opportunity to go to this quarry for quality specimen/cabinet grade pyrite. The Glendon pyrophyllite mine is an open pit quarry that has produced many perfect pyrite crystals up to 4 inches on a side and 6 inches long!! Generally, you can find a cube approaching 2 inches or so and a bunch of others in all shapes and sizes up to one inch or more. The pyrite cubes are located loose on the surface or in seams down a foot or less in the bottom of the quarry floor. If it hasn't rained for some time, the light gray pyrophyllite soil seems to coat everything with a gray goop that makes it difficult to identify the pyrite crystals on the surface. Using a VERY GOOD metal detector makes the hunt almost a "no brainer"! A basic metal detector may offer some help in finding those cubes containing the most iron but just digging anywhere in the quarry floor will probably yield much quicker results. On a previous trip here four children unearthed huge pyrite cubes less than 10 feet from Jim Haege who was using "industrial strength" hard rock tools and not being nearly as successful. A couple struck a large pyrite seam and had no trouble filling up two 5 gallon buckets with cubes and one very large matrix piece. So, luck and/or a very good metal detector has a lot to do with success!

You may also find small greenish blue fluorite crystals in crevices on some of the larger boulders strewn about the middle of the quarry floor.

Collecting: pyrite cubes, pyrite cubes in matrix, green fluorite, and micro-minerals.

Bring: You will need hard rock equipment for mining the quarry floor. Bring a small shovel, pick, rock hammer, small sledge, chisels, eye protection, buckets, etc. Surface collecting with scratching tools and a small pick can be just as productive and a lot easier. Don't forget your gloves, sturdy shoes or rubber boots, hat, sun screen, something to munch on and plenty of fluids.

DIRECTIONS TO THE MEETING PLACE: Take 1-85 North to Charlotte, North Carolina. On I-85 North of Charlotte, either exit the interstate at Lexington on to US 64 and travel through Asheboro to SR 42. Turn right and follow SR 42 past Coleridge and Bennett; turn right onto SSR 1006/ Glendon-Carthage road. OR exit I-85 at Concord and travel through Albemarle (SR 73 to SR 24) to

just past Carthage and turn left on SSR 1006/ Glendon-Carthage road. The mine is located on the left about one mile or more south of the SR 42 turn off or about one and a half miles north of Glendon on the right side when coming North from SR 24. Sanford, which is 12 miles to the East of Glendon, is probably the best bet for finding a good motel room and nearby restaurants.

GMS has made arrangements with the Comfort Inn in Sanford, NC to hold a block of rooms at a special group discount rate good on reservation made for Friday through Sunday, April 8th, 9th and 10th, 2005. The rooms set aside for us contain two double beds but you may specify a one king bedroom at the same rate when you call to make your reservations. Our block of rooms will be reserved at the group rate until 6PM on Friday, April 8th, 2005. The Comfort Inn had a very good hot breakfast ready for us before we departed for the dig in last time. Also, this motel is located next to a good seafood restaurant which seems to be very popular with the locals! On US 1 take Greensboro Dunn ex. Left to SR 421 N. (Horner Blvd.) Hotel 1/2 Mi. on left.

Comfort Inn, 1403 North Horner Blvd., Sanford, NC 27330
 Reservation Phone: 919-774-6411

Group Rate: \$50.95+tax/per day
Group Name: Georgia Mineral Society
Travel Time: A little over six hours and 342 miles from the I-85/I-285 North interchange in Atlanta.

George Libby, GMS Field Trip Chair
Telephone: 770-978-2117
Fax: 770-985-4281
Cell Phone: 678-910-7476
email: Onsiteinatlanta@yahoo.com

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Official GMS Field Trips are scheduled for GMS members only. These trips are not to be advertised to other clubs in newsletters or by other means.

*A lucky collector at Glendon in October 2004 displays his finds.
 (photo by Bill Waggener)*



The Southeast Federation of Mineralogical Societies, Inc

The Friendly Federation - Founded in 1976 to serve.
SFMS Field Trip Committee

An Official Field Trip of the DMC Program of the SFMS Field Trip Committee

An Official Field Trip of the GEORGIA MINERAL SOCIETY

Graves Mountain "Rock Swap and Dig"

8 AM to 6 PM, Friday, May 13, 2005

8 AM to 6 PM, Saturday, May 14, 2005

(HOT FOOD/drinks, Saturday, May 14, 2005)

8 AM to 6 PM, Sunday, May 15, 2005

"GMS has been invited to field collect minerals at Georgia's premiere mineral location!"

The SFMS Field Trip Committee has been contacted by the caretaker in charge of Graves Mountain, Junior Norman, to invite all member clubs of the DMC to a three day dig and rock swap on the mountain during May 13-14-15, 2005. He will have the mountain open to collecting from 8 AM to 6 PM each day. All participants must stop at the welcome table to sign a liability release and make a small contribution to defray the cost of opening the mountain and providing port-o-lets. There will be several golf cart type vehicles available to transport those participants who have trouble walking long distances. The dig will cease and everyone is expected to be off the mountain by around 6 PM each day. Participants will be allowed to park in a designated area on the mountain.

Rock Swap and Hot Food/Drinks:

Junior will set aside an area in the parking lot for tables to be setup for a daily rock swap. Anyone who would like to setup a table(s), please contact Junior at the phone numbers listed below. Hot food cooked on the grill or BBQ will be available for purchase on the mountain during Saturday, May 14, 2005. Cold drinks will also be available for purchase.

Contact Information:

Clarence Norman Jr. - 706.359.3862 (his business) or 706.359.2381 (his home)

Please go to this site for a map to Graves Mountain:

<http://www.gamineral.org/commercial-gravesmountain.htm>

DIRECTIONS: From Atlanta's I-285, take I-20 east to the exit for Washington, GA SR 78 (SR 10, SR 17) and turn left. Travel north to Washington, turn right onto SR 378 and drive 11 miles to the Graves Mountain area. The entrance to Graves Mountain is on your right about 8/10 mile past the Lincoln county line sign. The entrance is a paved road that goes through a gate and up a hill. Proceed up the hill and park. Next, go to the welcome tent to sign a liability release and make a small contribution to defray the cost of opening the mountain and providing port-o-lets.

"Field trips are open to all members of associated clubs of the DMC program of the SFMS Field Trip Committee and to all members of SFMS member clubs who have provided their membership with SFMS liability insurance. Because of insurance requirements, members of the GENERAL PUBLIC are NOT invited on this or any DMC program field trips!"

DMC Program / SFMS Field Trip committee's purpose: To collect field trip information from it's member societies; schedule and coordinate field trip dates; disseminate field trip information to all member clubs so that each member society may publish this information as one of their "official" scheduled field trips.

Please reply by e-mail to: dmc@gamineral.org

World Wide Web site for the DMC is:

<http://www.gamineral.org/dmc.htm>

DMC is a program of the Field Trip Committee of the Southeast Federation of Mineralogical Societies, Inc. Copyright © All rights reserved.

"Earth first...we'll collect on the other planets later."



**ADOPT-A - HIGHWAY
 EGG HUNT 2005**

Saturday, April 16, 2005

10:00 AM

Ball Ground, Georgia

All members are invited to our **8th ANNUAL LITTER PICK-UP AND EGG HUNT**, taking place on Saturday, April 16th, at 10:00 A.M.

Plastic eggs are concealed in litter and hidden along the G.M.S. adopt-a-mile.

Eggs are redeemable for mineral, gem, and fossil related prizes. Join us to help keep Georgia "peachy-clean" and share in the fun and prizes. For those who have not yet participated in a litter pick-up, it goes quickly, is rewarding to the environment, and if you didn't discover enough eggs during the Easter holiday then here's another opportunity to impress your bunny.

All ages are welcome but young children should be supervised, as our mile is a moderately busy part of Hwy. 5. Wear old clothes, boots or sturdy shoes, and don't forget a pair of gloves. Trash bags and safety vests will be supplied as usual.

Directions to the meeting place: Take 1-75 North to I-575 North. Go 35 miles to exit 27 (Bus.5) – the Howell Bridge Rd/Ball Ground Exit. Go right to the stop sign and left on Bus.5/Canton Highway. We will meet 0.6 mile on the left, at the Thriftown/Conoco Station. Please park on the side away from the store. It takes about 30 minutes from I-75/I-575 to our meeting site.

**Rob Peard, Adopt-A-Highway Chair
 Talkin' Trash at (770) 936-0180**

MEMBERSHIP NEWS

Please join me in welcoming the following new members to Georgia Mineral Society: Alka Kapoor of Atlanta, GA; Arun, Jyoti, Kedar, and Omkar Kulkarni of Chamblee, GA; Jon, Cheryl, Beth, Sallie, Conner, and Jimmy Mack of Decatur, GA; and Lee, Shell, Lara, Liane, and Steven Rogers of Jeannette, PA. We hope to be able to meet all of you sometime soon at a meeting or field trip

Happy rockhounding!

Lizabeth McClain, Executive VP/Membership



GEM SECTION NEWS

**Monday, April 25, 2005
7:30 PM
2605 Van Court
Snellville, GA, 30078**

This month we will discuss the light phenomena in gemstones. Supper will be at 6:30pm.

Please RSVP to Kim at 770-979-8331

Hope you can make it,

Kim Cochran, Gem Section Chair

EDUCATION NEWS

GMS will be hosting a booth at Zoo Atlanta on April 22nd and a table at Fernbank Museum on April 16th for Earth Day activities in April.

Anita Westlake, Education Chair

JUNIOR SECTION

**April 10, Sunday, Providence Canyon,
Lumpkin, GA
Field Trip -Meet at Providence Canyon State
Park, 12 Noon**



This is a three hour drive to the Canyon. We will have a picnic lunch (**bring your lunch, there are no fast food areas nearby**) and then go climbing into the canyon. This is not a collecting site since it is a state park but a great place to have fun learning about erosion and finding fossils in the sedimentary layers. We will get dirty. We will leave the Canyon at 3 PM and be home by 6 PM. Call me for any other questions you may have. The website that I have listed gives information and directions to the Canyon. We will meet at the visitor's center at noon on Sunday. We will see a short 13 minute video about the canyon, have lunch and go down into the Canyon. **Water shoes** are very handy for this area. We will be walking in very small streams to get to certain areas. A **change of clothes** would be another option, just in case you fall or get too muddy to get back into the car. I will have my cell phone if you need me.

<http://gastateparks.org/info.asp?id=20&linkval=providence&siteid=5>

Roxanne Lopez, Junior Section Chair

Home: 770-436-0387

Work: 404-814-4031

Cell: 678-491-7175

SUNSHINE NEWS

Happy Birthday to the following GMS members:



Glenn W. Summerlin, 4/1
Jeremiah Wood, 4/17
Jorge Buznego, 4/21
John C. Praser, 4/23
William G. Waggener, 4/24

Kim Cochran has been very busy as usual. He spoke on separate occasions to the Northeast Georgia club on caves and on plate tectonics; to the Cobb Gem and Mineral Society on the gemstones of the bible; and to the Columbia Gem and Mineral Society on gold. Carolyn Daniels spoke to four seventh grade science classes (life science) at the new Tucker Middle School on February 15th. Anita Westlake spoke to the Athens Gem and Mineral Society on amber and to Cobb on meteorites. Bill Waggener spoke to a group at the Dunwoody Nature Center in February on the geology of Georgia and will speak to a group of elementary school teachers about geology in April. Bill is fighting a battle with his thyroid right now. The thyroid has been winning for the past few months, but I have my money on Bill now that he has consulted a doctor and is taking medications.

Joan White, Temporary Sunshine Chair

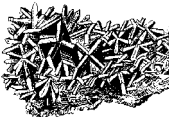
FOSSIL SECTION NEWS

There will be no fossil section meeting this month. Please keep an eye on future issues of Tips and Trips for an announcement regarding the next meeting.



*Friends, like fossils, are forever,
Harry Yingst, Fossil Section Chair*

MINERAL SECTION NEWS



There will be no meeting of the mineral section in April. Details of the next meeting in May will be announced in upcoming Tips and Trips and on the GMS web page. If you would like to host a meeting in your neck of the woods or give a presentation, please contact me!

Thank you!

Julian C. Gray, Mineral Section Chair

MICROMOUNT SECTION NEWS



The Micromount Section meeting this month will be April 21st at 7:30 PM at the Fernbank Science Center. Please bring your specimens and microscopes.

Dave Babulski, Micromount Section Chair