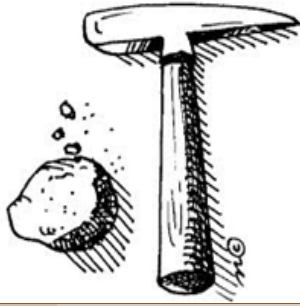


# Nephrite Jade / Wyoming Jade

Article from: Wyoming State Geological Survey, University of Wyoming Education



## Jade State News

VERNE ORCUTT - EDITOR  
JADE STATE NEWS

**N**ephrite jade (also known as “Wyoming Jade”), the Wyoming State Gemstone, was first described in the Granite Mountains area of central Wyoming in 1936 (Sinkankas, 1959; Sutherland, 1990). The most intense jade exploration and mining activity occurred there between about 1940 and 1960 (Madsen, 1978). Recent exploration activity indicates renewed interest in Wyoming Jade.

Gemologists apply the term jade to two distinct and unrelated mineral species: jadeite and nephrite. These two types of jade resemble each other so closely that they are essentially indistinguishable in most hand specimens isolated from their geologic environment of origin. Positive distinction between the two jades often requires the aid of tests such as petrographic, specific gravity, chemical, and/or x-ray diffraction analyses (Hausel and Sutherland, 2000).

**Wyoming Jade is nephrite Jade;** jadeite is not known to occur in Wyoming. Most of the high-quality jade found in Wyoming has been extracted from alluvial deposits in and around the Granite Mountains of central Wyoming. Jade’s specific gravity of 2.9 to 3.02 is not great enough to concentrate usable-sized pieces into well-defined placers. Wyoming Jade is considered to be some of the finest nephrite in the world, against which material from other deposits must be compared (Sinkankas, 1959). Wy-

oming’s nephrite jade varies from translucent to opaque, and ranges in color from off-white (rare) to apple green, emerald green, leaf green, olive green, black, and green and white “snowflake jade” (Hausel and Sutherland, 2000). Detrital nephrite jade is found over a wide area of central Wyoming, from the southern end of the Wind River Range on the west to the Platte River near the town of Guernsey on the east, and from Sage Creek Basin along the Sierra Madre on the south to near the town of Lysite on the north.



Jade in its natural state after cleaning



Another Jade specimen after polishing

### Physical properties

Nephrite is an amphibole made up of extremely dense and compact fine-grained fibrous tremolite-actinolite, whereas jadeite is a pyroxene of the augite series composed of fine-grained, compact massive aggregates of interlocking crystals. The felted fiber (nephrite) or interlocking crystal (jadeite) textures of these two different minerals both result in a toughness and durability much greater than anticipated from their moderate

hardness (5.0 to 6.0 for nephrite and 6.5 to 7.0 for jadeite). This moderate hardness combined with great toughness makes jade, regardless of whether it is jadeite or nephrite, relatively easy to saw and carve into delicate but extremely durable objects of art and adornment (Sinkankas, 1959). Because of its fibrous aggregate structure, nephrite has no cleavage. If broken, nephrite shows a brittle and irregular fracture that produces a dull to splintery fractured surface unless accompanied by inclusions of other minerals such as mica (Sinkankas,

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**WSMGS Webmasters****Marlene Sibley—Jim McGarvey****Jade continued from page 1**

1959). Nephrite may occasionally show a direction of separation if it has developed schistosity (Bauer, 1969).

**Geochemistry**

Nephrite is a calcium magnesium silicate  $[\text{Ca}_2(\text{Fe},\text{Mg})_5\text{Si}_8\text{O}_{22}(\text{OH})_2]$  intermediate in composition between actinolite  $[\text{Ca}_2(\text{Fe},\text{Mg})_5\text{Si}_8\text{O}_{22}(\text{OH})_2]$  and tremolite  $[\text{Ca}_2\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2]$ . Bauer (1969) provided a chemical analysis of nephrite from Eastern Turkestan that shows a small amount of sodium present within the mineral (1.28 percent  $\text{Na}_2\text{O}$  in that particular specimen). Madsen (1978) also noted minute amounts of sodium in some analyses of Wyoming nephrite. It is most likely that other elements occasionally substitute within the nephrite structure depending on its specific environment of formation. Harlow and Sorensen (2001) cite an uncommon emerald green color in nephrite as resulting from the presence of chromium within the crystal lattice. The typical green color of nephrite derives from the presence of iron within the crystal lattice. In the absence of iron, nephrite is almost colorless, but appears cloudy white because of its micro-fibrous structure. Black nephrite generally results from excess iron (Sinkankas, 1959).

**Mineral associations**

Nephrite is associated with actinolite and tremolite as a member of the same mineral series. It is also associated with clinozoisite, pink zoisite, epidote, chlorite, white plagioclase, and mica as byproducts related to metasomatic alteration (link to glossary) of amphibolite (hornblende) to nephrite (Hausel and Sutherland, 2000). Other minerals found in association with nephrite include graphite, chromite, magnetite, calcic garnet, diopside, apatite, rutile, pyrite, datolite, vesuvianite, prehnite, talc, serpentine polymorphs, and titanite (Harlow and Sorensen, 2001). Foreign mineral inclusions within nephrite are common and may include those previously mentioned, along with various black iron minerals, micas, quartz, and, at one California location, fine specks of gold (Sinkankas, 1959).

**Genesis and geology**

Nephrite, a product of metasomatism and alteration, occurs as sheets, lenses, and nodules along or near contacts

between dissimilar rock types in strongly metamorphosed zones (Sinkankas, 1959). It also occurs in or adjacent to faults and fault zones. Nephrite in Wyoming is found within granitic gneisses and granites where enclosing or intruding amphibolites have been altered. Sherer (1969) investigated nephrite jade in Wyoming and suggested that it developed from metasomatic alteration of amphibole during metamorphism. Disrupted blocks of amphibolite became trapped as xenoliths in quartzofeldspathic gneiss, and were subsequently altered to nephrite by fluids derived from regional amphibolite-grade metamorphism. Amphibole, primarily hornblende, reacted with hot metamorphic fluids to produce actinolite (nephrite jade), clinozoisite, and chlorite. In the Laramie Range, this alteration was concentrated along shear zones and fractures where it resulted from the emplacement of quartz diorite, vein quartz, or pegmatite. Water loss at sites of nephrite development stopped the alteration process that otherwise would have eventually converted nephrite into serpentine. Wallrock alteration accompanied nephrite development, bleaching leucocratic granite-gneiss adjacent to the jade to produce a mottled pink and white granite-gneiss halo with associated secondary clinozoisite, pink zoisite, epidote, chlorite, and white plagioclase pervasively altered to mica (Hausel and Sutherland, 2000).

Once formed, nephrite jade is much more resistant to erosion than its enclosing rocks, and is often found in residual and alluvial deposits as rounded boulders and cobbles. Alluvial jade tends to be solid, flaws and weak or impure zones having been removed during erosional processes. Because of nephrite's durability, cobbles and boulders often survive transport over great distances from their source. They may also take on a natural polish from fluvial abrasion and from wind-driven sand in desert areas such as the Granite Mountains. Naturally polished pieces of nephrite jade exhibit a high-gloss, waxy surface and are known as jade slicks (Hausel and Sutherland, 2000). When not in the form of slicks, nephrite pieces may be covered with a cream to reddish brown oxidized weathering rind that hides the jade's true color. Experienced jade prospectors learn to recognize this weathered surface, and can often recognize jade that others have overlooked.

# Wyoming WSMGS Affiliated Rock Clubs

## **Cody Fifty-Niners Rock Club:**

**Meet 4<sup>th</sup> Friday 7:00p.m.-Park County Court-house-Cody**

**Mail:** Stan Strike-2132 Gail Lane-Cody, 82414

**Club Contacts:** Jenny Schneider  
Beth Spears

**President**-Jim Ulmer (307-272-5330)

**Vice President**-Jenny Schneider

**Treasurer**-Douglas Sunderland

**Secretary**-Beth Spears

**JSN**-Beth Spears

**Historian**-Jackie Platt

## **Riverton Mineral and Gem Society:**

**Meet Sept.-May-2<sup>nd</sup> Monday-7:00pm-303 E. Lincoln-Riverton**

**Mail:** Linda Richendifer-P.O.Box 1904-Riverton, WY 82501

**Club Contacts:** Linda Richendifer  
Alice Gustin

**President**-Linda Richendifer (307-856-1532)

**Vice President**-Nancy Eustice

**Treasurer**-Vonda Huish

**Secretary**-Holly Skinner

**JSN**-Holly Skinner

**Historian**-Richard Heumier

## **Rex Young Rock Club:**

**Meet 2<sup>nd</sup> Wednesday-7:00pm-Senior Center-216 E 19<sup>th</sup>-Torrington**

**Mail:** Ron Harroun-P.O. Box 373-Lingle, WY 82223

**Club Contacts:** Joyce Troybridge  
Kim Nielsen

**President**-Kim Nielsen (308-632-2385)

**Vice President**-Ron Harroun

**Treasurer**-Leroy Meininger

**Secretary**-Joyce Troybridge (307-837-2726)

**JSN**-Joyce Troybridge

**Historian**-NA

## **Shoshone Rock Club:**

**Meet 1<sup>st</sup> Tuesday-7:30pm-Library Club Room-217 E. 3<sup>rd</sup> St.-Powell**

**Mail:** Mary Ann Northrup-P.O.Box 256-Powell, WY 82435

**Club Contacts:** Linna Beebe  
Art Schatz

**President**-Mary Ann Northrup (307-754-4472)

**Vice President**-Lynn Neale

**Treasurer**-Art Schatz

**Secretary**-Linna Beebe

**JSN**-Linna Beebe

**Historian**-Linna Beebe

## **Cheyenne Mineral & Gem Society:**

**Meet Sept-May 2<sup>nd</sup> Wednesday-7:00pm IBEW-810 Fremont Ave.- Cheyenne**

**Mail:** Bob King-P.O.Box 21412-Cheyenne,WY 82003

**Club Contacts:** Bob King  
Carroll Schnell

**President**-Bob King (307-632-2702)

**Vice President**-Kathy Bade

**Treasurer**-Steve Bade

**Secretary**-NA

**JSN**-NA

**Historian**-NA

## **Natrona County Rockhounds:**

**Meet 1<sup>st</sup> Thursday-7:00pm-5211 Rambler-Mills, WY (Clubhouse)**

**Mail:** George Tillman-P.O.Box 123-Casper, WY 82644

**Club Contacts:** Helen Hoff  
Jennifer Flowers

**President**-George Tillman (970-405-5502)

**Vice President**-Carolyn Logan

**Treasurer**-Jennifer Flowers

**Secretary**-Helen Hoff

**JSN**-NA

**Historian**-NA

# WSMGS INFORMATION AND UPDATES

by Stan Strike, President



1. **Thank You:** The WSMGS Board would like to thank all the member clubs for the prompt return of their 2013 “Annual Election of Officers Report” and the “WSMGS Dues Form”. Please note that the current contact information for each WSMGS affiliated member club is listed in this Jade State News. The use of e-mail addresses has been reduced to avoid spamming by “web spiders and web bots”. A complete WSMGS Club Directory was sent to all club contacts on January 22, 2013 for inter club use only-not to be published for non-club members.

2. **New Website Format:** Our WSMGS website ([www.wymineralandgemsociety.org](http://www.wymineralandgemsociety.org)) is in the process of being rebuilt by our webmaster –Marlene Sibley-in order to make it more informative to our members/public and to allow additional reference information to be added in the future. The new format will have tabs that can be “pulled” down and opened to allow selection of other subtopics. When complete, the new website could serve as a club program to introduce your members to the power of the internet! Please take time to explore all the links and contact the WSMGS Board with information that could be added.

3. **Required Historical Reports:** As an incorporated non-profit club, the Wyoming Secretary of State requires each WSMGS club to provide it’s individual members with an Annual Financial Report and Activities Report. The Financial report should report balances, income, and expenses. The Activities Report can be a photo copy of the club’s minutes or a Summary of the club’s programs, activities, field trips, etc. Please send a copy of your club’s 2012 Activity Report to Richard Heumier (WSMGS Historian) 2402 East E Street-Torrington, WY, 82240 so it can be preserved in the WSMGS Historical Archives for future reference.

4. **WSMGS Board Meeting:** The WSMGS Board met January 19, 2013. Topics discussed were:

- \* Review of e-mail information sent via affiliated club contacts
- \* Nomination of Verne Orcutt for RMFMS New Editor newsletter competition
- \* Rockhound of the Year “forms” on WSMGS website & sent to clubs-Due March 31<sup>st</sup>
- \* President filed 2012 IRS 990-N-e-postcard 1/13/2013
- \* Proposed changes to WSMGS website by webmaster
- \* Payment of WY Secretary of State Incorporation Fee
- \* Payment of RMFMS dues & insurance for WSMGS Board
- \* Development of Contract Agreement for State Show Bid & WSMGS Trailer Use
- \* Input for February 2013 Jade State News
- \* Review of additions to WSMGS website
- \* Advantages & disadvantages of 501(c)3
- \* Development of new WSMGS logo
- \* Review of draft By-Law amendments for approval at Annual meeting
- \* Donation by Heumier Family Trust for Rockhound of the Year Award

5. The February 2013 issue of the Rocky Mountain Federation News was sent to each WSMGS member club via their club contacts- who should make it available to their club members. **Check out these great articles:** page 3-Geology of South Dakota(Black Hills), page 6-Rockhound Helps to End WWII?, page 9-Is It Topaz or Quartz-testing hardness with water?, page 11-Rockhound Humor

6. **Important Dates & Deadlines:**

- March 31-Rockhound of the Year Forms Due-e-mail or mail form(s) to WSMGS President Stan Strike
- May 1<sup>st</sup>- Deadline for Club News to Jade State News Editor-Verne Orcutt (JSN will print before 5/15)
- May 18<sup>th</sup>/19<sup>th</sup>-Cheyenne Mineral & Gem Show
- June 1<sup>st</sup>- Deadline for WSMGS Annual Meeting Delegate/Alternate Forms to Stan Strike
- June 14<sup>th</sup>-WSMGS Annual Meeting-Riverton, WY
- June 15<sup>th</sup>/16<sup>th</sup>-WSMGS State Mineral & Gem Show-Riverton, WY

State Board Meeting: 1/18/13

Winter is finally here, so it's time to catch up on book work. I have been working on the State Club Directory off & on. It takes a lot of research of reading and collecting of data to come up with what is needed to put in the directory. Without the printings in the Jade State News, I would be slowed to a crawl, so to speak. I get some past data from the club's minutes, the ones I have.


To my knowledge, I have one of the most complete issues of the J. S. Newsletters, so I am able to get as much info from them that was printed. If there is anyone who might have old issues, possibly ones I do not have, please feel free to contact me, so that I might copy them. I am always looking to update. I will bring my complete set to the board meeting for anyone to see. I will bring the State Club Directory to the meeting, also. There is still a lot to do towards getting the older years filled in.

As I am researching, I see certain names being repeated many times. I am able to use this, as well as other info gathered, to make nominations for the "Rockhound of the Year" award. These nominees have a long history as Rockologists, and they all deserve awards. However, only a few get the award. Many Kudos to the ones who do not. The State nominations for this year is due on March 31<sup>st</sup>, 2013. The nomination form is in the last issue of the JSN: issue 4, November, 2012. If you need a form and do not have this issue, please get one from any board member. These people should be recognized for their long time commitment.

Back to researching!!

State Historian,

Richard Heumier



# American Federation of Mineralogical Societies



Turn to page 10 for the AFMS Newsletter announcement dated April 2011

A large measure of the enjoyment of our hobby consists of collecting in the field. For that reason, the members are proud to endorse the Code of Ethics below. It is suggested that field trip Chairs present a copy of this code to landowners when asking permission to enter private property.

## AFMS Code of Ethics

- ☛ I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.
- ☛ I will keep informed on all laws, regulations of 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 - fences, signs, and buildings.
- ☛ I will leave all gates as found.
- ☛ I will build fires in designated or safe places only 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 supply.
- ☛ 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.

## Club News and Reports

### Shoshone Rock Club

#### Historian Report 2012

**Monthly Programs:** Ned Kelley-slide program on Carter Mtn. limb casts; Linda Thomas-Crystals; 61<sup>st</sup> anniversary celebration at the Homesteader Museum with a potluck and museum tour; Jane Neale read an article from the Jade State News on Quartz when a video was unable to be shown; Show & Tell, plus items displayed in the club case at the state show were viewed and items were retrieved by members; potluck picnic at the Homesteader Park; black light show by Lynn Neale; Meteorites by Dr. Bruce Watne; Office & Board elections & silent auction from donations; Christmas potluck with speaker-Curt Talbot on Wyoming minerals and a rock exchange. Thanks

to Art and Judy Schatz, the new 2013 Club Yearbook was passed out at the December meeting.

**Field Trips:** Feb.-Geo-Science Center, Greybull Museum and lecture; Mar.-Cliff Manual, Bighorn Basin dinosaurs & other fossil discoveries; July-Yellow Brick Road, dinosaur tracks & sweetwater agates; August-Cedar Ridge field trip to an opal claim; December -Mary Ann Northrup lead a trip to the Greybull area for woodbuds, brecciated Jasper, and assorted fossils.

**Specialty Programs or field trip notifications:** Feb. Lynn Neale-lapidary instruction class; June-PVCE- Legend Rock Archaeological site tour; August- 100th birthday celebration of the Powell Library; September-Cedar Ridge field trip to an opal claim; September-Billings rock show; October-

Margaret Scranton's 90<sup>th</sup> birthday party at the Rocky Mountain Manor; November - PVCE-Rock hounding lecture in the Bighorn Basin; December - Washakie Museum-speaker Dr. George Frison on Bison and Native Americans.

**Boys & Girls Club Programs:** Jan- Linna Beebe & Kim Winters - crystals; Feb.- Lynn & Jane Neale-fluorescent rocks; Mar-June Rich - fossils; April-Mary Vogel-spinning wool; May-Nancy Ryan & Mary Vogel-plant for your mom; September-Linna Fossil program; Oct.-Linna-Halloween cards; Nov-Linna-Native American tools; Dec.- Linna-students made rock slab tree ornaments.

**New members:** Linda Thomas, Albert & Sheila Abee, Cynthia Swain & Martin Nielson, Donna Brasher, Tuesdee Oswood, Roger and Joy Lyons.

**Club donations:** Feb. -\$200- Geo-Science Center, Greybull; March -\$400 -Northwest College scholarship Fund; November - \$25.00 to the American Lands Access Association, \$50.00 to the Boys & Girls Club.

**WSMGS state rock show** was held in Torrington, "Wyoming Oceans of Treasures": Cody 59'ers won the traveling trophy for their club case, SRC won 2<sup>nd</sup> for the club case, & Jane Neale won a 3<sup>rd</sup> on her mineral case. Lynn and Jane Neale were acknowledged as Rockhounds of 2012 at the WSMGS meeting. Club members are very proud and appreciative of the service of this great couple!

**New officers for 2013:** Pres. Mary Ann Northrup, Vice Pres. Lynn Neale, Treasurer Art Schatz, Sec. Linna Beebe. Other members of the Board: Ned Kelley, Romain & Mary Vogel, Carl Brown & Jane Neale.

Congratulations to the Shoshone Rock Club for another good year!

Respectfully submitted, Linna Beebe, Historian

## CODY 59ers ROCK CLUB NEWS

The Cody 59ers Rock Club finished 2012 with a Christmas Party at the Sunset House Restaurant. Dinner was No-Host with everyone ordering their favorite meals. Dinner was followed with a gift exchange.

Our new officers for 2013 are: President-Jim Ulmer, Vice President-Jenny Schneider, Treasurer-Douglas Sunderland, Secretary-Beth Spears, and Historian- Jackie Platt.

Our Club has paid the 2013 fee and is current as an incorporated nonprofit with the Wyoming Secretary of State and electronically filed their 990-e.

At the January meeting members were given a financial statement for 2012 which had been audited and certified by an audit committee. The club is planning on doing another activity for the young adults who participate in the Cody Nowcap. A committee was formed to investigate the possible purchase of a fluorescent light for individual club members to use and for demonstrations. The program by B.L.M. staff geologist-Gretchen Hurley-was "Geo-Connections Resulting from Tectonics & Strata in N.W. Wyoming."

Our February program will be Bob Richard-"Geology of the Cody Area." The 59ers are looking forward to taking some indoor field trips this early spring to museums that are close by in the Big Horn Basin. We are also polishing our Jade pieces getting them ready for the WSMGS State Rock Show in Riverton June 15-16<sup>th</sup>.

## 59ers Rock Club, Cody, Wyoming Historian Report

### First Quarter 2012

#### First meeting, January 27, 2012

Twenty-seven people attended the first meeting of the year for 59ers Rock Club. It was held Friday, January 27, 2012 at 7 pm in the EOC Room of the Park County Courthouse. The new officers were introduced. They are as follows:

Jim Ulmer,	President
Corinna Lineback	Vice-President
Beth Spears	Secretary
Brad Miller	Treasurer

We discussed the new Bylaws and the new Constitution and voted to accept them. We had show and tell and a silent auction. The Platt's furnished the two door prizes and the refreshments. The door prizes were won by Ariana Joskow and Deb Severide.

Our first field trip was to Greybull to the Geo-Science museum. It was on Saturday, January 28. We met at the Kmart parking lot and car-pooled to Greybull. Nine people from the Cody club attended and we met up with Shoshone Rock Club and had a joint field trip.

#### Second meeting: February 24, 2012

Sixteen people attended the February 24, 2012 meeting which was held in the Old Law Library of the courthouse. Treasurer Brad Miller reported that he had filed the e-postcard for the 2011 IRS filing. The IRS reported back that they had received it. We discussed the 2012 budget, the new bylaws and constitution, the Garage-a-Rama, and the outreach at Nowcap for disabled adults.

It was reported that Charter Member Walter Nelson, age 84, had a stroke. He is undergoing rehab at Elkhorn Valley Rehab Hospital in Casper.

Jim Platt reported about the previous month's field trips. Beth Spears served delicious refreshments and a door prize. The door prize, a Wyoming Atlas, was won by Stan Strike. We had a silent auction of 16 beautiful rocks.

Ned Kelly gave a very interesting program and power point presentation about limb casts. These limb casts were located on Piney Creek west of Meeteetse, high in the mountains. Ned and his wife, Lynette, had hiked up there and carried out many limb casts. This was done legally. It was a very good program.

#### March 19, 2012

On Monday, March 19, 2012, four of us went to the NOWCAP building. There we assisted the clients in making pet rocks out of rocks, feathers, pipe cleaners, and other colorful items. There were 6-8 clients.

#### Third meeting: March 23, 2012

Our third meeting was held in the EOC room of the courthouse with 20 people attending, including three pebble pups (children). We discussed the upcoming state show and the upcoming Garage-A-Rama. The program was about jade, presented by Jim Ulmer. Our vice president, Corinna Lineback was not present because her son was sick. We had three guests, Bruce and Tracy Smith, and Trish Maslak. They all joined. Jackie Platt, club historian brought the most current club scrapbooks for the members to look at. Jackie has started a new 2012 scrapbook. Jackie Platt, Sunshine Lady, presented bills to the club for greeting cards and stamps. We got an update on Charter Member, Walter Nelson. He is in the nursing home in Thermopolis after having a stroke. We had two returning new members, Bob and Nancy Brown.

After the program and refreshments we had a silent auction. Stan and Kay Strike served delicious refreshments. Gail and Douglas Sunderland donated the door prize, which was won by Stan Strike. The door prize was four beautiful rocks, sweetwater agates, petrified wood, and other rocks. The next meeting will be a work meeting the night before the Garage-A-Rama at the Riley Arena.

#### 2<sup>nd</sup> Quarter 2012

##### April 2012

We learned that Roz Doerr had taken a fall while rockhounding. She injured her knee and had surgery on it at West Park Hospital. Our Sunshine Lady visited her in the hospital and gave her a get

well card. On Saturday, April 14, 2012, we went on a field trip to Cedar Mtn. Fifteen people went on this field trip. We found petrified wood, fossils and agates. We went all the way up to Valley on the Southfork and then came down to Lovelace's in Indian Pass and looked for rocks.

Friday, April 20, 2012 marked the 61st anniversary of the Shoshone Rock Club. Two of us from 59ers motored over to Powell to help Shoshone Rock Club observe their anniversary.

On Monday, April 23, 2012, four of us went to the NOWCAP building. There we assisted the clients in digging through the sand for fossils, agates, pretty stones, and other colorful items. We sang happy birthday to Jim Platt. The clients enjoyed our visit.

#### Fourth meeting, April 27, 2012

Our fourth meeting was a work meeting, setting up the display for the club's part of the Garage-a-Rama at the Riley Arena. Ten club members helped put our club's booth up and running. Others dropped off their goodies for the sale.

Then, on Saturday, April 28, 2012, we had a booth at the Optimists Garage-a-Rama at the Riley Arena. We had a good turnout of club members to help man the booth and we made over \$200 in profit. We had a sign up sheet there for the prospective members to join us. Several people signed up and paid their dues.

On May 21, 2012 we went to the NOWCAP and presented a craft program to the residents.

#### Fifth meeting, May 25, 2012

Our fifth meeting was held in the EOC room of the courthouse with President Jim Ulmer presiding. We began work on the club showcase. We skipped a meeting in June.

#### Third quarter of 2012

Five people went on the field trip to Cedar Ridge out of Worland on July 1. About 30 people went on the field trip on July 7, 2012. They went to the Yellow Brick Road.

#### Sixth meeting, July 27, 2012

Our sixth meeting of the year was held in the EOC room again with President Jim Ulmer presiding. About 12-15 people attended. We had a silent auction. The program was presented by Stan Strike about polishing rocks. Ned Kelly served the refreshments and Jim Platt won the door prize, which consisted of two petrified wood rocks with polished ends, a book about geysers, and a deck of playing cards with a rock theme.

#### Seventh meeting, August 24, 2012



Our seventh meeting of the year was a picnic held at Beck Lake Park on August 24, 2012 at 5:30 pm with about 16 people attending. The club furnished the meat (chicken) and the members brought food to share. President Jim Ulmer brought rocks for a silent auction, we did that and left the area when it turned dark.

Eighth meeting, September 28, 2012

Our eighth meeting was held in the EOC room with President Jim Ulmer presiding. About eight people attended. We were instructed to bring our finds of the summer. The door prize was won by Jim Platt and donated by Gale Sunderland. The door prize was a selection of pretty rocks. Our Secretary, Beth Spears, received a telephone call during the meeting concerning a fire near her home and promptly left.

**4th quarter of 2012**

Ninth meeting, October 27, 2012

Our ninth meeting of the year was held in the EOC room with President Jim Ulmer presiding. Fourteen people attended. Officers Vice President Jenny Schneider and Secretary Beth Spears also were there. Treasurer Brad Miller was absent. Larry Brown was our guest.

The fossil display has been taken out of the library. This display was Jim Platt's idea. We purchased the magazine, "Rock and Gem" for the library patrons to read. We voted to purchase grit and belts for our 5 or 6 pieces of equipment. We still have a display of rocks in the courthouse. Jenny Schneider became our new VP because Corinna Lineback moved to Billings.

We informally discussed the upcoming club election. Everyone who is an officer now said they would continue being an officer, except Brad Miller. He has held the treasurer's job for two years.

We voted to have our Christmas party on Saturday, December 7. Jim Ulmer said he would look into the Sunset House or Chinatown. We had a show and tell and also a silent auction.

The Severides served delicious pumpkin bars and punch or milk. Ron Bice won the door prize, a Lake Superior cabochon. After munching on the goodies, we viewed a DVD about making cabochons.

Tenth meeting, November 17, 2012

About 20 people attended the November 2012 meeting. The program was Wild Horses of the

McCulloch Peaks by Phyllis Preator. It was a power point presentation which we viewed on Beth Spears laptop computer. The meeting was in the Barling Room of the courthouse. Pete Joskow spoke about supplies for the rock equipment. Mrs. Douglas Sunderland has become our treasurer for 2013. Committee sheets and refreshments sign up sheets were sent around. Rozi Doerr showed us the perfect arrowhead she found. Refreshments were served by Jenny Schneider. Ariane Joskow won the door prizes, a piece of pyrite and a book about hiking in the Beartooths, and a rock of leopard/galena. The Christmas party was changed to December 12.

Jackie Farias-Platt, 59ers Rock Club Historian

**When leaving your dog in the car**

A man pulls into a crowded parking lot and rolled down the car windows to make sure his dog had fresh air. The dog was stretched out in the back seat, and the man wanted to impress upon the dog that he must remain there. The man walked to the curb backward, pointing his finger at the car and saying emphatically, "Now you stay. Do you hear me? Stay!" The driver of a nearby car gave the man a startled look and said, "I don't know about you, man," he said incredulously. "But I usually just put my car in park."

*Anonymous*

**Washakie Museum, Worland, Exhibition**

*Linna Beebe [stoneage@tritel.net]*

Something fun and interesting to consider!

Cruisin' the Fossil Freeway, with Artist Ray Troll and Paleontologist Kirk Johnson, Temporary Exhibition Opening Reception, Saturday, Feb. 2, at 3-5:00 PM, Washakie Museum. Museum members free, non-members \$10.00. FOSSILS, ORIGINAL ART, LOADS OF FUN. Family Friendly even, Fossil-rific Fingers Foods, hands-on art Project.

**The exhibit will last from Feb. 2-April 27th, 2013**

Organized by the Burke Museum of the University of Washington, Seattle. Major sponsorship for the traveling exhibit has been provided by Microsoft Corporation, Paul G. Allen Family Foundation, Pendleton and Elisabeth Carey Miller Charitable Foundation and Wells Fargo.

Washakie Museum, 2200 Big Horn Ave. Worland, WY 82401, 307-347-4102

for their website: [www.washakiemuseum.org](http://www.washakiemuseum.org)

*Public Lands Travel Management Plans Hits Snag in Courts*

by John Martin , AFMS Conservation & Legislation Chair

Several lawsuits have been filed by various environmental groups against both the Bureau of Land Management and the US Forest Service over their Travel Management Plans. These Travel Management Plans have been going through their development and approval stages for several years and most of them have been released in their final version by the respective government agencies. In most cases the environmental activist groups felt that the government agencies did not do enough to protect the environment to the extent of the agencies own policies and procedures. One of the long-running dispute centers on a Civil War-era mining law, known as R.S. 2477, which granted rights-of-way across public land until it was repealed by congress in 1976. Existing rights-of-way, however, were grandfathered in and now these environmental activists want most of these roads (Rights-of-way) across our Public Lands closed.

A large number of these roads and trails have been used for years by the Hunters, Fishermen, and Off Road Users and, yes, even Rockhounds use some of these roads to get to our favorite collecting areas or campsites. Congress has enacted legislation requiring agencies responsible for the management of our public lands to establish and implement a Travel Management Plan identifying for the multipurpose usage of roads, trails and access rights-of-ways through the public lands they manage. They must take into consideration the recreational and commercial value of these roads and the environmental impact the roads and users of the roads may or may not have on the public land they manage.

The Environmental Activist Groups have been active for several decades trying to achieve their agenda of having no unpaved roads through our public lands or as they call it “A Roadless Wilderness”, where the only way to gain access is on foot or horseback. This will kill most all Rockhounding as we know it today.

What these lawsuits have accomplished, whether ruling in favor of the OHV users, the Government Agencies or the Environmental Activist Lobby, is allow time to return to the negotiating table and reconsider and replan the usage of these roads across our public lands. Now, we in the Rockhound community have a chance to let our voices be heard and our wishes be known on these matters. If we speak

long enough and loud enough and with a unified voice, we may just be able to keep our access roads open to mechanized travel now and for future Rockhounds to enjoy.

It will take several years to redraw the Travel Management Plans, so the fates of our collecting sites are ours to loose. Please get informed and become proactive in the process. A good way to start is to contact your Federation, Federation Director and check often the American Land Access Association (ALAA) Website. The AFMS website <[www.amfed.org](http://www.amfed.org)> and all of the Regional Federation websites can be accessed through the ALAA Website <[www/amlands.org](http://www/amlands.org)>.

**AMERICAN LANDS ACCESS ASSOCIATION  
(ALAA): PURPOSE STATEMENT**

The purpose of the American Lands Access Association is to promote and ensure the rights for amateur fossil and mineral collecting, recreational prospecting and mining, and the use of public and private lands for educational and recreational purposes; and to carry the voice of all amateur collectors and hobbyists to our elected officials, government regulators and public land managers. ALAA has become an organization that is present wherever there are hobbyist and recreational users of our public lands whose interests and concerns are not being heard or are being jeopardized by proposed policy, regulation or legislation at the local, state and federal level.

ALAA, the American Federation of Mineralogical Societies and the 7 Regional Federations do not condone the collecting of any type of specimens where collecting is against Federal, State or local laws, regulations, statues or ordnances. Federation Members adhere to the [AFMS Land Use Polices](#) and the [AFMS Code of Ethics](#) while engaged in collecting of rocks, minerals or fossils.

# Websites for Rockhounds

*Continued from Jade State News, Volume 2012, November, page 15*

9. Subject-Rock Tumbling & Other Lapidary Topics: <http://andy321.proboards.com/>
10. Subject-Guide to locate by state/country Mineral & Gem Clubs of the American Federation of Mineralogical Societies: <http://www.the-vug.com/vug/vugclubs.html>
11. Subject-Web links to Rockhound Sites of Interest: <http://www.mtgms.org/otherint.htm>
12. Subject-Complete Rock Hounding Information Resource: <http://gatorgirlrocks.com/>
13. Subject-Rock Collecting Sites by State: <http://www.42explore.com/rocks2.htm>
14. Subject-How to Read Maps & Describe Locations:  
<http://mcrocks.com/ftr07/WayneNavigation.html>
15. Subject-USGS Mineral Resource Data System Locations: <http://tin.er.usgs.gov/mrds/>
16. Subject-Earth Science / Rockhounding Web links:  
[http://www.dmoz.org/Science/Earth\\_Sciences/Geology/Rocks\\_and\\_Minerals/Rockhounding/](http://www.dmoz.org/Science/Earth_Sciences/Geology/Rocks_and_Minerals/Rockhounding/)
17. Subject-Basic Rockhound Information Web links:  
<http://cash-and-treasureswiki.travelchannel.com/page/Rockhound+Links+for+Dummies>
18. Subject-Fluorescent Mineral Index:  
<http://www.galleries.com/minerals/property/fluotabl.htm>
19. Subject-Lewis and Clark/Rockhounding along the Way:  
<http://www.amfed.org/lewisclark.htm>
20. Subject-Western Dakota Gem and Mineral Society:  
[www.wdgems.org](http://www.wdgems.org)

**SAFETY FIRST:** the following safety precautions and guidelines always apply when working with lapidary equipment:

\* ***It is extremely important to wear proper eye protection when using any machine.*** We highly recommend that you wear full coverage safety goggles rather than just glasses.

\* DO NOT wear loose clothing or any accessories (long necklaces, bracelets, shirts with long fringes, and similar) that might get caught by the machines during operation.

\* Use only in a properly grounded and tested outlet. Under NO circumstances should you override the grounding system or modify the plug. Most surge suppressors have a green light indicating that the plug is properly grounded.

\* Set up your machine on a sturdy, level work surface that is water tolerant and at a comfortable height for your frame.

\* ***ALWAYS WEAR a quality dust mask when grinding-sanding-polishing.***

\* Never use any of the silicon carbide or diamond discs, blades, or drums dry. Doing so will permanently damage them and may well damage the slabs you are working. Water also helps to clean the rock and to reduce the amount of silica dust you breathe.

\* Take care to prevent water from running down the shaft and into the electric motor. Fill reservoirs only to the indicated levels and keep all drains open and running free.

\* Always unplug your machine when switching between set-ups, changing blades or discs, making adjustments, or when not in use.

\* Make sure you have educated yourself with written materials or have received instructions about the proper operation of the lapidary equipment you are using.

### PREPARATION:

If starting with a flat rock slab to make a cabochon or another desired shape, it can be pre-marked with a pattern and trimmed down with a slab saw. For the beginner it is recommended to start with a multi-shaped common or inexpensive stone that can result in a free-form (Baroque) style. This allows the beginner to learn the proper technique and feel of each piece of equipment in order to create a polished lapidary product.

### Instructions for the use of a Dop Pot

The dop pot and wax in conjunction with a dop stick is the method used to attach a smaller stone (that can not be hand-held) to a stick so that you can hold and control a stone to be grinded, sanded and polished. The dop stick is most commonly made from a wooden dowel of various diameters approximately 4" in length. The steps to achieve this are as follows.

- \* If the Dop Pot is new add dop wax to the pot as per the manufacturer's instructions.
- \* Clean dry stones can be pre-heated on the table of the dop heater
- \* When the stone and dop wax is warmed place the dop stick in the wax and spin and move around until you have enough wax gathered on the dop stick to hold the stone.
- \* Push the dop stick down on the stone and shape the wax to the back of the stone, have enough wax on the stick to make a good solid backing for your stone. You can shape the wax with your fingers by having a container of cold water near, wetting your fingers and shaping the hot wax. Keep in mind that the wax is very hot and will burn your fingers if you do not keep them wet while shaping the wax. Or use another damp or wet object to shape the wax such as a knife.
- \* If you are unsure of the bond, set the stone and dop stick on the heater for a few more minutes to allow the wax to bond to the stone. Allow the stone and dop stick to cool at room temperature and test to make sure that the stone is securely bonded to the stick.
- \* You are now ready to grind, sand shape and polish the surface of your stone.
- \* To easily remove the stone from the dop stick after your stone is completed by putting it in a freezer for a few minutes and it will easily pop off of the stick.

### Cautions to take note of when preparing a dop stick:

1. Wax is hot and will burn your fingers, be sure to keep your fingers wet with cold water when conforming the wax to the back of the stone.
2. Wear Safety Glass's to protect your eyes from flying objects should the stone happen to fly from your dop stick when you are grinding and sanding.
3. Follow all safety precautions as per instructions with the machines you are using.
4. When you are polishing or sanding your stone too much heat generated from the sanding or polishing operation may damage the stone and can soften the wax and cause the stone to release from the dop stick.

[Note that some rock hounds prefer to use super or epoxy glues to attach dop sticks to stones and are able to separate them by putting in them in the freezer or by soaking with acetone. If the dop stick is metal, it can be separated by applying the heat of a match.]

**PROCESS:** Lapidary equipment to grind-sand-polish rocks differs only in the size of the silicon carbide or diamond grit used to "scratch" the rock. The process begins with grinding (80/100 and 220grit), then sanding (280/400, 600, 1200 and 3000 grit) and finishes with polishing (14,000/50,000 grit). Grit sizes selected can vary with individuals. It is extremely important that the stone is worked uniformly and examined with magnifying equipment to be certain that all of the scratch marks are equal in depth on the stone before going to the next smaller size grit which produces ever finer scratches until the final step produces a "gem" which appears as if it is glistening wet – but is dry!

**Silicon Carbide Machines** - All of the machines have or will need a system for keeping the wheels and your stone wet as you sand and grind. Usually this is accomplished by a gravity feed water system and valves to each wheel or a small pump which sprays water on the wheel. If you are cutting cabochons or polishing small agates you will probably need to dop the stone on a dop stick for better control before proceeding.

Most lapidary machines using the carbide wheels are usually set up with two carbide wheels of different carbide grits. Green carbide wheels work best for lapidary work. Usually 80 or 100 grit for the coarse or rough grinding on your cabochon or specimen and 200 grit for the touching up and more precise shaping of the stone.

For sanding most lapidary machines will be set up with 1or 2 rubber expando wheels for using silicon carbide belts. These wheels allow you to easily change belts when the machine is shut down and they expand to hold the belts tight so they don't slip when it is running. These belts can be purchased in many grit sizes for your various needs. Probably the most common ones would be a 220 grit for the next step after the 200 carbide wheel and then a 400 grit for the fine sanding and then on to a 600 for the final sanding. (tip - some

*(Continued on page 14)*

times a worn out 400 will serve the same purpose as the 600 grit belt).

The last and final step on most machines would be a flat polishing disc which mounts on the threaded end of the arbor on the machines. Usually these will have a soft rubber pad to which you attach a leather or felt pad for the final polishing of the stone. The final process then would be to dampen the polishing pad with water, mix a small amount of your favorite polish in a slurry and add to the pad and apply your dopped and ready to polish stone to the wheel with light pressure. Use caution in the polishing stage as when the polishing pad begins to dry out the stone will begin to slightly pull against the pad and too much heat generated could cause the stone to fracture or come off of the dop stick. We use a small spray bottle filled with water to moisten the pad occasionally if needed during the polish. After only a brief amount of time you can admire the beauty of your nicely polished cabochon or polished agate or stone.

**Diamond Machines** - All of the machines have or will need a system for keeping the wheels and your stone wet as you grind and sand. Usually this is accomplished by a gravity feed water system and valves to each wheel or a small pump which sprays water on the wheel. If you are cutting cabochons or polishing small agates you will probably need to dop the stone on a dop stick for better control before proceeding.

Most lapidary machines using Diamond wheels are set up with two diamond grinding wheels of different grit sizes -usually 80/100 and 200/220 grit. Stones are coarse grinded with the 80/100 grit in order to shape the slab, cabochon or specimen. The 200/220 grit is then used for touching up and more precise shaping of the stone.

For sanding most diamond lapidary machines will be set up with 1 or more rubber expando wheels for using diamond belts. These wheels allow you to easily change belts when the machine is shut down and they expand to hold the belts tight so they don't slip when it is running. Most machines have a series of diamond belts from 280/400 to 3000 grit which will be used for the final sanding or your stone, slab or cabachon.

The last and final step on most machines would be a flat polishing disc which mounts on the threaded end of the arbor on the machines. Usually these will have a soft rubber pad to which you attach polishing pads of finer diamond grit paste (usually 8,000 to 50,000 grit ) to achieve the final polishing of the stone. Use caution in the polishing stage as when the polishing pad begins to dry out the stone will begin to slightly pull against the pad and too much heat generated could cause the stone to fracture or come off of the dop stick. We use a small spray bottle filled with water to moisten the pad occasionally if needed during the polish.

After only a brief amount of time you can admire the beauty of your nicely polished cabochon or polished agate or stone.

**Flat Laps** are used to grind and polish slabs or other flat surfaces such as crystals, geodes, and can be used for some cabs. The laps can be either vibrating or rotary. Vibrating laps use silicon carbide grit or diamond disks and powders much the same way as the above silicon carbide and diamond machines. Simply place the flat surface face down on the lap add the grit and a little water and let the lap do its work. Weights are sometimes used to keep the work piece in contact with the lap, speeding up the process. Rotary flat laps are simply machines that rotate an abrasive disc, typically diamond. Used for crystals, cabs, or other work requiring a flat surface.

**TECHNIQUE:** While cabling or shaping a stone is definitely "hands on" work, here is where that dop stick comes into play. It gives you something to grasp and manipulate the cab with, and saves a lot of wear and tear on the fingernails.

**Grinding:** If you know what you're doing and have the physical strength to press hard continuously, you can really hog off material fast on one of these heavy duty grinders spinning a 100 grit wheel. Of course, if you don't know what you're doing, that means you can also ruin a stone in pretty short order too.

As the stone is rotated with the dop stick, a sweeping, oscillating motion is used to keep the contact point moving on both the stone and the wheel, the object is to produce a smooth surface and uniform wear on the wheel. There is a certain feel to things when you get this motion and the pressure correct that's hard to describe, but you soon come to know it when you're doing things right. It's a skill that's refined with experience, although you may have to destroy a couple of rocks before you get the basics down on ovals and feel ready to try your hand at some free forms.

Use light to moderate pressure and inspect the progress and results of various motions frequently. Once you're started it's a closed loop process and you quickly learn what works for you and what doesn't. Since you are using inexpensive materials and the time involved is relatively low, consider them expendable and not a heart breaking ordeal to screw one up as part of the learning process. The experience of only half a dozen or so work sessions has changed the grinding operation from feeling awkward, clumsy and vexing to relaxing and therapeutic. It takes about half an hour on the grinder to grind a stone to form a domed cabochon but less for free forms.

Remember to work the stone progressively from the edges towards the center of the face. There's a tendency to grind down the corners on a freeform like this too much and that's where a side reference line helps to give a reality check.

If you're having trouble seeing what's going on, one technique which can be employed is to black out the problematic area with a magic marker and look to see after some passes on the grinder if you're taking off material only where you intended to. The grinding operation is complete when the stone is fully shaped.

**Sanding:** The next step is sanding with a 220 grit belt on a water cooled sander with expandable rubber drums. The 220 grit belt is used to remove the scratches left in the surface of the cab by the 100 grit wheel. The 220 grit belt is also abrasive enough that it can be used to do some of the fine shaping and smoothing, especially with softer materials. The rubber drum compresses and conforms to the face of the cab as pressure is applied against it, which also helps with the smoothing chores. The same sweeping, oscillating motion that's employed during grinding is also used on the sanders. The cab must be frequently dried by wiping it with a paper towel or rag during sanding to reveal the remaining scratches. When only 220 grit sized scratches remain, the work is moved to another sanding station equipped with 400grit belts and the process is repeated to remove the 220 grit sized scratches. This process is repeated yet again at another station with 600 grit belts. When all of the 400 grit scratches have been removed and the cab is dried, it has a smooth sheen and a hazy, semi-polished appearance.

The cab is almost finished at this stage and the next operation is polishing.

**Polishing:** A rotary polisher with pads to hold the polishing compound is employed for this task. The pad is wetted with a spray bottle, and then a paste of some cerium oxide or tin oxide is applied to both the cab and the pad. The face of the cab and the edges are then simply pressed into the pad and polished all around. As the pad dries out, the cab starts to get draggy on the surface and it is at this point that the best polishing action seems to occur. Heat from friction can build up quickly during polishing, and it's important to let the stone cool frequently so that so much heat is not built up that the dop wax softens and loses its bond to the cab. The polishing paste tends to build up in any fine cracks or pits in the cab's surface, and it can be removed by a final scrubbing with a toothbrush and soap and water.

Finished! Ain't it pretty? All that's left to do now is to stick it in a freezer...this causes the dop wax to become brittle and lose its bond to the cab, which often falls off under its own weight after a few minutes of cooling. Any remaining wax on the back side is then cleaned up by scraping with the blade of a pocket knife.

*Information Sources for the above article compiled and written by Stan Strike are: [www.therockshed.com](http://www.therockshed.com), [www.inlandlapidary.com/user\\_area](http://www.inlandlapidary.com/user_area), and [www.rockhounds.com/rockshop](http://www.rockhounds.com/rockshop).*

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## An Announcement from the Western History Center

Geri Zeimens, *Secretary Western Plains Historic Preservation Assoc. DBA Western History Center, (501C3)*

I would like to advise you that we are 5 miles West of Lingle, WY on US highway 26 (Goshen County). We are a Western History Center (museum) that houses historical, archeological, minerals and fossils. Among our exhibits, we have a collection that belongs to the Norma Beers estate for public viewing, and, we also have a nice display of items that are of florescent material. Open most weekdays and Sat. from 10am - 3pm. For more information and when we are open as the center is run by volunteers, contact us at 307-837-3052.

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## An Update on "Places top see Geological Displays in Wyoming"

From the Editor: I have been advised that the Frederick Museum in Platte County (Page 10, Volume 2012, Issue 4) has been closed for some time with exhibits and other items of interest sold at auction. No further information is available.

## LAPIDARY TIPS

SLAB SAWS AND MISTING PROBLEMS—A SOLUTION (RMFMS NEWSLETTER-FEB.2013-VOL.44-ISSUE 2)  
BY VERN AND SYLVIA CLIFFE, PASADENA LAPIDARY SOCIETY; VIA *ROCKHOUND RAMBLINGS*, NOV. 2012,  
*SHAWNEE SLATE*, JAN. 2013

The use of slab saws to cut rocks creates the problem of mist that takes upwards of fifteen minutes after the cut before settling inside the hood. Opening the hood shortly after cutting exposes the operator to possible health problems and "coats" clothes and equipment. Many rockhounds elect to wait fifteen minutes before opening the hood, slowing production, especially during club workshops. Now a simple solution to the problem has surfaced. While talking to our friend, Dan Stevens (of Caldwell, Idaho), he suggested an additive to the cutting oil that literally stops the misting. It's thick as honey and available from auto parts stores and WalMart. The product is "No Smoke + Stopleak", made by Bardahl. Dan adds 1/2 cup to his 18" and 24" saws.

**Silver & Rubber Do Not Mix!** (February 1978- Tulip City Conglomerate News)

Rubber should never come into contact with silver-even a rubber band-because it will leave a permanent stain on the silver.

**Fluorescent Labels!** Quinine mixed with water makes a bright blue fluorescent ink for fluorescent mineral display labels. (Jade State News-Sept.2005 from No Stone Unturned via Gems of the Rogue)

**Dirty Tumbler Rollers? Clean them with lacquer thinner!** (Jade State News-Sept. 2005)

**Cleaning Obsidian:** Obsidian can be cleaned by soaking in Oxalic Acid and then washing in Castile Soap. Never put Obsidian in detergent because it leaves a white film which is very hard to remove. (JSN-Sept. 2005)

**Revlon Emery File:** Revlon emery files with a handle work well to size the bezel of a cabochon so it fits into the mounting, light filing required for silver smithing, plus many more uses! Plus it does not plug up like other regular files do. (Jade Journal-P.M.Huntley-date unknown)

**Polished Look?**-If you can't polish a rock and you want to coat it to give it that "Look", try using spray gloss lacquer-which can be removed later with lacquer thinner. NEVER use urethanes, resins, etc. - which are nearly impossible to remove. ( Rock and Gem-April 2010 by William A. Kappeler/ Shop Talk Columnist)

**Polishing Rocks in Rotary Tumbler:** Use a filler material to soften the fall to avoid rocks being chipped or broken. Fillers may be cut up wine corks and rubber bands, walnut shells, wood shavings, etc. Remember objects that float are easier to separate out from the polished rocks.

## KNOW YOUR ROCKS (Rocky Mountain Federation News-Feb.2013-Vol.44-Issue 2)

**Leaverite:** Also known as Dropite, Junkite, and Crudite. This type of rock should be discarded immediately. It constitutes 90% of most rocks. This includes Sourgrape Agate and Mutilated Quartz.

**Sack Rock:** This is material that is stuffed into a sack but falls from the top as the bearer struggles back to the car. If taken home, it will be tossed into a corner and forgotten.

**Wonder Rock:** You always wonder why you brought it home and where you found it.

**Braggin' Rock:** Also called Pocket or Eating Rock. This material is licked, rubbed, spit upon, and fondled until it assumes a near polish and is frequently passed around for admiration.

**@#%& Rock:** A large, heavy, possibly angular rock that falls on your foot as soon as you have removed your hiking boots.

(FROM *THE ROCK COLLECTOR*, 5/08; VIA *SHAWNEE SLATE*, 1/13)





# Working with our youth and community



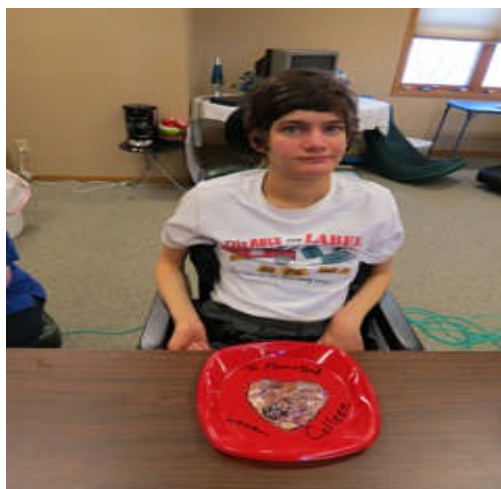
February 5th, Shoshone Rock Club held an “Ugly Rock Contest”. All the rocks were numbered and members votes were counted. Four year old Tanner Seifert won! He was awarded a \$5 bill and was very proud. He carried the bill around waving it up and down as he came to the front to say a shy “Thankyou” with a big smile.  
*Article submitted by Jane Neale*

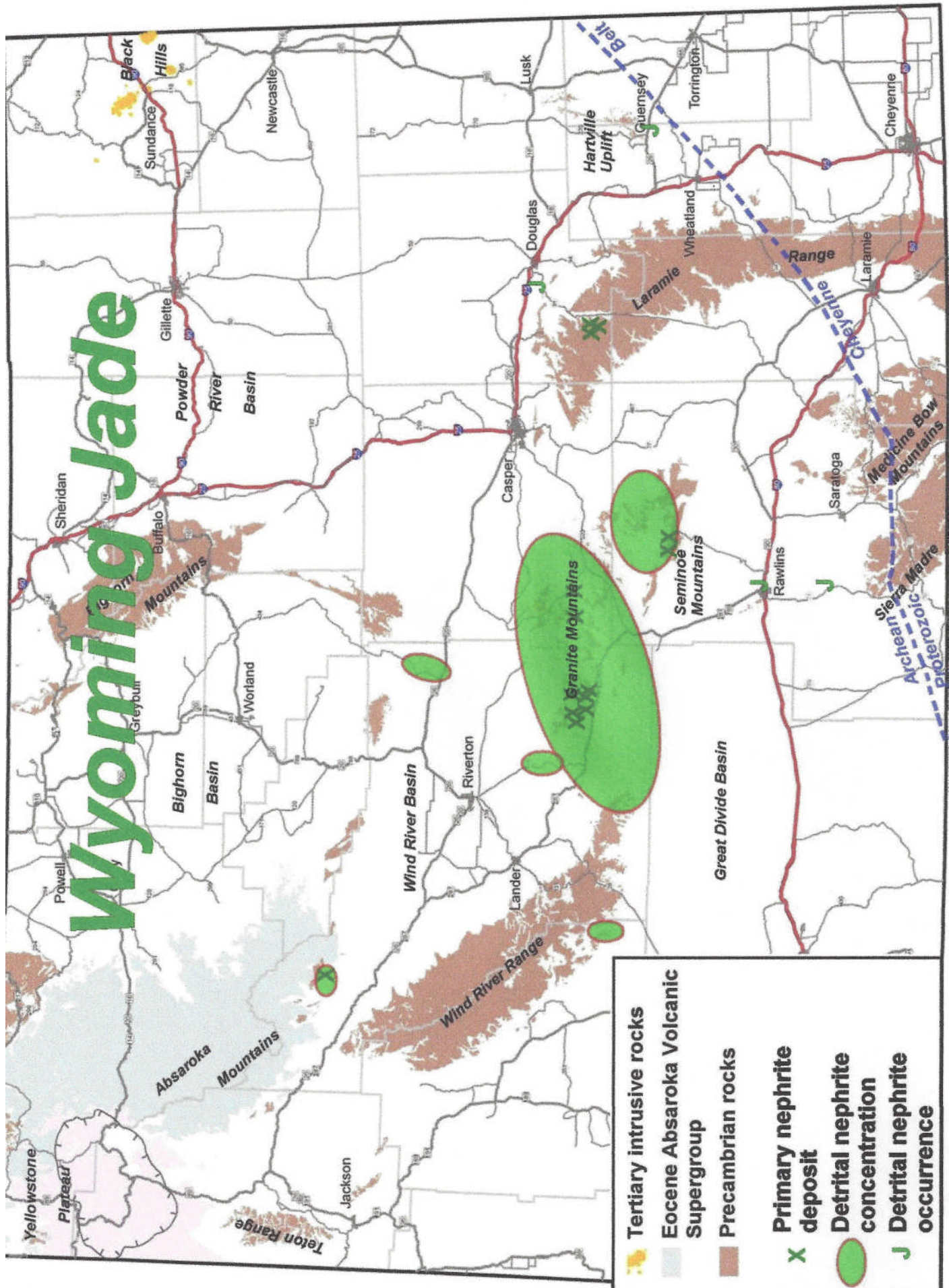
## Words To Live By

Courtesy of the Ammonite Newsletter *Contributed by Wayne Ehlers*

- "Broke" is what happens when your yearnin's gets ahead of your earnin's.
- The person who forgives ends the quarrel.
- A candle loses none of its light by lighting another candle.
- You never get a second chance to make a good first impression.

February 11<sup>th</sup>, President Jim Ulmer of the Cody 59ers had arranged a Valentine Activity for the disabled young adults in the NOWCAP Program (337 Robert Street, behind Cost Plus Appliance Store on Big Horn Ave., Cody. The Activity: Making a Heart outline on red plastic plates and gluing polished rocks to the Heart.





# BIG NEWS:

## The State Show for 2013

Theme: Jade: Wyomings'  
Timeless Gem

Date: June 15th (9am-  
6pm) & 16th (9am-3pm)


Where: Fremont County  
Fairgrounds, Riverton, WY

Show Chair: Alice  
Gustin: 307-856-3699  
(email: [river-  
ton.wyoming.gemshow  
@gmail.com](mailto:river-ton.wyoming.gemshow@gmail.com))



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***This page is still under construction!***

You can help by sending your articles of interest with or without photos, calendar of special events and field trips which I can keep updated for all members to view and/or attend.

Please allow sufficient lead time before the date of the event to provide time for assembly of the Newsletter. As a rule of thumb, I need three weeks from the due date for submissions.