

# The CMS Tumbler

June 2021

The monthly newsletter of the Cascade Mineralogical Society, Inc., Kent, Washington

Next Meeting: June 10, 2021 7:00 p.m.

American Legion Hall 25406 97th PI S Kent, WA

The Program is about Picture Stones

The Show & Tell
Theme is something
you've done or acquired in
the last 15 months

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# Connect with us!

Website: https://www.cascademineralogicalsociety.org Club Facebook: https://www.facebook.com/CasMinSoc/ Show Facebook: https://www.facebook.com/cascadegemandmineralshow Instagram: https://www.instagram.com/cascadegemandmineralshow/

This month remember to wish a Happy Birthday to Michelle Patterson on June 2 Leonard Bahr on June 7 Charles Benedict on June 10 Isaac Fu on June 11 Charleen Shoemaker on June 11 Michael Watson on June 11 Shelley Opel on June 16 Becky Patterson on June 21 Margaret Squires on June 27 Brenda Haworth on June 29 Dick Morgan on June 29 and also remember

to wish a
Happy Anniversary to
Robert & Mrs. Waddell on June 8 (7 years)







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Tips, suggestions, recipes and experiments printed in this newsletter are the experiences and/or opinions of the individuals submitting them. We are not responsible for their authenticity, safety, or reliability. Caution and safety should always be practiced when trying out any new idea.

CMS Club Address 25838 W LK Wilderness Dr. SE. Maple Valley, WA. 98038 Keith Alan Morgan, Editor 3802 W Tapps Dr. E Lake Tapps, WA 98391 Postal, or Email, Exchange Bulletins are welcome. Email preferred. greenrockdraggin@yahoo.com

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# **2021 Show Committee Chairs**

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### 2021 Committee Chairs

| Club Historian                                |              |   |
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| Donations Kat Koch                            | 425-765-5408 | president@cascademineralogicalsociety.org |
| Field Trip Roger Danneman                     | 425-228-8781 | roger.danneman@gmail.com                  |
| Health & Welfare Bev Williams                 | 425-228-5063 | britbev1957@outlook.com                   |
| Library Bob Pattie                            | 425-226-3154 | bobpattie@comcast.net                     |
| Meeting Programs Miriann Fu                   | 253-236-5593 | merriannf@gmail.com                       |
| Membership Mark Hohn                          | 253-332-3736 | showchair@cascademineralogicalsociety.org |
| Newsletter - Tumbler Editor Keith Alan Morgan | 253-439-9471 | greenrockdraggin@yahoo.com                |
| Open Shop Instructors Bob Pattie              | 425-226-3154 | bobpattie@comcast.net                     |
| Public Relations Kat Koch                     | 425-765-5408 | president@cascademineralogicalsociety.org |
| Refreshment Angie Bayer                       | 253-631-3840 | angiemc61@msn.net                         |
| Raffle/Display Roger Pullen                   | 206-387-3214 | None                                      |
| Shop Operations Bob Pattie                    | 425-226-3154 | bobpattie@comcast.net                     |
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| Social Media Kat Koch                         | 425-765-5408 | president@cascademineralogicalsociety.org |
| Webmaster Mark Hohn                           | 253-332-3736 | showchair@cascademineralogicalsociety.org |
|   |              |   |

2021 CMS Dues are \$15 per year per family Pay online, by mail, or at our meetings.

Mailing Address: Charles Benedict, 25838 W Lk Wilderness Dr SE, Maple Valley WA 98038

You can pay your dues via credit card!! We now accept all cards through our website or at the meeting.

You can renew your membership or enroll as a new member and pay your dues all in one shot online. You will find it under the "Membership" tab on our website. http://www.cascademineralogicalsociety.org

The object of the Society shall be to stimulate interest in the study of the earth sciences, lapidary arts and related subjects.

This Society is affiliated with the American Federation of Mineralogical Societies; the Northwest Federation of Mineralogical Societies; and the Washington State Mineral Council.

Every member of the club should be receiving a copy of the Northwest Newsletter. If you are not receiving a copy contact Mike Blanton in person or by telephone at (425) 271 -8757 or by computer at mblanton41@hotmail.com

To get information to the Tumbler via the Internet send it to greenrockdraggin@yahoo.com Please put Tumbler and subject in the Subject Line. The deadline is the 20th of each month.

| Sun | Mon                         | Tue | Wed | Thur                          | Fri | Sat |
|-----|-----------------------------|-----|-----|-------------------------------|-----|-----|
|     |                             | 1   | 2   | 3                             | 4   | 5   |
| 6   | Board<br>Meeting<br>7:00 pm | 8   | 9   | General<br>Meeting<br>7:00 pm | 11  | 12  |
| 13  | 14                          | 15  | 16  | 17                            | 18  | 19  |
| 20  | 21                          | 22  | 23  | 24                            | 25  | 26  |
| 27  | 28                          | 29  | 30  | Meetings are back!            |     |     |

CMS Board Meeting:.....Monday, June 7......7:00 pm to 8:00 pm CMS General Meeting:....2nd Thursday, June 10......7:00 pm to 9:00 pm

Lapidary Class Hours:.....By appointment, call to set a time & day for your lesson (425) 226-3154
Lapidary Shop Hours:.....Most Tuesdays.......2:00 pm to 5:00 p, call ahead (425) 226-3154
Lapidary Shop Hours:......3rd Saturday.......by appointment only (call a few days ahead to set time)

More Field Trip info can be found on Page 11 More Show info can be found on Page 12

# Paleontologists have found a dinosaur that evidence shows must have been nocturnal! What evidence? Lots of bruising on the shins from bumping into stuff!

The Tumbler has received One-Time Rights to publish this cartoon

### Our Club is a Member of these Federations and Associations

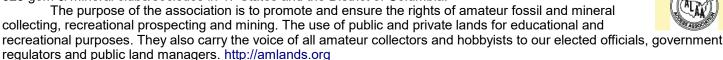
AFMS: The AFMS governs our Northwest Federation. http://amfed.org/index.html
The bulletins are published quarterly. You can find the news bulletins at
http://amfed.org/news/default.htm



*NFMS:* The Northwest Federation is our home federation. To keep up on the goings on in our own backyard. http://northwestfederation.org/

The link for the news bulletins is http://northwestfederation.org/Newsletters.asp

ALAA: The American Lands Access Association, Inc. represents the rockhounding interests of 325 gem & mineral clubs/societies in 47 States and the District of Columbia.



The front page also has a lot of current news, rockhounding restrictions or lack of, etc. http://amlands.org
ALAA also publishes a quarterly newsletter. To keep up on the news and lobby efforts on our behalf check out
http://amlands.org/

Washington State Mineral Council: The Washington State Mineral Council is dedicated to the location and conservation of rock and mineral sites of interest to the rockhounds of Washington state. https://mineralcouncil.wordpress.com/

You can find a database of local rock and gems shows and field trips. It's a great resource if you want to plan on outing.

Also check out "Misc. News" for all the latest updates on collecting sites around Washington. https://mineralcouncil.wordpress.com/news-updates/

When the weather is good they have regular monthly field trips. So take advantage of these great outdoor rockhounding adventures! The field trip details are under "Field Trips" on the left side of the side. Check out the link for additional details for time and place to meet and the field trip leader.

You can find all this information and a whole lot more about what is happening in our state at https://mineralcouncil.wordpress.com/

# **Rockhounding Code of Ethics**

I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I will discard no burning material - matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use.

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

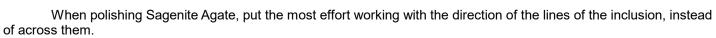
I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

from the AFMS website





# CMS Board Meeting Minutes May 10, 2021

Canceled.

by Pete Williams, 2021 Secretary

# CMS General Meeting Minutes May 13, 2021

by Pete Williams, 2021 Secretary

Canceled.

# From the Top of the Rock Pile... by Kat Koch, President

We will be resuming in-person club meetings on June 10th, Thursday at 7 pm. We will have our regular meeting the American Legion Hall, Kent.

Mike and I took a 3 week vacation/road trip via the giant redwoods on our way to Lake Arrowhead in the San Bernardino Mountains behind San Bernardino, CA. We had 2 weeks hanging around this beautiful lake. We went on a couple of leisurely drives looking for rocks but all we found were several types of granite. We then headed to Las Vegas to visit friends and relatives. On the way home we attempted to go to the Bruneau

Wood Pile in Idaho. We didn't get far as my Prius is just not made for off roading. LOL. Mike did pickup some small pieces of petrified wood to tumble but nothing to write home about.

We continue to have about 5 new members every month via our website. I want to welcome each of you to our great rock club. I am looking forward to meeting everyone in June!

I am looking forward to not only seeing all our old members but also meeting all our new members! Mark your calendar now and plan on attending.





# June 10, 2021 General Meeting

Finally and at last we are resuming in-person meetings on June 10th at 7 pm at the American Legion Hall, Kent.

Our topic for the evening will be a power point presentation on picture stones. Show 'n Tell will be something rock, mineral or fossil item you have done or acquired in the last 15 months.

Google GPS lists the address as American Legion Hall, S 252nd St Kent, WA 98030 (No building address number.)

Bing GPS doesn't list it correctly no matter how you enter the address.

When we resume our in-person meetings the club has obtained sanitizers to sanitize the tables, chairs and hands. Everyone will be required to wear a mask.



# Time is Running Out - Lower Dues for 2021

2021 club membership dues is \$15 for a family or individual!

The Board has approved a temporary reduction in our dues for 2021 only to \$15 per family or individual.

As of October our dues will go back up to \$25 per family or individual.

Our club is resuming in person general meetings on June 10th. Our general meetings are held on the 2nd Thursdays of each month at 7 pm.

From our website you can use a credit card to renew your membership. You can also mail a check to CMS, c/o Charles Benedict, 25838 W. Lake Wilderness Dr. SE, Maple Valley WA 98038.



....., ....,

# **New for Members Only – New Texting Service**

You can now sign up for club text reminders for our upcoming meetings and events.

We are all busy and often times forget CMS has an upcoming meeting or event.

Go to our website and in the lower right corner and you can register for this service. If you are unable to go to our website you can send a text to the number (888) 731-1000 and in the body put the word rocks. Or scan the QR code with your smart phone, select "Send SMS," it will auto insert the word rocks. Now hit send.

No matter how you register you should receive a confirmation back that you are registered. If you do not receive a confirmation then try

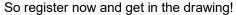




registering again.

NOTE: If you have already registered you do not need to do anything further. The telephone number and QR code are just new added features.

So be sure to take advantage of this service. The only stipulation is that you must be a club member. There will be a random drawing for a nice prize after 30 members have registered for the text messaging reminders. We have only 13 members registered so far, so hop to it and enroll in this reminder service.





# Updating Some of the Bills in Congress by Bob Pattie

Last month I listed some of the bills that could affect our access to some of our collecting sites. This month I will talk about a couple of bills that directly affected Washington State, those bills are House of Representative - H.R.999, Senate - S. 455, and H.R. 803. The first two bill are called "Wild Olympics Wilderness and Wild and Scenic Rivers Act" and the third bill is called "Protecting America's Wilderness and Economy Act".

This is the same situation as we saw four years ago when congress put 99 bills together and then they pass in mass all the bills at one time. (S. 47 (116th): John D. Dingell, Jr. Conservation, Management, and Recreation Act.) By putting a number of bills together they can get enough support from many Representatives and Senators to pass the larger bill. In the case of the Olympics Wilderness and Wild and Scenic Rivers issue, which had not been voted on in any of the committees, but in a few days under the H.R. 803 bundle it has passed the House of Representatives (both committee and the full house) in for signature. It still must go through the Senate steps before it will be presented to the President.

All three of these bills have the same wording and now congress just need to pass HR 803 for all of them to became law. The effect of this bill would be an increase of 126,534 acres of land would be added to the current wilderness area in the Olympia National Park and Olympia National Forest. It would also include parts of 19 rivers in this area for about 480 miles of Wild and Scenic Rivers additions to the current list of Wild and Scenic in this area.

I would strongly suggest that if you have an interest in this particular area you read that section (Section 300) and them send your comments to your representative or senator. This bill includes other locations in many states (9) and many items in general on land management. The more information we can provide our representatives and senator the better they can serve.

# **Club Rock Shop**

The rock shop is up and running, actually is has been up and running since March but it was kind of cold the day that Travis and James came by, they had collected this rock the day before at the club rock hunting trip and came the next day to cut it open.



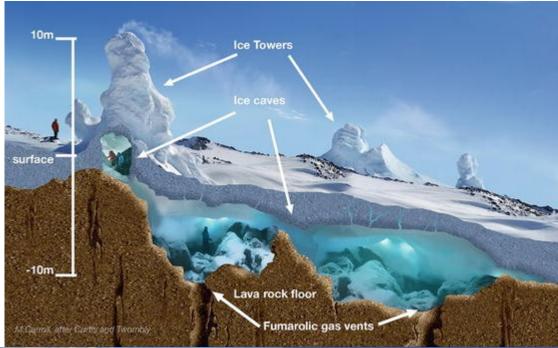


# Antarctica's Fumarolic Ice Towers by Kat Koch

Fumarolic ice towers are produced by fumaroles of volcanic activity in an environment whose ambient temperature is below the freezing point of water. There are often massive ice caves underneath. Some of these ice towers reach more than 33 feet in height.

Mount Erebus (12,448 ft), the world's southernmost active volcano, is main producer of ice towers. This volcano as been active for approximately 1.3 million years. The ambient temperature at its location is always well below the freezing point of water, and the diffuse degassing of carbon dioxide through the steaming warm ground around its flanks causes ice to first melt, then vaporize, and then accumulate into chimney-like towers.

Mount Berlin (11,411 ft) is another glacier covered Antarctic volcanic mountain that produced such towers. Bibliography: Youtube, Earth Reference and Data, Wikipedia, Research Gate, Atlas Obscura.





# Young Richard's Almanac by Dick Morgan

As we move into summer the month of June is for fathers and brides. A day for fathers and a new start for many families.

# Ideas Regarding the Problem of Undercutting

When polishing cabochons that undercut, finish by the usual methods. Upon completion, and after removing from the dop-stick, wash and scrub the stone with ammonia. Then apply clear fingernail polish to the entire surface of the stone, and allow to dry for twenty-four hours. Once the stone has dried, it can be sanded with 600 grit sanding paper that is wellworn, and polished by the usual method.

## Colors From Around The World Series: Part 1 by Kat Koch

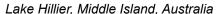
The Fly Geyser, Gerlach, Nevada

Would you believe there is located in the middle of the Nevada desert a brightly colored geyser that shoots boiling water over five feet high? This is true. It is the Fly Geyser located on the 3,800 acre Fly Ranch in northern Nevada.

In 1916 the ranch owner was looking for irrigation water and drilled a well. This well was quickly abandoned when it was discovered that the water was too hot to use. This started the first geyser. Likewise, the main geyser was created accidentally in 1964 after a geothermal power company drilled a test well at the site. According to newspaper reports, the well was either left uncapped or was improperly plugged.

In either case, the scalding hot water shot from the well hole and calcium carbonate deposits began to form, growing several inches each year.

The geyser formation is now 6 feet high by 12 feet wide, counting the mound on which it sits. The geyser contains thermophilic algae, which flourishes in moist, hot environments, resulting in multiple hues of green and red, coloring the rocks.

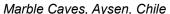


With its mere 2,133 feet in length and a width of 820 feet, Lake Hillier is not one that will impress you by its size but delights your eye with its pink color. Moreover, it lies just next to the Pacific Ocean, thus if you watch it from above, the contrast between the mellow pink of the lake and the blue of the ocean is striking.

The reason of its unique color is still a topic that is not fully understood by scientists, although most suspect it has to do with the presence of the Dunaliella salina micro-algae. The Dunaliella produces carotenoids, a pigment found in carrots as well. But the presence of halophilic bacteria in the salt crusts could be another explanation. A reaction between the salt and the sodium bicarbonate that is found in the water may cause it as well.

The Hillier Lake was first discovered in 1802 by navigator and cartographer Matthew Flinders who took samples from the lake and mentioned its existence in his journal.

Fun fact: the water stays pink even when you take it away in a bottle, so it's not just a trick of the light.



One of the most isolated natural treasures of the world, the Marble Caves (Capillas de Mármol) are a series of sculpted caves in the General Carrera Lake in the heart of Patagonia. The Cathedral, the Chapel and the Cave are the three formations that make up this natural spectacle that will certainly leave you breathless.

The mesmerizing blue-and-white patterns of this solid marble peninsula in the Lago General Carrera reflect the natural history of the region.

The swirling cavern walls were formed more than 6,000 years ago from waves washing up against the calcium carbonate-rich piece of land. The turquoise tones directly correspond with the shades of the lake and change with each season.

# Vinicunca Rainbow Mountain in Peru

Vinicunca Rainbow Mountain is a mountain in the Andes of Peru with an altitude of 17,060 feet above sea level. That is a little more than half the altitude of Mount Everest. The various peaks of the Ausangate Mountain region exhibit an array of shades—from lavender to pastel green—due to the different types of sediment and its reaction to the atmosphere. It is composed of 14 different colorful minerals. However, no other mountain in the region displays seven different colors in a uniform fashion like Vinicunca.

Just 4 years ago it was entirely covered in snow, making it impossible to fully witness the beauty of the mountain. The Rainbow Mountain wasn't known to the outside world until the last few years. The technicolor mountain is found deep within the mountain range and takes nearly six days of experienced hikers to reach the peak. There is now a







road leading to the mountain, which makes seeing the rainbow much easier for less-experienced hikers.

According to the Cultural Landscape Office of the Decentralization of the City of Cusco, the seven colors of the mountain are due to its mineralogical composition: the pink color is due to red clay, fangolitas (mud) and arilitas (sand); the whitish coloring is due to quartzose, sandstone and marls, rich in calcium carbonate; the red is due to claystones (iron) and clays belonging to the Upper Tertiary period; the green is due to phyllites and clays rich in ferro magnesian; the earthy brown is a product of fanglomerate composed of rock with magnesium belonging to the Quaternary period; and the mustard yellow color comes from the calcareous sandstones rich in sulphurous minerals.

Bibliography: Wikipedia, Reno Tahoe News, Veranda Travel, Lake Hiller, Chile Travel, Pintrest, Rainbow Mountain Peru.

# May Field Trip Report by Roger Danneman CMS Field Trip Guide

On Sat. May 15th we went over the mountains to First Creek northeast of Cle Elum. It was a gorgeous spring day. Maybe a little too hot (80 degrees F.) We had 20 people on this trip making the 2 mile hike in and digging for the bluish agate nodules and crystal filled geodes and geode fragments. Wood ticks were not an issue this trip. I only saw one on my glove. Robert M. dug out a very nice big crystal plate and Tim B. hammered out a nice geode from an outcrop. I collected 1/3 bucket of agate and geode pieces.

Phillip found some nice partial geodes and clued me into a couple other spots worthy of checking out next time. Beautiful material here, but the hike is long, especially in warm weather.

Next trip is scheduled for June 26th at Little Naches for thundereggs and lilypad jasper. I read that the DOT is well on their way to clearing Chinook Pass and are hoping for a Memorial Day weekend opening. I may move that trip up a week or two. Keep your eyes on the schedule and make sure you're in my distribution list.















# Field Trips

The club or clubs sponsoring the field trips are shown in italics. When known I have listed a phone number and contact person for each sponsoring club below the listed trips. If you are not a member of the sponsoring club, you should phone and ask permission to go on their field trip.

Information from the Washington State Mineral Council webpage (https://mineralcouncil.wordpress.com).

June 23-28

All Rockhounds Pow Wow - Madras Oregon - Trips leave from the Jefferson Fair Ground by 8 am - Agate, Jasper, Thundereggs, Petrified Wood - Bring digging & hard rock tools

Larry Vess vessel3755@gmail.com or (253) 473-3908

<u>June 26</u>
Cascade Mineralogical Society - Field Trip to Little Naches for thunder eggs/lily pad jasper/leaf fossils Roger Danneman roger.danneman@gmail.com; 425-228-8781 hm or 425-757-3506 cell.

<u>June 27</u>

Marysville Rock Club - **Saddle Mtn. Mattawa** – Meet at W Mattawa Lepricon Market before 9 am - <u>Petrified Wood maybe Opal</u> - Bring digging & hard rock tools Ed Lehman wsmced@hotmail.com h# (425) 334-6282 c# (425) 760-2786

# Marking History, On Stone by Jennifer Haley, AFMS Historian

Mt. Antero is a 14,245 ft mountain, known around the world since the 1880's as the highest mineral locality in North America. The mountain is known for its aquamarine, smoky quartz, rock crystal, fluorite and feldspar, to name a few of its precious beauties.

The largest sphere of rock crystal in existence in 1893 was put on display at the Chicago World's Fair, along with a marvel of invention of the time, the Ferris wheel. The crystal came from Mount Antero.

In 1938 the Colorado Mineral Society maintained a summer field camp at Mount Antero. During 1948 the president of the Colorado Mineral Society, Richard Pearl, formed a committee to study a proposal for commemorating the famous collecting area.

With the permission of the U.S. Forest Service, nine members of the Colorado Mineral Society in 1949 climbed to the top of the Mount Antero peak over a weekend to mount a bronze plaque set on granite. A proclamation was read stating the significance of the mountain to mineral collectors. The first to reach the summit was a 14yr old in the society's group. The plaque, weighing thirty-five pounds, states, MT. ANTERO MINERAL PARK "WORLD FAMOUS LOCALITY FOR SUPERB CRYSTALS OF AQUAMRINE, PHENAKITE, BERTRANDITE" COLORADO MINERAL SOCIETY 1949.

from AFMS Newsletter, 5/21

### To Polish Wonderstone

In general, Wonderstone should be worked in the same way as most stones that tend to under-cut. It is a rock and not a mineral. It is not always possible to get a high polish on all types of Wonderstone. Sanding should be completed through the 600 grit paper. Polishing should be rapid to minimize under-cutting. Linde A is the best powder to use. Wonderstone is a very "loose term" and is used to describe a variety of rocks, including so-called "sand-stone" and types of rhyolite.

via Breccia, 2/21; via San Fernando Valley Mineral and Gem Society, 1975; from Chips and Facets



# **Rockhound Estates & Downsizing Sale**

June 5: Saturday 9:00 am – 4:00 pm
Everett United Church of Christ
2624 Rockefeller Ave
Downtown Everett

# **Shows**

June 5 & 6: Saturday 9 am – 5 pm; Sunday 10 am – 4 pm
North Idaho Mineral Club, Annual Show
Kootenai County Fairgrounds
4056 North Government Way
Coeur d'Alene Idaho

June 17 – 20: Thursday, Friday, Saturday 9 am – 5 pm; Sunday 9 am – 4 pm Sublette County Rock Hounds/RMFS/AFMS, Show and Conventions

Sublette County Fairgrounds

Event Center & Community Hall

10937 Hwy 189

Big Piney, Wyoming

June 18 - 20: Friday 10 am – 5 pm; Saturday 9 am – 5 pm; Sunday 10 am—4 pm

Lower Umpqua Gem & Lapidary Society, Annual Rock And Gem Show

Reedsport Community Building

451 Winchester Avenue

Reedsport Oregon

### Rhyolite by Jim Urbaniak

Rhyolite (ry-o-lite) is an igneous-extrusive rock. It will form either out of a vent or fisher or directly out of the top of a volcano. Visually, while still in its lava form, it can look like molten, sticky plastic. It tends to have lots of gas bubbles in it and because of this it tends to be highly explosive. As an example, about 10,000 years ago in southern Oregon (present day Douglas County) Mount Mazama, which was a rhyolite-type volcano, erupted. It blew approximately the top 6000' off, leaving behind a massive crater, which today forms Crater Lake. I remember growing up seeing a two-story house-size boulder near our family farm, which had been blasted from this eruption. This boulder was deposited just over 100 miles away from the volcano! Today, Wizard Island, a live cinder cone, grows in the middle of Crater Lake, which is also the deepest fresh water lake in the United States with a depth of just over 2000'. Rhyolite is typically made up of the minerals quartz, sanidine (sani-dine) and plagioclase (play-g-o-klays), sometimes also including biotite (bee-o-ite) and hornblende. If it were to form as an igneous-intrusive rock, it would form granite.

Rhyolite actually forms several different types of material. It can appear as a solid, even rock in a variety of colors ranging from yellow, tan and cream to pink, red and brown. It can appear chalky or waxy. It can form swirls and spheres, referred to as 'birds eye' rhyolite. It can form in slightly different colored bands, referred to as 'flow-banded' rhyolite. It may be very solid or very porous, looking like a rock version of Swiss cheese. Rhyolite is the same chemical composition as pumice, obsidian and tuff, differing only in how each rock cools and is extruded from a volcano, vent or fisher.

Though rhyolite volcanic eruptions are relatively rare, other famous locations for rhyolite include Saint Andrews Straight in Papua New Guinea; Novarupta in Alaska; Chaiten in Chile; all volcanoes in Iceland; and the Black Forest in Germany. It is used in architecture and as landscaping rock; in making beautiful jewelry; and is a great source of fine minerals, including garnets, copper, turquoise and chrysocolla. Rhyolite was named by the German geologist Ferdinand von Richtofen, uncle of the Red Baron! It's name is derived from Greek, meaning 'a stream of lava'.

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After lapping flat stones, such as cut thunder-eggs, with 600 grit, wash them and leave them under a heat lamp or 100 watt bulb for about five minutes. When the stones are warm, polish them on a felt wheel with tin oxide. By preheating, the polishing is almost instant. Otherwise the felt wheel has to heat the stone before the polishing action begins.