



Oregon

Falls

Klamath

Clul

Arrowhead

a n d

0 c k

OFFICERS & EXECUTIVE BOARD

President: Jeff Eastburn 541-363-6154 302 W. Main St. Klamath Falls OR, 97601

Vice Pres: Marshall Curran 541-882-3933 4708 Laverne Ave Klamath Falls OR, 97603

Secretary: Vicky Davis 541-331-4026 4200 Summers Lane # 89 Klamath Falls, OR 97603

Treasurer: Laura Limb 541-273-7503 1528 Dayton Klamath Falls, OR 97603

NFMS Director: Kathi Milem 3333 Anderson #3 Klamath Falls, OR 97603

NFMS Junior Delegate: Alyssa Carnes

Past President: Doris Newnham

Member @ Large: Marvin Stump

The club mailing address is: PO Box 1803, Klamath Falls OR 97601 www.klamathrockclub.org

nicee1214@gmail.com

Committee Chairs

•	>
Sunshine	Chris Chance
Program	Marshall Curran
Greeter/Door Prize	Sandi Masterson
Refreshment	
Historian	Ellie Hart
Librarian	Jessica Limb
Charity	John Long
Claims Rep	
Field Trips	Marshall Curran
Black Light Display	
Show Chair	
Asst Show Chair	Marvin Stump
Safety Officer	Jeff Eastburn
Publisher/ Webmaster	rDenise Sebastian

Meetings are held at the Klamath County Museum Meeting Room – Main & Spring Streets, using the *West* entrance. **Meetings are**

held on the 2nd Monday of each

month at 7:00 pm with the exception of December when we have our Christmas Luncheon and Party and April after the show.

Visitors are cordially invited:

Dues are \$13.50 per year per adult (\$25 for families plus \$1 per child), \$7.50 ages 16-18.

General Objectives of the Club:

To promote popular interest, knowledge and understanding in the various earth sciences, as

in Geology, Mineralogy, Paleontology and Lapidary and other related subjects. To sponsor and provide means of coordinating the work and efforts of all persons interested therein.

Helping Others:

The club participates in the NFMS stamp program, saving large commemoratives, airmail, pre-canceled, and foreign stamps of all values. Proceeds from stamp sales will be used to benefit any charity deemed worthy by the NFMS Endowment Fund.

All contents Copyright © 2011-2012 All rights reserved. No part of this document or the related files may be reproduced or transmitted in any form, by any means without the prior permission of the Rock and Arrowhead Club. Permission is hereby given to non-Commercial and not-for profit groups or persons to copy, forward or otherwise share this publication for educational and informational purposes.

THE NORTHWEST NEWSLETTER is published 11 times a year. Copies are sent to each member's household. The cost is included in your annual dues.

Two free copies of the **AFMS NEWSLETTER** are mailed to each member club. Subscriptions are available at \$3.50 for 9 issues. Send payment to: American Federation of Mineralogical Societies PO Box 26523 Oklahoma City, Ok. 73126.

We are affiliated with

Northwest Federation of Mineralogical Societies

American Federation of Mineralogical Societies

Newsletter Editor Jennifer Zimmerlee 541-993-4955 jlazys@hotmail.com

Visit Us At www.klamathrockclub.org

Please e-mail nicee1214@gmail.com to get on our email list.

Reference to use of arrowheads within our club is limited to flint napping activities during workshops, annual shows and personal creations. No gathering of arrowheads on field trips is authorized or suggested by any club member

June 2012

Father's Day

Inside this issue:

Inside Cover	1
Editors Page	2
May Minutes	3
Minutes con't	4
Rock Pile	5
Field Trips	6
Sunstones	7
Mines	8
Sunstone maps	9

NEXT MEETING:

June 11th

- 7:00 pm
- Refreshments:

Sam & Chris Chance

• Program:



CLUB ~ KLAMATH FALLS OREGON

~ ROCK AND ARROWHEAD

FROM THE EDITOR....

Page 2

Wow, it is here, my last newsletter. It has been a huge honor to bring the news to you each month for the last few years. The fun, compliments, awards, feedback will provide memories to last a life time. Currently I'm in southern California having fun while my husband works, just one stop on a long journey across the US this year. With travel comes spotty internet so if you don't hear from me for a bit you'll know why. I want to offer Sandi a huge thanks for taking over this newsletter and wish her the best of luck and all the help I can offer. I also owe Denise a huge thank you for printing and emailing our newsletter out and an apology, she had sent me the show info last month and I just flat missed. Scanned an email, took out the info I needed and didn't finish the rest of it. So I'm sorry. Also thanks to Larry for my sticker, I love it. Life is short so live all your dreams and have lots of fun. Please friend me on Facebook or check out my blog at http://zcrewnews.blogspot.com/. Happy trails to you all, till

We meet again! *Sennifer*



June Birthstone

Moonstone belongs to the mineral family of feldspars. Known for a range of colors with a iridescence known as adularescence, moonstone shines in unique jewelry settings.

Found in several areas of mined feldspar, look for areas with a high concentration of albite such as Southern California, Maine and North Carolina.



Happy Birthday

Kira Brux - Klamath Falls, OR

Alyssa Carnes - Klamath Falls, OR

Rachel Limb - Klamath Falls, OR

Elinor Taug - Fairview, OR

Jennifer Zimmerlee - Moro, OR



Page 3 ~ ROCK AND ARROWHEAD CLUB ~ KLAMATH FALLS OREGON



May 14th, 2012 Meeting Minutes Submitted by Vicky Davis

Meeting called to order by President Jeff Eastburn at 7:05pm. Pledge of Allegiance

Guests: Alisia Baxter and Richard Harter (2 Guests) (Total in Attendance, unknown)

Door prizes: slabs from Garwin Carlson, won by Vicky D., Priday thundereggs won by Bob M, Susan K.

Program will be presented by Tommy Wells, retired geologist.

Kids' Program: Rachel L. will conduct.

<u>Birthday Contributions:</u> Happy Birthday to those whose birthdays are in May, and to those who donated tonight, whose birthdays were during times they were absent from monthly meetings.

<u>Minutes from April monthly meeting</u>: Correction to; Field trip to Newnham's Opal Mines, should be 80 miles East of Klamath Falls, instead of East of Barnes Valley. Other minutes approved. Motion made by Chuck N, seconded by Marv S.

<u>Treasurer's Report:</u> Paying bills left and right. Paid previously approved bills. Approved to pay for motel and gas expenses for Kathy M. and Alyssa C. to attend Federation meeting. Moved and seconded.

NWF Report: Kathy and Alyssa will leave Friday. Alyssa going as Junior delegate.

<u>Historian Report:</u> Ellie H. doesn't trust human memory, looking for old copies of Dusty Rocks, going through old copies of Herald & News issues. She is still working on reporting "what charities we donated to, during last 20 years of Gem & Mineral Shows. Jeff thanked Ellie and commented her work is a success.

<u>Editor Report:</u> Sandi M. is receiving assistance from Jennifer Z. so she will be ready for July newsletter editing. She requests all club members submit articles, including items you may like to sell. Doesn't have to be all rock related.

Discussion that newsletter submittals must be in by Monday, last weekend of each month.

<u>Webmaster Report</u>: Printer is showing wear & tear. Club decision was made to purchase new printer. Approval to purchase was voted on end of last year. Denise and Laura will make the purchase. Denise is starting program on website for membership.

Correspondence: None.

Charity Report: Long's are absent.

Librarian Report: Absent. Laura mentioned there are several old issues of Lapidary Journals, Rock & Gem magazines.

<u>Old Business:</u> 1) Barb M. asked about whether Chocktoots have been called. Suggestion is to add a 'disclaimer' to inside cover of newsletters each month stating, "reference to use of arrowheads within our club is limited to flint napping activities during workshops, annual shows and personal creations. No gathering of arrowheads on field trips is authorized or suggested by any club member". This passage will be improved upon before submitting to newsletter editor.

2) Club's trailer ramp is more secure, brakes are not working yet. Trailer has been moved back to Zunbrum's home.

3) Theme for next year's annual show will be: <u>OBSIDIAN</u>. Advertising can now begin.

Page 4 ~ ROCK AND ARROWHEAD CLUB ~ KLAMATH FALLS OREGON



Minutes Continued....

<u>New Business</u>: Please bring items (rocks, old magazines, old sets of lights) to sell at next general monthly meeting. Silent Auction proceeds will go to costs for renting porta-potty for field trip. There was discussion about contributing cash from silent auction for funds to NW Federation meetings and field trips.

<u>Field Trips:</u> See body of April newsletter and future newsletters. Head count was taken for those who will be attending Rhodonite Trip May 19th.

Sunshine Report: Darrell McCulley is improving and expected to return home from Redding hospital this week.

Refreshments provided by: Sandi M. and Katie B. Thank you!

Next meeting: Monday, June 11, 2012 7pm, Klamath County Museum

Meeting Adjourned: 8:10pm. Program was presented by Tommy Wells, retired geologist.



Winner, Crystals: Alyssa Carnes



Winner, Crystals: Angie Britan



Winner, People's Choice: Lois Phillips



Winner, Craft: Nicki Biehn

Volume 53, Issue 6 June 2012	Page 5 C L U B ~	~ ROCK AND ARROWHEAD KLAMATH FALLS OREGON
		BOCKPIC
Rock, Gem, Mine	ral Shows	Rock Club Has Black Light To Loan
		If you would like to borrow the club's black light
June 9-10Butte, MTJune 16-17Newport, OR		for one month, please attend a monthly meeting,
	see the librarian or treasurer, pay a \$20 refundable	
<u>REFRESHMENTS sign ups.</u> Thank you to all who donate your food and time to prepare it for the rest of us!		deposit, and return the black like the following
		monthly meeting.
April ~ Garwin C. May ~ Sandi M.	Marshall C.Katie B.	



Sunshine Report. Please keep Ken Newnham and Darrell McCulley in your thoughts and prayers.

~ Sam & Chris C

~ Marv & Leah S.

December - Christmas party, no meeting

~ Sandy Gentry

~ Denise S.

~ Doris N.

~ Jeff E.

~ Ken & Marolyn D. ~ Tom & Cheryl E.

~ Vicky D.

~ Laura L.

~ Don P.

~ Kathi M.

June

July

Aug

Sept

Oct

Nov



~ ROCK AND ARROWHEAD CLUB ~ KLAMATH FALLS OREGON



Sunstones Field Trip, Plush OR June 22 - 24, 2012

On Friday June 22nd in the morning Garwin will be going to the claims and putting our yellow

flagging on the upper part of the road into the claims. There will also be yellow arrows pointing the way to the claims. Watch for the yellow arrow on the main road. You are welcome to come out to the claims at any time.

Camping at the claims are dry camping with no hook-ups available. If anyone wants to bring along a porta-potty you are welcome to do so. The area around the claims is mostly sagebrush. There are very few rattle snakes, scorpions and black widow spiders. Garwin has never seen a rattle snake on his many trips to the claim, but always be careful and aware of your surroundings when at the claims. Restroom and regular camping are available at the public dig area if there is space available.



If you have never been to the claims make sure you have good tires and a good spare - flat tires can be a problem. The road is 10-15 miles of rough gravel which makes for dusty travel. When driving down the road help keep the dust out of your car by keeping your windows closed and open vents or turn on air conditioning to pressurize the inside of your ve-hicle and keep the dust out.

The collecting area is about 56 acres and there are several ways to collect sunstones. You can just pick up sunstones on the surface (having polarized sun glasses will help you to see them on the surface). You can hard rock mine the stones trying to get a larger piece or the brighter colors. Plan on bringing shovels, sledge, picks, hammers, wedges and screens. Bring plenty of water and other cold drinks, lunch, sunscreen, bug spray, gloves, chairs and shade if want to make a day trip of it and your camping gear if staying overnight. You are welcome to come out at any time to the claims.

Road to the claims begins in Plush, OR. Take the road heading north out of Plush. First 8 miles is good blacktop chang-ing to gravel. Turn right on road 3-11 going about 1/2 mile. Turn left on 6155 heading north going about 9 miles of rough gravel road. Turn right where road 6155 and 7145 split. (Road 6155 goes to public dig area, **do not take this road**) Follow 7145 for 2.3 miles to yellow arrow on left side of road. Turn left and continue on this side road about 3.4 miles. If you get lost stop at other mines in the area and ask for directions. Don't follow road 7145 north of road into claims or it will take you 100 miles into Burns, OR.

About 4 sq. mi. of the Lake County sunstone area have been withdrawn from mineral entry and established by the U.S. Bureau of Land Management (BLM) as a free public collecting area. This sunstone area is located off the northeast flank of the Rabbit Hills about 25 mi. north of Plush and 80 mi. northeast of Lakeview. Maps, directions, and information on road conditions are available from the BLM District Office in Lakeview. Medical help is available at the Dust Devil commercial mine on the road to the public area.

If you have never gone to the claim or dug sunstones, it is a long drive but well worth the trip for a fun day for all ages and skill levels, bring a friend and open their eyes to fun of rock hounding. If you have any questions call Garwin at 541 -882-8276 and we hope to see you there.

Page 6

Page 7 ~ ROCK AND ARROWHEAD CLUB ~ KLAMATH FALLS OREGON



The Oregon State Gem, Sunstone



Oregon sunstone, also known as heliolite, is a transparent feldspar with colors ranging from water clear through pale yellow, soft pink, and blood red to (extremely rare) deep blue and green. The color appears to vary systematically with small amounts of copper and may depend on both the amount and the size of individual copper particles present in the stone. Pale yellow stones have a copper content as low as 20 parts per million (ppm) (0.002 percent), green stones contain about 100 ppm per million (0.01 percent), and red stones have up to 200 ppm (0.02 percent) copper. Some of the deeper colored stones have bands of varying color, and a few stones are dichroic, that is, they show two different colors when viewed from different directions.

Many stones appear to be perfectly transparent at first, but when they are viewed in just the right direction, a pink to red metallic shimmer flashes from within the stone. This effect is called "schiller" or "aventurescence" and is caused by light reflecting from min-

ute parallel metallic platelets suspended in the sunstone. When viewed along their edges, the platelets are invisible to the naked eye; when viewed, however, perpendicular to their surfaces, they reflect light simultaneously from each platelet, creating a mirror effect. Earlier studies of the Lake County feldspar suggested that the platelets were hematite (iron oxide), but the most recent research concludes that they are flat crystals of copper metal.

The terms "sunstone" and "heliolite" (from Greek helios, meaning sun, and lithos, meaning "stone") have been used for at least two centuries for feldspars exhibiting schiller. The Lake County occurrence was first reported in 1908, and the presence of the schiller effect was the original reason for naming the stones sunstones. For decades, however, the term "sunstone" has been used for these Oregon gem feldspars both with and without schiller. Oregon sunstones are a calcium-rich variety of plagioclase feldspar named labradorite, a common mineral in basaltic lava flows. All three known sunstone occurrences are in small basalt flows that superficially resemble basalt flows elsewhere in the state that contain large feldspar phenocrysts or megacrysts. However, feldspars in those flows are typically cloudy to opaque and relatively small compared to those in the sunstone flows, which are clear, glassy, and can be up to 2 or 3 in. in one dimension. No detailed information has been collected on the geology, petrography, or chemistry of the known sunstone flows, so no meaningful comparisons can be made between them or with other flows in the area. The sunstone flows appear to be small; the Lake County occurrence covers about 7 sq. mi., and the two Hamey County occurrences are probably less than 1 sq. mi. each. Considering the regional geology and the wide separation between the flows, it is probable that there are more sunstone occurrences in the area.

Sunstones are mined from the soil and partially decomposed rock formed by weathering of the lava flows. The surface

debris is dug with pick and shovel and sieved through a quarter-inch screen, and the sunstones are separated from rock fragments by hand. In some local areas, the lava flows are weathered to a depth of several feet, and good stones have been recovered from pits dug into these zones. Hard-rock mining techniques have been used on unweathered parts of the flows, but the sunstones are often shattered along with the lava, and recovery of large unbroken stones is difficult.



~ ROCK AND ARROWHEAD CLUB ~ KLAMATH FALLS OREGON



The Sunstone Mines

You've seen them on Cash and Treasures on the Travel Channel, read about them in Rock and Gem or shopped from them at our show, while in Plush take the time to check out some of our commercial mines and see if you can find your own treasure.



The Sunstone Mining Company

www.sunstonemining.com

The Sunstone Mining Company produces natural Oregon Sunstone from the High

Desert of southern Oregon. We operate an extensive number of Bureau of Land Management (BLM) mining claims. The sunstone mining area is approximately 27 miles northeast of Plush, Oregon. Sunstone Mining Company is owned and operated by Gary Kratochvil.

Double Eagle Mine

www.doubleeaglemine.com/

We are one of only a few full time mining companies of Plush Oregon Sunstone, which is a rare top gem quality Copper Bearing Labradorite, Feldspar. Giving the world a great opportunity to buy direct from the mine one of the rarest gemstones.

The Dust Devil

www.dustdevilmining.com

Dust Devil Mining Co. was founded by rock hounds who believe everyone should have access to good quality cutting rough at a reasonable price. We believe the Oregon Sunstone **is** on the threshold of becoming a very popular gemstone and that demand will cause the price to increase considerably over the next few years.

The Spectrum Mine

www.highdesertgemsandminerals.com/html/spectrum_sunstone_mines.html

High Desert Gems & Minerals currently owns over 40 sunstone mining claims in the Plush and White Horse Ranch area of Oregon. We are very active in prospecting and exploring the Plush sunstone area for new sunstone deposits and have discovered more Oregon Sunstone mines than any other company in the world.

Page 8



