



# SKAGIT GEMS

Official Publication of the Skagit Rock and Gem Club  
Serving Skagit County WA Since 1961

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Volume 57, Issue 8

## **Next meeting October 7th 10am**

**Gem of the month:** Beauty and the Beast Rock Contest.  
Bring your ugliest rock and your prettiest rock for a chance to win a prize!



**Program:** David will present a video on the formation of gemstones -see his article on page 3

**Snacks:** Frank Isca, Lee Tennefoss

# CURRENT

## *happenings*

### Raffle Prizes Needed

At our show in November we have a raffle that benefits our scholarship fund. The club needs prizes to put in the raffle. These can be items from your rock collection, jewelry you've made, or other rock-related items. They should be nice items that people will want to buy raffle tickets for.



### Display Case at the Burlington Library

Our Club has the use of the display case at the library for the month of October. It's a good way to share some of our treasures with the community and let them know about us and our upcoming show. We can start putting items in the case on Saturday Sept. 30th. Just go to the counter and tell them you have something for the case. Please label your items so that people can see what they are. Call Dave with any questions 360-755-0741

Burlington Library: 820 E. Washington Ave



Its time to pay your dues for the 2017-2018 year. Dues must be current to use the club shop and receive the newsletter.

### Club Officers for 2018

The club is in need of a Secretary for 2018. This is an easy way to help support the club. The main duties are taking minutes at the meetings and getting them to the newsletter editor, checking the mail from the PO BOX and attending the Board meetings. You can sign-up even if you think you might miss a meeting or two- we can cover you!



## **4,500 Minerals ... And Still Counting**

(Article Six of Series) by David Britten

The wonders of the universe began with physics. The first primitive particles of matter clumped together due to GRAVITY. The clumps grew into the first stars. The stars produced ENERGY (light) and new MATTER – in the form of the elements. Each element has its own unique characteristics. The stars formed the elements, and in their explosive deaths, dispersed these elements throughout the universe. Physics is the branch of science concerned with the nature and properties of matter and energy.

Gravity again took over and caused the formation of planets circling new stars like our sun. The planets were the birthplace of CHEMISTRY. As the molten mixtures of the elements cooled, they combined to form minerals. Each mineral had its own unique characteristics. This chemistry became the important bringer of change as these minerals then combined with other minerals in conditions that could vary from high pressure, high temperature deep in the earth to low pressure, low temperature near the surface, and all combinations in between. To this day new minerals with their own unique characteristics are forming in these various environments.

The third stage of evolution of things involves BIOLOGY. Biology is the science of life. It is how elements and minerals are combined in such a way as to bestow the ability to survive and reproduce replicas of themselves.

We have seen how biology has changed the chemistry of our planet. The release of oxygen from carbon dioxide reduced the acidity of our oceans and toxicity of our atmosphere. We are now in a great interactive process where everything that happens effects everything else. Changes in the physical environment effect changes in chemistry and biology and vice versa.

The first gemstones formed directly from the cooling of molten mixtures of the elements. Zircon - zircon silicate - is one of the oldest minerals. Most zircon on the planet are actually microscopic in size. Continued on next page...

In some vicinities, however, zircon crystals and the surrounding rock was recycled. The zircon bearing rock was thrust back into the molten depths. The temperature of this magma was not so high as to melt the old crystals but did allow new silicate to form on its surface. Larger zircon specimens are formed layer by layer on the original minute crystals.



A few colors of Zircon

Most usable zircon today is found in placer deposits. These are areas where water or glaciers have broken down the zircon bearing rock. Zircon crystals are deposited in the silt as the water slowed or the glacier retreated.

As the proportions of elements in the earliest magmas changed, so changed the types of minerals formed. Peridotite magmas produced peridot and diamonds. The feldspar magmas (or thoclase and plagioclase) formed moonstone, amazonite, labradorite, and albite crystals. Granite pegmatite magmas produced emerald, aquamarine, morganite, and tourmalines. These crystals all formed directly from cooling of these magmas. The slower the cooling, the larger and more pure were the crystals.

In the search for all these oldest gemstones we look for remnants of the host magmas from which they formed. Some of these magmas solidify into very hard rock. Breaking intact specimens out of this matrix can be quite the challenge. Easier access to specimens is available, however, as the rock ages. Weathering of surface rock, fracturing of rock due to earthquakes, and dissolving of rock by volcanically heated water under great pressures are three ways some of these gemstones are made more easily collectible. Many gemstones are collected from the rubble produced by these processes.

Though we don't usually think of it so, WATER was one of the first minerals formed. It was present in the cosmic dust that became our solar system and accumulated on most of our planets and moons. As water helped release gemstones from the rocks, it also produced the conditions for the formation of new minerals and gemstones. Water is the next stop on our journey of discovery.

## Mineral Council Field Trips

ALWAYS contact host for updated info a week before trip !!!

**10/21/17 Picture Jasper maybe Ore @** Money Ck, Skykomish. Meet @ Money Ck Campground 9:00. Bring Dig tools. Contact: Marysville Rock Club-- Ed Lehman wsmced@hotmail.com h# (425) 334-6282 c# (425) 760-2786

**11/18/17 WA Dalmatian stone & Chert @** Blanchard Hill. Meet @ I-5 Exit 240 Gas Mart 9:00am. Bring hard rock tools. Contact: Marysville Rock Club-- Ed Lehman wsmced@hotmail.com h# (425) 334-6282 c# (425) 760-2786



**October 7th 10am - 5pm 8th 10am—5pm**

Marysville Rock and Gem Club 43rd Rocktoberfest  
Totem Middle School Cafeteria 7th Street and State Avenue Marysville WA

**October 28th 10am - 6pm 29th 10am - 5pm**

Bellevue Rock and Gem Club Octoberfest of Gems annual show  
Vasa Park 3560 W Lake Sammamish Pkwy SE Bellevue, Washington 98008

**November 11th 9am - 5pm 12th 10am - 4pm**

Skagit Rock & Gem Club Treasures of the Earth  
Sedro Woolley Community Center 703 Pacific St Sedro Woolley WA 98284

Local Gem Shows



## SKAGIT ROCK & GEM CLUB MINUTES

NO Board Meeting in September

### Meeting Minutes Sept 2, 2017

**Guests:** We had two guests this month-Zach and Tiffany, they both received a guest prize

**Treasurer's Report** was read by Dave and approved

**Meeting Minutes:** August minutes as printed in the newsletter were approved

**Program:** Dave presented an interesting video on fossils titled 'Making North America'

**Display table:** Dave, Joe, Wes, Marie-Claire, Kevin, Janet, and Peggy all brought items to share. Marie-Claire won the prize.

**Birthdays:** Bill and Jim had September birthdays and each one donated \$1.00 to the scholarship fund as is the club custom

**New business:**

- Sign-ups to help with the club gem show in November have started. Flyers will be available at the October meeting for members to put up in store windows and around the community.

- It was suggested to have a club field trip to Princess Jade in Lynden after the popular presentation from Washington Jade.

- Dave will have the shop open for members on Sept 14th at 6pm

- The Mineral Council will be going to the Diatom pits for opal after their meeting on Sept 23rd

Submitted by Debbie Frank

## VISITORS ARE ALWAYS WELCOME!

Meetings are on the FIRST Saturday of the month (except for Jan, July and Dec) at 10:00 am at the  
Mount Vernon Community (Senior) Center  
1401 Cleveland St. Mount Vernon WA 98273



- The purpose of this non-profit earth society shall be to stimulate interest in the study of geology, lapidary, and the collection of geological specimens
- We are a member of the Northwest Federation of Mineralogical Societies and the Washington State Mineral Council. We are affiliated with the American Federation of Mineralogical Societies.
- Dues are \$15.00 per year for adults and \$7.50 for those under age 16
- Visit our website: [skagitrockandgem.com](http://skagitrockandgem.com)
- Email: [skagitrockandgem@gmail.com](mailto:skagitrockandgem@gmail.com)
- Mailing address: PO BOX 244 Mt. Vernon 98273

### Officers and Committees

<b>President</b>	Wes Frank
<b>Vice President</b>	Greg Hochmuht
<b>Treasurer</b>	David Britten
<b>Secretary</b>	Open
<b>Fed Director</b>	Virgil Keltz
<b>Bulletin Ed</b>	Debbie Frank
<b>Past President</b>	Eric Self

**Annual Show Chair**-Eric Self

**Banquet**- The Men

**Display Table**-Open

**Education Coordinator**-Open

**Facilities/Field Trips**- Dave Britten

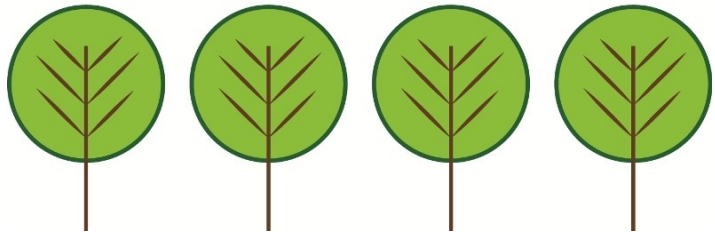
**Greeter**-Linda Keltz

**Library**-David Britten

**Scholarship**-Noni Avery, Joe Kantor

**Mineral Council & PLAC**-Open

## Get Outside



**NFMS Competition**-Open

**Nominating Committee**-Executive Board

**Program**-Open

**Publicity**-Frank Isca

**Stamps**-Virgil Keltz

**Sunshine**- Noni Avery

**Swap**-Vandenburs

**Ways & Means**-Executive Board



Skagit Rock and Gem Club  
Debbie Frank, Editor  
20379 Aliston Ln.  
Burlington WA 98233



**MARYSVILLE**  
**ROCK AND GEM CLUB INC.**

Presents

**43RD ANNUAL  
ROCKTOBERFEST**

October 7th and 8th, 2017

Find the  
address on  
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