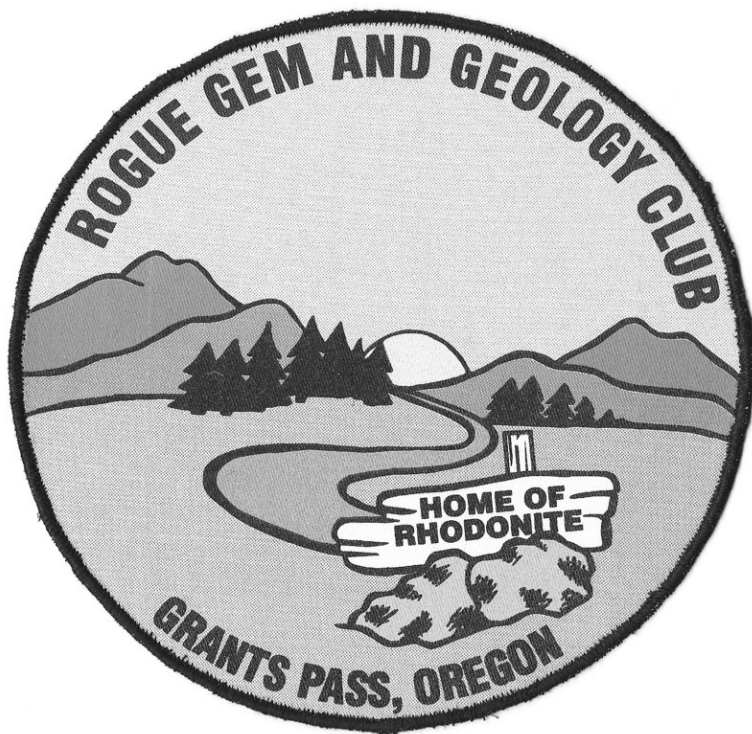


GEMS OF THE ROGUE
PO Box 1224
Grants Pass, OR 97528

**FIRST CLASS MAIL
DATED MATERIAL**



OFFICIAL PUBLICATION OF THE ROGUE GEM & GEOLOGY CLUB, INC.
"THE FRIENDLY CLUB"

2010/11 OFFICERS	
President Mary Bowers — 541-479-1045	Vice-President Dick Bowman — 541-472-9609
Treasurer Jan Patrick — 541-476-9174	Secretary Jan Arnold — 541-862-8715
Sergeant-At-Arms Mary Blankenship — 541-862-2989	
COMMITTEE HEADS	
Ways & Means Fair Sales Linda Pullen — 541-476-1712 Trish Hepburn — 479-1488 Fair Workshop Barbara Catania — 541-582-3248	Show Chairperson Mary Bowers — 541-479-1045 Co-Chairperson-OPEN
	Club Claims John Hudick — 541-472-8585
	Librarian, Historian & Club Photographer Bonita Spencer — 541-476-6980 Andie Springer — 541-441-4908
Shop Foreman Wally Coleman — 541-471-3337	Hospitality Janet Sessions — 541-855-1461 Laurel Krencik & Winifred Paris
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Equipment and Grounds Dick Marsh — 541-474-3246	Refreshments Orley Ringering — 541-582-1893
Field Trips Roy Lichtenstein, Bill Patrick & Jim Hawkins	Auctioneer & Evening Workshop Gary Ruehling — 541-660-6894

<u>GENERAL CLUB INFORMATION</u>
<ul style="list-style-type: none"> • The purpose of the Rogue Gem & Geology Club is to foster healthful fellowship among its members while pursuing the activities and knowledge of the earth sciences, and to serve the community by introducing its young people and adults to the wonders of the mineral world. • Regular meetings are held the first Wednesday of each month at the Fruitdale Grange, 960 Rogue River Hwy., Grants Pass. Meetings begin at 7:30, and Guest are always welcome. • Members are entitled to use the equipment and join in the classes that are available at the clubhouse located at 1003 Isham, Grants Pass. • A one-day field-trip is held each month on the second Saturday or Sunday following the club meeting. A once a year extended field-trip is usually held each June. • Membership dues of \$20.00 per year per (immediate) family include the bulletin, "Gems of the Rogue" and are payable at the general meeting. Individual junior (youth ages 12-18) membership dues are \$7.00 per year. • Non-Member subscription to the bulletin is \$15.00 per year. Send subscriptions to P.O. Box 1224, Grants Pass, OR 97528. We exchange bulletins with other clubs at no charge. • Deadline to submit articles in the bulletin is the 2nd Wednesday of the month. • Permission to reprint material from the bulletin is granted provided due credit is given. <p style="text-align: center;">Visit our Website at — www.roguegemandgeology.com</p>

GENERAL MEETING MINUTES

August 3, 2011

The meeting was called to order by President Mary Bowers at 7:30 p. m.

Mary Blankenship led the pledge of allegiance.

Minutes: Mary Bowers asked if there were any corrections or additions to the minutes. There were none. The minutes were approved as written.

Program: There was no program.

Announcements: Mary Bowers and Mary Blankenship presented the "Food Table" they have been working on. Ken Morrow brought in a major donation of items for the table. Thank you Ken!

Connie Silver announced that the Roxy Ann Fun Day will be Sept 10th from 9 to 2. This is a sales event where you can sell rocks or anything you want. Then at noon there will be a potluck. Connie and Harold will provide the sandwich makings. If attending bring a side dish or dessert. At 2:30 there will be an auction of museum surplus rock.

Mary Bowers reported that we are planning on having a table at the next Psychic Fair. Donations of New Age products gladly accepted.

Vests are here. If you ordered one get it from Mary. Costs is \$15.00.

Club picnic will be September 17th at Merlin Park. Sign up if planning on attending.

Fair: Linda Pullen asked for donations of jewelry and other items people make that could be sold at the fair. Mary Blankenship reported that we still need people to sign up for display cases. We are having a pet rock case. Set up will start Sunday the 14th when we will haul the trailers and equipment. Monday at 8:00 a. m. the loose stuff from the clubhouse will be moved and we will do the booth set up and display cases. Sunday the 21st at 8:00 a.m. will be take down. Anyone with a case needs to be there at 8:00 to empty their case.

Ways and Means: Barbra Catania reported she is all ready for the fair. Thank you to Winifred for all the good ideas and to Carmella and Jo and all the other people who implemented the ideas as well as their own.

Workshop: Wally Coleman reported that the cleanup day went well.

Claims: John Hudick reported that all was well. He will fill out the affidavit of assessment before the end of the year.

ALA: Bill Patrick requested people write their Senators and Representative in regards to public access to public lands.

Show: Mary Bowers reported that letters have been sent to the area schools so they can plan their attendance at the show.

Membership: Membership dues are payable in September. We are requesting everyone fill out an application with their dues so we can update our records. We are still looking for a volunteer to take over membership.

Classes: Thursday night class on August 11th will be Marlene Brown teaching how to make square hole beads. Class will meet 5 to 8. Please sign up if attending. August 25th will be arrowhead knapping. Bring a copper tool for knapping and a piece of leather for protecting yourself from the chips.

Bulletin: Jim Hawkins stated that within a few months the bulletin will be available on-line and that people who would like to receive their bulletin on line can check that area on the applications.

Hospitality: There were 68 members and 7 guest in attendance. Linda Harger won the member prize, Richard Ebipane won the 50/50 and the Silver's won the donation prize. Thank you to Dick Theilbar, Jim Ward, Wally Coleman and Roy Lichtenstein for donations to the hospitality table.

Field Trip : August field trip will be August 6th to Applegate Jade.

Board Meeting: We need to get an inventory of all club equipment and keys. If you have any club equipment or keys please contact a board member. Members shared their "O" rocks. Rock of the Month for September starts with "P". Meeting adjourned 8:43.

Minutes submitted by Jan Arnold

TAILGATE SALES & PARTY REMINDER. . .

Saturday, Sept 10th the RAGMS will be having their annual fun day, 9a.m to 2p.m. at the parking lot of the Crater Rock Museum. Everyone is invited to join the tailgate sales or just come for a day of shopping, fun & food. Harold & I will be furnishing the sandwich fix'ns, ice tea and lemonade. Members please bring a salad or desert and your table servings.

After the fun day, the Crater Rock Museum will be having an auction of old stored pieces from the museum. Should be fun to watch and even pick up a piece or 2 for your collection.

More information about the fun day at the next meeting or call me at 541-770-9459. Connie Silver

BOARD MEETING MINUTES

August 10, 2011

The meeting was called to order by President Mary Bowers at 1:15 p.m.

Jan Patrick reported that she has received a letter from RCC Foundation saying it is time to pay our scholarship recipients. Jan Patrick made a motion to give two \$250 scholarships this year. Mary Blankenship seconded the motion. Motion passed.

Linda Pullen reported that we are ready for the fair. Sunday will be table and case set up. Monday morning we will bring in the things we are selling and people can fill their cases. When we purchase our booth space for the fair the group receives 2 vendor parking tickets. We are allowed to buy 2 more parking tickets. This gives the club a total of 4 parking tickets. Mary Blankenship made a motion that the tickets be allotted as follows: 2 parking tickets for the people who open the booth each day. These are the people carrying in the water, we all drink, and all the materials needed daily in the booth. The other 2 parking tickets for the people closing the booth each night and leaving with the funds collected. Wally Coleman seconded the motion. Motion passed.

Wally Coleman stated he and Jim Hawkins are still investigating the options available for saw oil. He also reiterated the need to check into a proper ventilation system over the saws. Any member with experience with duct work and vent systems please see Wally and offer your input and volunteer to help. Wally also suggested the club form a policy for the loaning of surplus club equipment to members. This was tabled for future discussion.

Bill Patrick reported that area miners are forming a mining district. Also there will be an event at Cantrall Buckley on September 11 to raise funds for stopping the federal government's land grab. Buchanan thunder eggs are going to be open on the weekend of September 16 to 18. This area has been closed for years. Wally Coleman made a motion that Dick Theilbar be given the authority to purchase up to \$200 worth of the thunder eggs for club use. Jim Hawkins seconded the motion. Motion passed.

Claims Manager John Hudick reported that there will be a field trip to Sunny Valley on October 8th for serpentine. The Board and John Hudick reviewed R.G. & G.'s "Rules for Members Mining and Collecting at Club Claims. A few points were picked out for clarification. John Hudick will type out the changes and present the modified rules to hand out to the general membership.

Jim Hawkins reported there will be a field trip to Zinc Creek on September 24th. There has been some logging done in the area and the soil disturbed so perhaps some good carnelian has been exposed. Jim Hawkins said that if quite a few people sign up to receive their bulletin via email, he needs a pdf program in order to facilitate that process. Mary Blankenship made a motion that the club purchase a pdf software program. Linda Pullen seconded the motion. Motion passed.

Club picnic is planned for September 17th. Start gathering items for the white elephant auction and for the rock silent auction. Mark the date on your calendar!

Meeting was adjourned at 3:40.
Minutes submitted by Jan Arnold

SPECIAL NOTICE TO ALL MEMBERS

Please be respectful and thoughtful of our clubhouse neighbors and there property.
Please do not block their driveways and mailboxes. These folks have been very good neighbors, who have kept an eye on our property, and warned us of potential problems and incidents that have occurred when we are not around the clubhouse.

*Once Again, Please be Respectful
They are Our Neighbors*

**46th Annual Grants Pass
COIN * CURRENCY * STAMP
SHOW
CAVEMAN COIN CLUB
September 17th & 18th, 2011
Josephine Co. Fairgrounds
Grants Pass, Oregon
Sat 10am-5pm Sun 9am-4pm
For Information Contact
Jack Smith
541-471-6048
jbsmith54@msn.com
Or
Bill Ryan
541-476-0629**

Message from the President

Well we made it through another successful fair!! Our sales were down by only a couple hundred dollars from last year. I think that is pretty good considering this economy. Thank you so much for everyone who got it all pulled together, helped set up, worked shifts, helped take it all down, donated items and worked all year making things. The winner of the Pet rock contest will be announced at the meeting.

I also would like to extend a special thank you to Ken Morrow for his very generous contribution to the food table. Those of you at the meeting got to see his wonderful donation of several food items, rock candles with holders, and salt and pepper shakers.---thank you Ken!

We will be having a class on making mesh covered marbles/spheres at the clubhouse on Thurs. Sept. 8th from 5-8pm (see examples at the meeting). If anyone would like to share their talent and teach a class on a Thursday evening let me know. I'm running out of ideas—Please help!

T-shirts are here!!! They will be available to purchase at the meeting and also at the club picnic so bring your money!!

The summer is winding down but there is still lots going on in September...our monthly field trip, club picnic, Medford tailgate sale, and the Roseburg show. And don't forget that dues are due!! Get them paid ASAP so we can get the new roster out with everyone included!

Hope to see you all soon,

Thank You! Thank You! **Thank You!!!!**

- Vickie Lee for beading berries for the food table
- Clyde Wilson + Bernie Paris for getting the faceting machines working
- The Wilsons for donating rock Easter eggs for the food table
- Milt Coleman for cutting slabs for the bead class
- Jim Hawkins for cutting arrowhead blanks for Thursday night class
- Jim Ward for donating sunstones, wood, and rose quartz
- Wally Coleman for donating saws to paint
- Dick Theilbar for donating Books, food table items, shell necklaces, thunder eggs
- Roy Lichtenstein for donating 3 backpack/stools
- Andrea Wilson for donating bracelets, and a necklace
- Laurie Alspin for donating rocks, and ice cubes for food table
- Michelle Sutcliffe for donating two rings
- Ken Morrow for donating two knives and several items for the food table!!
- Harold Silver for donating slabs
- The Hawkins for donating and egg cup and butter dish
- Marlene Brown for donating rocks and teaching the bead class
- Bruce and Millie Casey for donating food table items
- Andy Springer for donating garnets, and slabs
- Barbra Catania for donating petrified wood
- Bonita Spencer for donating octopi
- Jan Arnold for donating slabs with pictures, necklace, treasure boxes
- Carol Swisher for donating slabs with pictures
- The Swishers for donating amethyst for jackpot prizes on the wheel
- And anyone we forgot...you know who you are;-)

CLC SERVICES

Alan Sowles Stump Grinding
541-761-8896 Field Mowing
Tractor Services

HOPPER ROCK SHOP
541-479-6343

hopper@budget.net
hopperrockshop.com
Rocks • Tumblers • Grit & Polish
Other Lapidary Supplies
\$5 off Tumblers for club members

FROM THE CHAIRS' & ODDS-N-ENDS

...and from Gary
program chair

Whew, the 2011 Jo Co fair is history. A few changes this year to keep us on our toes, but a lot of old friends that keep oncoming back year after year.

This month we'll have a short presentation by Nancy Coleman about the Grants Pass Museum of Art. She'll give us the lowdown on where it has been and "what's happening" today... We had a hint last meeting!

As always, bring something rock related to

"Show-N-Tell" .

See you there!!

ROCK OF THE MONTH

Gather those stones from the "P" Locations.



WELCOME
NEW MEMBERS

Jann Lazaroni
Albert Bullard
Lee Saw Trumbly
Dale Howell
Dave Prince
Fred & Michelle Rutan
Mia Guthrie, and Heather, Jaysen
& Bailey White

Thanks for joining our club! We hope you will find many rewards and many friends among those who share our wonderful hobby!

FREE! TOASTER OVEN
GREAT FOR REMOVING CUTTING OIL
FROM SLABS.
NEEDS AN ELECTRICAL PLUG &
TEMPERATURE ONLY GOES TO 375°F
CONTACT GAIL MAHAN
541-597-8572

MINERAL & GEM CLUB SHOWS COMING SOON

September 2011

9-11—FERNDALE, CALIFORNIA: 7th annual show, "Wildcat Gem Fest"; Wildcat Gem Society; Humboldt County Fairgrounds, 1250 5th St.; Fri. 12-7, Sat. 10-6, Sun. 10-5; free admission; door prizes, games, raffles, silent auction, more than 40 dealers, gems, minerals, fossils, crystals, jewelry; contact Mike Martin, P.O. Box 189, Miranda, CA 95553-0189, (707) 943-1575; e-mail: micknorma@directv.net

10-11—ROSEBURG, OREGON: Annual show, "Oregon Really Rocks"; Umpqua Gem & Mineral Club; Douglas County Fairgrounds, I-5 Exit 123; Sat. 10-6, Sun. 10-4; contact Eileen Paul, (541) 672-5229; e-mail: beadpatch@cmspan.net

10-11—WALLA WALLA, WASHINGTON: 42nd annual show; Marcus Whitman Gem & Mineral Society; Walla Walla County Fairgrounds Community Center, 9th St. and Orchard; Sat. 10-5, Sun. 10-5; adults \$2, kids under 12 free; dealers, rough, slabs, gems, minerals, beads, fossils, jewelry, equipment, silent auction, door prizes, raffle, demonstrations, knapping, gold panning, wire wrapping, rock cutting, interactive kids' section; contact Warren Rood, (509) 522-2330; e-mail: warrenrood@yahoo.com

17-18—CASTLE ROCK, WASHINGTON: 46th annual show; Southern Washington Mineralogical Society; Castle Rock Fairgrounds, A St. and Cowlitz River; Sat. 10-6, Sun. 10-4; contact Dave Furuli, (360) 430-4092, or Jackie Furuli, (360) 431-0059; e-mail: jfuruli@yahoo.com

23-25—HILLSBORO, OREGON: 31st annual show and sale; Portland Regional Gem & Mineral Show; Washington County Fairplex, 873 NE 34th, across from Hillsboro Airport on Cornell Rd.; Fri. 10-6, Sat. 10-6, Sun. 10-5; adults \$5, children under 12 free with adult; dealers, member exhibits, special exhibits, demonstrations, Kids' Corner, door prizes, silent auction, raffle; contact Joshua Heater, 22563 South Day Hill Rd., Estacada, OR 97023, (971) 570-5456; e-mail: j.frankray@hotmail.com; Web site: www.portlandregionalmineral.org

CALENDAR, EVENTS & REMINDERS

September 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6 Faceting Class 1-4pm	7 Clubhouse Workshop 9am-12 Silver Class 1-4p General Meeting 7:30 Club Member Sales D-G Refreshments	8 Open Workshop 5-8pm	9	10 Tailgate Sales & Party— Crater Rock Museum
11	12	13 Faceting Class 1-4pm	14 Clubhouse Workshop 9am-12 Silver Class 1-4p Board Meeting 1-4p	15	16	17 Annual Club Picnic In Merlin
18	19	20 Faceting Class 1-4pm	21 Clubhouse Workshop 9am-12 Silver Class 1-4p	22 Open Workshop 5-8pm	23	24 Club Fieldtrip to Zinc Creek
25	26	27 Faceting Class 1-4pm	28 Clubhouse Workshop 9am-12 Silver Class 1-4p	29	30	

Upcoming Club Events**Annual Club Picnic**

See Info on page 10

September Fieldtrip

Zinc Creek—Saturday the 24th

See Info on page 10

Club Reminders**General Meeting-Refreshments**

Last names D-G bring refreshments.

OPEN SHOP

2nd/4th Thursdays—5-8pm

Groups are working on Rock Food Table items.
Let Mary Bowers, Gary Ruehling or Jim Hawkins
know if there is something you are interested learning
more about, or would like demonstrated.

BIRTHDAYS, ANNIVERSARIES AND BIRTHSTONES

SEPTEMBER HAPPY BIRTHDAYS

3—Cheryl Croley	17—Tricia Caulkins
3—Dick Theilbar	20—Donna Miller
4—Robert Asplin	21—Tammy Stout
5—Glen Streight	22—Trish Hepburn
7—David Theilbar	23—Buck Lovett
9—Roy Lichtenstein	23—Bill Pollard
9—Sherry Shippy	23—Bonita Spencer
11—Harry Smedes	24—Merle Straight
12—Marlene Brown	25—Jim Brady
12—Barbara Jacobsen	26—Loren Black
13—Mark Doane	26—Joan Thomas
13—Phil Kosak	27—Lloyd Bryant
14—Sierra Lahey	28—Rich Kelly
16—Michelle Rutan	30—Jill Sheckells



SEPTEMBER HAPPY ANNIVERSARYS

3—Pam & Alan Sowles
6—Mr. & Mrs. Bob Nelson
7—Dianne & Leonard Balutis
16—Warren & Linda Harger
26—Janet & Mike Field
26—Frank & Shigeko Walgamot
27—Jerry & Deloras Panks
28—Bruce & Millie Casey
30—Kirk & Kryes Bales

SEPTEMBER BIRTHSTONE

Sapphire

Sapphire, the September birthstone, has been popular since the Middle Ages and, according to folklore, will protect your loved ones from envy and harm. Medieval clergy wore sapphires to symbolize heaven, while commoners thought the gem attracted heavenly blessings. Blue sapphires range from very light to very dark greenish or violetish blue, as well as various shades of pure blue. The most prized colors are a medium to medium dark blue or slightly violetish blue. Sapphire is a variety of the gem species corundum and occurs in all colors of the rainbow. Pink, purple, green, orange, or yellow corundum are known by their color (pink sapphire, green sapphire). Ruby is the red variety of corundum.

(Greek: *σάπφειρος*; *sappheiros* "blue stone") is a gemstone variety of the mineral corundum, an aluminum oxide ($\alpha\text{-Al}_2\text{O}_3$), when it is a color other than red or dark pink, in which case the gem would instead be called a ruby, considered to be a different gemstone. Trace amounts of other elements such as iron, titanium, or chromium can give corundum blue, yellow, pink, purple, orange, or greenish color. Pink-orange sapphires are also called **padparadscha**. Pure chromium is the distinct impurity of rubies. However, a combination of e.g. chromium and titanium can give a sapphire of a color distinct from red.

Other Sapphire Facts/Beliefs

The Ancient Persians called the sapphire a "Celestial Stone" because they believed the Earth rested upon a huge sapphire, which reflected its color and turned the sky blue. In Ancient Greece, the stone was special to the god Apollo and was worn by his worshipers at the Oracle of Delphi. The Hebrews made mention of the sapphire as being one of the gems on Aaron's Breastplate in the Book of Exodus. During the Middle Ages, sapphires were believed to represent the purity of the soul. Priests, who were supposed to remain celibate, wore them as a means of protection from "the temptations of the flesh." Kings, queens and other members of the upper nobility wore the gems in rings and brooches to keep them safe. This was supposed to keep these important personages safe from harm and free from envy. It was also believed that a sapphire would turn darker in color if the wearer was an unfaithful lover.

Sapphires are traditionally given as gifts for the 5th, 23rd and 45th wedding anniversaries. Of course, this beautiful gem is popular for many other occasions and is found in all different types of jewelry including rings, bracelets and pendants. Sapphires are found in Sri Lanka, Thailand, India, Burma, Brazil and the United States. The biggest sapphire resource in the world is in Australia.

BENCH TIPS & FUN STUFF

SHOP HINTS**Polishing Soapstone**

Having completed the carving of your soapstone, you can put a glossy finish on the stone by the following the steps outlined below. Keep in mind that you are still removing stone when you are sanding. Indiscriminate sanding will result in you losing all the lines that you worked so hard at creating.

1. Remove the file marks by sanding, using 220 or 240-wet/dry sandpaper. This sanding is done wet. Hold the carving in one hand, wet the carving and the sandpaper in a container of water and begin sanding the carving with the sandpaper. The white mud that develops should be rinsed off in the container of water regularly, as it slows down the sanding process. Hold on to your carving as wet, smooth soapstone can be very slippery.
2. Wet sanding is done until all the file marks have been removed. File marks show as white lines on your soapstone.
3. For a high polish, additional sanding can be done using a 1000 or greater wet/dry sandpaper. The way to judge if you have missed an area is by feel, the missed areas will feel rough. After completion of the wet sanding, rinse the carving and allow to dry. The carving will turn gray when it is dry.

Polishing Soapstone with wax

4. Place the carving in an oven and heat to 250 ° F. Try not to heat over 300 ° F. High temperatures will not hurt the stone, (Soapstone can take temperatures of 1700 ° F without any ill effect) but the beeswax will evaporate at 300 ° F.
5. Remove the carving from the oven using gloves. Melt the bee's wax onto the carving by holding it against the hot stone. Spread the wax over the carving with a small soft piece of cloth. When the carving has been fully waxed, allow the carving to cool.
6. As the carving cools, the surface of the carving will turn from shiny to dull. At this point, the wax has turned from liquid to a soft solid. This is the time to begin wiping down the carving and remove the excess wax on the surface of the stone.
7. After the excess wax has been wiped off, allow the carving to fully cool. You may now polish the carving with a soft cloth sprayed with Pledge; this will bring up a high shine on the carving.

Continued at the bottom of Page 10

Factoids**How Do Dendrites Form?**

By Dr. William Cordua, University of Wisconsin,

Anyone who has seen "moss agate" is familiar with the delicate branching structures that look like fossil plants. These features, called dendrites, aren't plants, and the process that forms them is essentially inorganic. Dendrites are fairly common. They often form on bedding plane and joint surfaces in limestone, shale, granite, and other rocks. They frequently develop during the industrial process of making various alloys. They control the shape of some snowflakes. Most annoyingly, they form as frost on your car windshields on wintry mornings.

Dendrite refers to any mineral that grows in a delicate branching pattern. The habit is similar to arborescent, although I tend to use the term arborescent when the branches are relatively stout, rather than moss-like. Many minerals can take on dendritic forms. These include various iron and manganese hydroxides, copper, gold and silver.

How do these structures form if they aren't plants?

Dendrites are thought to form when crystallization is rapid and there is a limited amount of what chemical is formed available. These are conditions associated with disequilibrium. Frost on our windshield is a good example. The little frost flowers grow fast, but if there is too much moisture they intergrow to make a solid sheet of ice without the delicate form showing. Black dendrites on a limestone bedding plane are another example. These make what people often call "pyrolusite dendrites," although recent analyses have shown them not to be pyrolusite, but instead other manganese hydroxides such as romanechite, birnessite, coronadite, and cryptomelane. At any rate, a fluid bearing manganese in solution is seeping along a bedding plane surface as little tendrils of liquid. As the liquid dries out, the solution becomes supersaturated in manganese compounds and the dendrites form fast. However, since there isn't a lot of manganese in the tendrils to start with, the manganese hydroxide doesn't form a solid sheet, preserving the fractal patterns of the fast mineral growth.

Dendrite formation can be modeled artificially and studied quantitatively. This is done because understanding dendrite growth is an essential part of mineral science, especially alloy formation. It turns out that the shape and amount of dendrite growth affects all sorts of properties of materials - such as their flexibility, springiness, stretchiness, electrical conductivity and so forth. NASA did a crystallization experiment on a Space Shuttle mission to study the nature of alloy growth under weightless conditions. Dendrites can be modeled exactly by simple computer programs in which the computer constructs what happens when sticky particles encounter another at random. The way they stick together beautifully generates dendrites. So this random relationship over time turns out to form an elegant pattern. A lot of nature works this way. In minerals dendrite growth isn't quite random. The little atoms (particle in the above experiment) don't stick at random, but do so according to the crystalline structure of whatever mineral they are forming. Thus in ice and snow the branching often takes a hexagonal form and in copper, a lot of branching is at right angles, which is consistent with copper's cubic crystal structure.

Related Definitions and Websites

A bedding plane the surface separating two successive layers of stratified rock. Lichtenberg Figures are branching, Tree-like or fern-like patterns that are created by high voltage discharges on the surface of, or within, electrical insulating materials. For more information, including images of the patterns formed when lightning hits the ground or a person, see: <http://205.243.100.155/frames/lichtenbergs.html> .

FIELDTRIPS & OTHER THINGS OF INTEREST

PICNIC



THE ANNUAL PICNIC & AUCTION

SATURDAY SEPT 17th - 11am
at the Merlin Memorial Park
A—L bring salad M—Z bring dessert

The club will provide hamburgers, hot dogs, buns and condiments. The Picnic will be followed by an auction of rocks, rock items and white elephant items for which your donations will be gladly accepted.

Bring Your Own Table Service and Beverages

DIRECTIONS

Just drive into Merlin from G.P. and its on your left. Turn left on Merlin Sanitarium Road, then immediately right on to Acorn Street. The first three driveways to the right will provide access to parking in front or behind the facility.



Continued from Shop Hints— Page 9

Polishing Soapstone with oil

4. Using a soft cloth, wipe on a light coat of boiled linseed oil. Do not apply heavy coats or the oil will become gummy and hard to polish. Wipe off the excess oil and allow drying.

5. When the oil has dried, buff with a cotton or flannel cloth to polish.

*For a higher polish, additional sanding can be done using a 400, 600 or 1500 wet/dry sandpaper

Other oils that can be used: Double Boiled Linseed Oil, Goddards Marble Wax, Danish Oil, Tung Oil

(**Resource:** <http://www.soapstonesculpture.com/> - A great resource for step-by-step carving and finishing soapstone.

Excellent instructions are given for carving various figurines and other objects.)



Reminder—Fieldtrip to Zinc Creek for Carnelian agate and some colorful jasper, 9/24. We will leave from the Merlin exit Ray's Market parking lot at 9am. Maps will be available at the general meeting.

The area has just been logged and there is wood slash everywhere. So, wear appropriate clothing and footwear. There is always the potential for storms. Be Prepared! There will likely be some digging, so bring equipment and knee pads. The roads do not require 4-wheel drive, but last four miles is on gravel road.