Tade State News

Wyoming State Mineral & Gem Society, Inc.

P.O. Box 697, Cody Wyoming 82414 Volume 2016, Issue 3



There Is A New Club In Town

Verne Orcutt served as our Jade State News Editor for 4 years (16 issues) and recently resigned. He was rewarded for his efforts by receiving a 1st Place award for New Editors from the American Federation of Mineralogical Societies and most recently was awarded 1st Place for Large (over 12 pages) Newsletter from the Rocky Mountain Federation of Mineralogical Societies. Our best wishes to Verne for a long and healthy retirement in order to add to his rock collection.

Our new Jade State News Editor is Jennifer Flowers of the Natrona County Rockhounds. Please send your CLUB NEWS to her ALIAS EMAIL ADDRESS = jsn@wsmgs.org.

Club News can consist of a paragraph or two and/or photos of your field trips, meetings, Rock Shows, special "finds", etc. Please make an effort to have your club be represented in every Jade State Newsletter. Deadlines for submissions are August 1st, November 1st, February 1st, and May 1st = Club NEWS only 4X/Year.

Thank You

Stan Strike-WSMGS President



On Saturday, June 4, 2016, thirty-nine people attended the first meeting for the Sublette County Rock Hounds Club which occurred at



the Southwest Sublette Senior Citizen Center in Marbleton with assistance from Stan Strike, Richard Heumier, and Melvin Gustin. This first meeting introduced Jim Gray as President, Mike Schaffer as Vice President, Debby Jess as Secretary, and continued on page 2

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Sublette County Rock Hounds Club continued from page 1

Leane Gray as Treasurer. A silent auction generated \$130 from generous donations from the Riverton rock club, Ava's Rock Shop in Thermopolis, J L Gray Rock Shop in Marbleton, and others. As of this date, the club has 28 memberships, single and family, representing 51 people.

On June 11, nineteen club members went on a field trip to the Blue Forest in Southwest Wyoming. Many nice small pieces were collected. For at least one of the members this was the first opportunity to go rock hunting with others who could identify the rocks and teach her what to look for and what to leave. The next meeting will be July 16 at The Bench Grill in Marbleton at 1:00 pm At this meeting the Articles of Incorporation and By-Laws will be reviewed, a future field trip schedule will be developed, and a time for

members to show off things they have recently collected. Report from the **Sublette County** Rock Hounds Club. June 24, 2016

-by Leane Gray



WSMGS BOARD INFORMATION & UPDATES

WSMGS 2016 Annual Meeting -June 24, 2016-Goshen County Fairgrounds Rendezvous Center

I. 7:00 p.m. ROLE CALL-3 Officers Present (Excused: Secretary-Carla Tillman, Treasurer-Melvin Gustin, Jade News-Verne Orcutt (resigned) 12 Delegates Present representing 6 clubs-

Cheyenne delegates absent

II. SECRETARY-July 16, 2015 MINUTES READ & APPROVED (Temp. Secretary-Linda Jennings)

III. ANNUAL TREASURER'S REPORT (Temp. Treasurer-Alice Gustin):

Balance 7/16/2015 = \$2009.28 Balance 6/24/2016= \$2462.39

IV. REPORTS

A. MINERAL & GEM SHOW UPDATES: Kim Neilsen reported that Rex Young was able to set up for show 3 days prior to dealer set up and club was ready for show to begin.

The WSMGS Board thanked the Rex Young Rock Club for hosting the June 24th dinner provided for the club delegates, WSMGS officers, dealers, & club members prior to the 2016 WSMGS Annual Meeting.

B. ANNUAL MEMBERSHIP REPORT (Vice President-Linda Richendifer): There was a gain of 122

WSMGS members (+28.5%) state wide from 10-31-14 (total 428) to 10-31-15 (total 550):

Cheyenne	78-134	(+56)
Cody	63-102	(+39)
Natrona	64-66	(+2)
Riverton	160-185	(+25)
Rex Young	23-26	(+3)
Shoshone	43-37	(-3)

C. ANNUAL HISTORIAN REPORT (Rod Baltes): Thank you to the 59ers Rock Club, the Rex Young Rock Club, the Shoshone Rock Club, and the Riverton Mineral and Gem Society Rock Club for getting their annual reports into me. I had a hard time getting ahold of the other two clubs. Natrona County Rock Hound club did send in an email. The rest of the year I received and filed historic reports, Jade state News' Rocky Mountain Federation News, and any other information or reports I received. Please feel free to send anything you want to have put into the historian records -- This is my new email. You can also share via google docs, slides, etc.: rbaltes57@gmail.com

Thank you to Beth Simmons, PhD(RMFMS Vice President) for sending us historical information and articles from the 1950's rock club newsletters and show bulletins. She had done a lot of research to find this information which are primary source documents for our WSMGS historical record.

D, JADE STATE NEWS (EDITOR-VERNE ORCUTT)

- 1. Club News Due August 1st. SEND TO: "pres@wsmgs.org"
- 2. Verne Orcutt has resigned and new editor(s) needed

E. WSMGS WEBSITE

- 1. iPAGEWeb hosting renewed until 3/16/2017
- 2. Domain name renewal: wymineralandgemsociety.org (3/13/2017) wygemandmineralsociety. org (3/4/2018)
- 3. New domain name purchase: wsmgs.org (**Renew prior to 10/30/2016)

V. OLD BUSINESS

- A. Discussion of role of Club Contacts' necessary role for communication within clubs
- B. Alias emails & Club Directory = privacy for individual club members
- C. New Wyoming State Director for RMFMS = Stan Strike
- D. Thank You From WY State 4-H Foundation for \$50 donation for Overall Geology winner at

2016 State Fair

- E. Nominations/voting for \$100 WSMGS Museum Award- Green River Valley Museum in Big Piney (future award to Glenrock, South Pass, & Dubois museums?)
- F. WY Dept. of Revenue: sales at rock shows taxable If club not 501(c)(3)=WSMGS is tax free if show revenue collected by WSMGS and distributed to clubs sponsoring state show. Donations for clubs can also be tax free if WSMGS Donation Forms are used

WSMGS BOARD INFORMATION & UPDATES continued

VI NEW BUSINESS

A. Bid for 2017 Wy State Mineral and Gem Show by Riverton approved. Show will be June 24-25,

B. Recognition of new WY rock club: Sublette County Rockhounds (Jim & Leane Gray)

On Saturday, June 4, 2016, thirty-nine people attended the first meeting for the Sublette County Rock Hounds Club which occurred at the Southwest Sublette Senior Citizen Center in Marbleton with assistance from Stan Strike, Richard Heumier, and Melvin Gustin. This first meeting introduced Jim Gray as President, Mike Schaffer as Vice President, Debby Jess as Secretary, and Leane Gray as Treasurer. A silent auction generated \$130 from generous donations from the Riverton rock club, Ava's Rock Shop in Thermopolis, J L Gray Rock Shop in Marbleton, and others. As of this date, the club has 28 memberships, single and family, representing 51 people.

On June 11, nineteen club members went on a field trip to the Blue Forest in Southwest Wyoming. Many nice small pieces were collected. For at least one of the members this was the first opportunity to go rock hunting with others who could identify the rocks and teach her what to look for and what to leave. The next meeting will be July 16 at The Bench Grill in Marbleton at 1:00pm. At this meeting the Articles of Incorporation and By-Laws will be reviewed, a future field trip schedule will be developed, and a time for members to show off things they have recently collected. (by Leane Gray)

C. Public Lands Access Committee Statement (by Rich Garow) Each club should contact

Forest Service about road closures before August deadline.

D. Awards

- 1. Club Rockhounds of the Year: June Rich-Shoshone Rock Club, Roger & Joy Lyons-Cody 59ers
- 2. State Rockhound of the Year: Jim McGarvey-Riverton Mineral & Gem Society

VI. ADJOURNMENT

UPDATES:

- 1. A special thanks to: Rod & Alleta Baltes, Linda Jennings, Stan Strike, Richard Heumier, Carla Tillman-who helped to set up & supervise the WSMGS sales table and to Melvin & Alice Gustin (Rock Solid Rock & Jewelry Shop) for donating a Lortone 3A rock tumbler and to Linda Richendifer (Rock & Doll) who donated a tool box, both of which were raffled by the WSMGS. Other donations for the WSMGS table were given by the Cody 59ers Rock Club, Kim Nielsen, Dale Tikalsky, Richard & Lettie Heumier, and Jim McGarvey.
- 2. The Peoples' Choice Winners at the 2016 WSMGS Mineral & Gem Show were:

1st Cody 59ers Rock Club

2nd Shoshone Rock Club

3rd Rex Young Rock Club

3. Jennifer Flowers of the Natrona County Rockhounds has volunteered to serve as the Jade State

Newsletter Editor and approved by the WSMGS Board. She is replacing Verne Orcutt, who resigned effective at the 2016 WSMGS Annual Meeting. Verne ended on a high note with a 1st Place Award from the RMFMS Newsletter competition in the Large Newsletter category. He served as editor for 4 years and producing 16 issues of the Jade State News!!

- 4. The Rex Young Rock Club donated 12- 4 foot display cases to the WSMGS. The cases were transported by Rod & Alleta Baltes to Riverton and will be kept in the Riverton Mineral & Gem Societies' storage unit. These cases will be made available for club usage as approved by the WSMGS Board. In lieu of a dollar payment by the WSMGS Board, it has been agreed that the WSMGS will waive the 20% payment of the net profit that the Rex Young Club earned from hosting the 2016 WSMGS Mineral & Gem Show.
- 5. The WSMGS domain name-wsmgs.org-has been renewed until 10/30/2018 via iPage.com.
- 6. Jan Shively of the Cheyenne Mineral & Gem reported the death of club member, Donna Durako who passed away on Saturday, 7/9/16. Please keep George in your hearts and minds at this sad time. George and Donna were Lifetime Members and 2 of the 4 people that discovered blue barite in Shirley Basin.

WYOMING STATE MINERAL AND GEM SOCIETY, INC. 2016 CLUB DIRECTORY & STATE OFFICERS

Information subject to change; updates will be posted upon notice. Contact the Editor with changes at: jsn@wsmgs.org

Cody Fifty-Niners Rock Club

P.O. Box 1251 Cody WY 82414

cody59ers@wsmgs.org www.Cody59ers.com

Meets 4th Thursday 7:00 p.m. Park County Courthouse, Cody

President:	Ron Bice
Vice-President:	Joy Lyons
Treasurer:	Roger Lyons
Secretary:	Linda Jennings
JSN:	Linda Jennings
Historian:	Jackie Platt



Shoshone Rock Club

P.O. Box 256, Powell, WY 82435

shoshonerockclub@wsmgs.org

Meets 2nd Tuesday 7:30 p.m. Powell Library, 317 E. 3rd Street, Powell

President:	Gary Olson
Vice-President:	Mary Vogel
Treasurer:	Linna Beebe
Secretary:	Linda Thomas
JSN:	Linna Beebe
Historian:	Linda Beebe



Cheyenne Mineral & Gem Society

P.O. Box 21412 Cheyenne, WY 82001

cheyennemgs@wsmgs.org

Meets Sept. – May 2nd Wednesday 7:00 p.m. LCCC Health Science Bldg., 1400 E. College Dr., Room 309, Cheyenne

President:	Donna Arnold
Treasurer:	Jan Shively

Natrona County Rockhounds

P.O. Box 123, Casper, WY 82644

natronarockhounds@wsmgs.org

Meets 1st Thursday 7:00 p.m. Clubhouse, 5211 Rambler, Mills

President:	Mac Goss
Vice-President:	John Hines
Treasurer:	Jennifer Flowers
Secretary:	Carla Tillman



Rex Young Rock Club

112 East 3rd Lingle, WY 82223

rexyoungrockclub@wsmgs.org

Meets 2nd Wednesday 7:00 p.m. Senior Center 216 E. 19th, Torrington

President:	Kim Nielsen
Vice-President:	Sherman Lenhart
Treasurer:	Leroy Meiniger
Secretary:	Joyce Trowbridge
JSN:	Joyce Trowbridge
Historian:	Joyce Trowbridge



Riverton Mineral & Gem Society

P.O. Box 1904, Riverton, WY 82501

rivertonmgs@wsmgs.org www.RivertonMGS.com

Meets Sept.–May 2nd Monday 7:00 p.m. 303 E. Lincoln, Riverton

President:	Alice Gustin
Vice-President:	Cathy Cline
Treasurer:	Melvin Gustin
Secretary:	Kim Brown
JSN:	

Sublette County Rock Hounds Club

P.O. Box 1351 Big Piney, WY

subletterockhounds@wsmgs.org

Meets 3rd Saturday 1:00pm The Bench Grill, 415 Winkleman, Marbleton

President:	Jim Gray
Vice-President:	•
Treasurer:	Debby Jess
Secretary:	Leane Grav



STATE OFFICERS

President: Stan Strike pres@wsmgs.org

Vice President: Linda Richendifer vpres@wsmgs.org

Secretary: Carla Tillman sec@wsmgs.org

Treasurer: Melvin Gustin treas@wsmgs.org

Historian: Rod Baltes hist@wsmgs.org

Jade State News Editor: Jennifer Flowers jsn@wsmgs.org

RMFMS State Director: Jim McGarvey wydir@wsmgs.org

The WSMGS conducts meetings quarterly and as special events require

2016 WSMGS State Show Hosted by The Rex Young Club



The Wyoming State Mineral and Gem Society Board would like to thank the Rex Young Rock Club for hosting the 2016 WSMGS State Mineral & Gem Show in Torrington June 25-26, 2016.

The show was a success financially for the Rex Young Rock Club as well as for the 12 vendors who sold a wide variety of rocks, minerals, fossils, gemstones, jewelry and lapidary products. The show was well organized and the Show Chairperson, Helen Vogel had great support from her club members and friends in setting up, greeting the public, selling tickets & grab bags, running the hourly door prizes & show raffle, providing security, and cleaning up.

The Rex Young Rock Club in Torrington, Wyoming is a small club with only 26 members. The following check list is what this small club accomplished to produce an A+ show:



1. Applied for and received an advertising grant from the Goshen County Tourism Board

(In addition, the Riverton Mineral & Gem Society donated \$500 for advertising this show)

- 2. Contacted every Wyoming newspaper and radio station to advertise the 2016 mineral & gem show
- 3. Signage at entrance and at various locations was professionally done
- 4. Advertised within the local region by radio and newspaper
- 5. Door prizes given periodically throughout Show
- 6. Raffle items were of high quality



2016 WSMGS State Show continued from Page 6

- 7. Club Showcases were grouped together and identified by number for Peoples' Choice voting
- 8. Twelve (12) Dealer/Professional, Amateur, and Educational Display Cases by club members
- 9. Host club members were easily identified with hunter orange hats and/or tee shirts
- 10. 12 Dealers and 3 demonstrators were well spaced with spacious aisles for the public

- 11. Outstanding Ultra-Violet Rock Display
- 12. Pot-luck Dinner provided for delegates, officers, dealers, & members
- 13. Special Thank You Certificate to all dealers/demonstrators for participating in show
- 14. Follow up Thank You advertising in local paper for local participation to make the event a success



Wyoming State Geological Survey

as a Resource

By Christina George Wyoming State Geological Survey Outreach and Publications Manager

Earlier this year, a couple reached out to the Wyoming State Geological Survey requesting information about concretions and the concretionary process. Gems and minerals geologist Wayne Sutherland handled the question, writing to the couple about how the concretion process oftentimes begins with the precipitation of cementing material around a nucleus followed by the build-up of successive layers.

On a different day, Sutherland addressed a query from a geologist at a college who wanted more information about opal to adjust his class discussion. Another man inquired about a rock he found while exploring a mountain range.

For 83 years, the WSGS has performed the important function of interpreting Wyoming's fascinating and multifaceted geology. A component of this significant role is serving as a resource to the public by relaying up-to-date geologic data and maps.

The structural and erosional history of Wyoming, combined with its dry climate, provides some of the best rock exposures around the globe. This makes Wyoming an ideal place to explore for economic minerals, to hunt for rocks and minerals, or to view diverse rock types and structures ranging in age from the very recent to more than 3 billion years old.

One way the WSGS serves as a geological information resource is by having staff geologists respond to queries using their experience coupled with reference material. The most common question is rock and mineral identifications, specifically meteorites, diamonds, jades, concretions, agates and opal, Sutherland said.

"Wyoming hosts a wide variety of gemstones," he added.

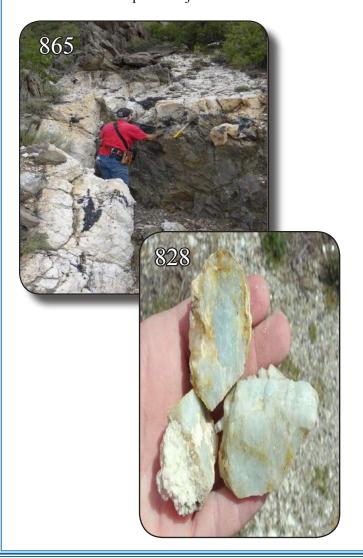
There are queries about rules for prospecting or rock collecting in Wyoming, mining claims and where to find or collect gold, jade, diamonds, agates, corundum and fossils.

"When searching for gemstones, nothing beats extended and observant walking across the area in which they may be found," Sutherland said.

Others pose questions on technical details about specific rocks and minerals or on general geology.

Queries are fielded by different staff geologists concerning aspects of the various economic resources in the state, geologic hazards and geologic tourism.

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Wyoming State Geological Survey as a resource continued from page 9

Such questions address drilling or mining activity, production statics, or earthquakes, landslides and volcanos. As a world leader in the production of trona and coal, accompanied by other significant energy and non-energy minerals, Wyoming geology pulls questions from both the general public and industry.

The WSGS also provides information about Wyoming's geology acquired through wide-ranging investigations and geologic mapping efforts. WSGS publications are the outcome of endless hours in the field, researching, and collaborating with fellow staff geologists and GIS specialists.

"Wyoming is a geologic wonderland that has sparked the interest and imagination of humans from the time they first set foot here," said Tom Drean, state geologist and WSGS director. "The Wyoming Geological Survey is happy that it can play a role in providing information to satisfy people's curiosities about the wide variety of geology found in the state."

Recent mineral studies include lithium, zeolites, rare earth elements, iron and phosphate. These reports, as well as those previously published, can be found on the WSGS' web site. Products are avail-

able as a free download, and some are available in hard-copy for purchase. Also provided online is general information about Wyoming's gemstones, minerals, industrial minerals, metals, rare earth elements and geologic maps, as well as information related to other areas of geology.

More about the WSGS can be found on its web site at www.wsgs.wyo.gov, by calling (307) 766-2286, emailing wsgs-info@wyo.gov, or stopping by the office on the

University of Wyoming campus in Laramie. To learn about the agency's latest research and projects, sign-up on the homepage to receive news releases.

Photos of some gem and mineral finds from the field can be viewed by following the WSGS on Facebook, Twitter and Instagram.

Photo Captions:

804 Repetitive layering associated with a Pegmatite at Copper Mountain north of Shoshoni

828 Beryl crystals from a Copper Mountain pegmatite

865 Field Work by WSGS Geologist Wayne Sutherland

728 Geologist Liz Cola, working with the WSGS, examines a Pegmatite at Copper Mountain north of Shoshoni.



2016 Rockhounds of the Year Awards



Wyoming State Roy Recipients



Wyoming State 2016 Roy Jim McGarvey



Cody 59ers Club Roy Recipients Roger & Joy Lyons



Shoshone Club Roy Recipients
June Rich



WSGMS Club News

Rex Young Club Report

Greetings from our club to yours. We had a busy year with all the planning that goes into a state rock show. In May, we met at the Western History Center. We got the display cases ready, loaded them into a trailer and then we had a short business meeting.

In June, there were a few of the club members that met at the home of Norm and Helen Vogel in Torrington. We sorted out the state trailer and got the things that we needed. There was a short business meeting afterwards. Ice cream cones were served after the meeting was adjourned.

On July 13 th the club met at the home of Roy and Joyce Trowbridge, in Lingle, for our annual picnic. There were barbecued hamburgers and hot dogs along with salads and desserts. It was a great night to sit outside and visit.

Thank you to everyone that planned, set up, helped and participated in the state show. A special thank you goes to Helen Vogel for all her time and dedication to make the show a great success!

Rex Young Jade State News Reporter - Joyce Trowbridge

Natrona County Rockhounds Report

We had a Great 69th Annual Gem & Mineral Show In July at the Parkway Plaza in Casper. I would like to thank everyone that helped put it on. John Akes donated one of his wonderful hand faceted stone for a drawing that all the volunteers that helped with the show were entered in. Thanks John. It went to Carla Tillman. We auction off a lot of Wyoming Rocks at the Show. Thank you to every one that purchased buckets of rocks, It really does help us keep our doors open.

Next Year will be our 70th Gem & Mineral Show, we are hoping to do it up big.

We lost one of our long time members this last month, John Joseph Kegler, 79, passed away August 23, 2016, after losing his battle with dementia. He will be remember fondly by the club as our club pack mule, memories of him coming back to the vehicle with his self-designed shoulder packs full to the brim with all sorts heavy treasures. His obit in its intirety can be located at http://www.newcomercasper.com/Obituary/124350/John-Kegler/Casper-Wyoming

Submitted by Jennifer Flowers NCRH Treasurer

Riverton MGS Loses One Of Its Finest

We are saddened to inform you of the passing of Lee Nelson, who has been a long-time and wonderful supporter of the Riverton Mineral and Gem Society. Lee had a particular love of fossils and in his later years had become quite an expert of preparing the fossil fish he had dug from the Green River Quarries near Kemmerer. He was an accomplished lapidarian having won several awards for his jewelry made of Wyoming jade. He was fascinated by rocks, minerals and fossils since he was

big enough to pick up a rock as a kid in Indiana, said Lee Nelson. 79, the RMGS 2016 Rockhound of the Year. Nelson enjoyed giving back to the club, especially to kids.

This is a small excert from his obit which you can find online at http://thedavisfuneralhome.com/obit. aspx?I=2314 and a portion of a RMGS Rockhound of the year award article submitted by Kimberly S. Brown, Secretary, RMGS

CODY 59ERS ROCK CLUB NEWS

Bighorn Mountain Field Trip

Rock-hounding is about looking down!



Sometimes you find fossils such as these corals and gastropods.

Sometimes rockhounds find minerals such as this limonite after pyrite crystals.

But the best find of all is when a young child yells-"I FOUND A FOSSIL!!"

SUBLETTE COUNTY ROCKHOUNDS CLUB

July 2016 news



Club members decorated club president, Jim Gray's, 1934 Ford Truck for the annual Big Piney 4th of July parade. Several members participated in the parade as well. Rock club banners were purchased and donated by Jim & Leane Gray.



July 16 was the second meeting of the Sublette County Rock Hounds Club and it was attended by 15 people including three new members. Topics of discussion included creating a club logo, lining out the next four rock hunting trips leading up to August's meeting, and reviewing the Club constitution and by-laws which were approved by the membership present and signed by the four officers.





July 23, 2016, the Sublette County Rock Hound Club went on a field trip to the Big Sandy Reservoir area in search of petrified palm, agates and jaspers. Twenty-one people attended including four new members, raising the total membership to 68 people! The weather was perfect and some pretty pieces were collected.

FIELD TRIP REPORT: BIG CEDAR RIDGE FOSSIL SITE -

A Complete and Well Preserved Late Cretaceous Plant Community

By Ross Gorman (Cody 59ers Rock Club)

The Site

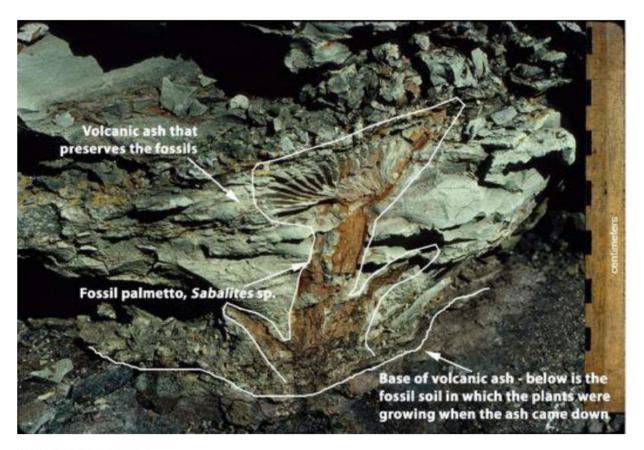
About 73 million years ago – a time during the late Cretaceous period – volcanic ash began to fall like snowflakes on a wide, low-lying coastal plain in what is now central Wyoming. Soon the ash fallout increased at an alarming rate; covering the ground and mixing with surface water. The vegetation – a mix of palms, ferns, flowering shrubs and conifer trees that form a mosaic of forest, wetlands, swamps and open glades - became laden with ash, and the streams became dammed with debris. This damming caused a massive amount of an ash slurry to back up onto the landscape. When the debris dam finally gave way, the volcanic ash slurry spilled out; entombing the entire Cretaceous plant community.



(Smithsonian - Mary Parrish reconstruction)

This event remained hidden until 1990 when Dr. Scott Wing of the Smithsonian Institute discovered an exposure of this formation just southeast of Worland, WY. The exposure runs for three miles along Big Cedar Ridge, which can be accessed via Blue Bank Road.

Excavations at the site resulted in the identification of over 100 new plant species. In addition, it was found that many of the plants preserved at the base of the ash layer were still rooted in the underlying soil. Such "in situ" preservation is extremely rare.



(Smithsonian Photo)

Because of this, Big Cedar Ridge has become an important, world-class paleontological resource. It represents a true snapshot in time where the relationship between ancient landscapes and vegetation can be studied. Thus, questions about Late Cretaceous ecology - the diversity of flora, the nature of open country vegetation, and the degree to which flowering plants were dominant - can be addressed.

By establishing the plant soil and topographic associations at Big Cedar Ridge, this means that Wyoming is home to possibly the oldest site where such associations have been determined. All indications are that further research at this site will result in a wealth of new scientific knowledge.

The Expedition

Since its designation as an "Area of Critical Environmental Concern" in 1996, the Bureau of Land Management (BLM) has managed the Big Cedar Ridge Fossil Plant Site as an area for research, public education, and fossil interpretation purposes. Fossil collecting by the public is allowed as long as it is for personal (i.e., noncommercial) use. As such, no fossils collected from the site can be sold, bartered, or traded.

Although hobby collecting of fossils is not prohibited by the ACEC designation, collectors are asked to search only existing dig pits and refrain from digging new exploratory holes. In addition, digging is restricted to the use of hand tools. BLM also requests that fossil finds be reported to their District Office in Worland.

With advice and site recommendations from the BLM office in Worland, the Cody '59ers Rock Club organized a collecting field trip this past June. Members and guests of both the Cody '59ers (Cody, WY) and the Shoshone Rock Clubs (Powell, WY) were invited for a day-long expedition to dig for plant fossils in an outcrop of the formation which is representative of a streamside thicket. So the expectation was that broad-leaved flowering plant fossils would be unearthed from the original ash slurry that has now turned to claystone.

Twenty-four members and their guests endured the 3 hr. drive to the site and then the midday heat to muck out a number of existing pits to reveal the fossil layer. Below are some of their finds. (*Photos by Ross Gorman*)







Doug and Linda with partials of a conifer – possibly related to the Norfolk Island Pine (family *Araucarites*) which is now found only in the Southern Hemisphere.





Flowering plant leaf with serrated edges.

Flowering plant probably related to laurels.

Sources:

Bureau of Land Management, Worland District Office, Bighorn Basin Resource Area, "Management for the Big Cedar Ridge Fossil Plant Area, Washakie County, Wyoming - Environmental Assessment WY 015 EA5 037, December 1995.

http://naturalhistory.si.edu/ete/ETE People Wing ResearchThemes BCR html

Lapidary Tips: DIY Inexpensive Lapidary Grinder Posted on January 13, 2011 by silverandstone

[https://silverandstone.wordpress.com/2011/01/13/lapidary-tips-diy-inexpensive-lapidary-grinder/]

This blog describes how you can build an inexpensive diamond lapidary grinder that will economically handle a lot of grinding tasks that should never be done on diamond wheels. Any lapidarist quickly learns that using diamond grinding wheels is expensive because diamond coatings are thin and wear off relatively fast. It's necessary to use expensive grinding wheels when the stone surface requires minimal scratches and is being prepared for sanding and polishing. But here are some grinding tasks where scratches are not an issue and they can be done on the grinder described in this blog:

- Removing saw tabs from the corner of slabs
- Grinding away opaque skin from agates to expose features
- Shaping rough so it fits slab saw vices
- Squaring rough to enable a usable first cut slab
- Removing any unwanted matrix from rough stones

simpler alternative is to use a water spray bottle. It's a good idea to always wear a dust mask.

Components for this grinder are:

- Six 7 inch masonry diamond blades (\$8 each if you shop around)
- Water hose washers for spacers
- Used 1800 rpm motor
- Lortone Splash Shield (\$50 unless you build your own)
- Motor shaft grinder adapter (\$10)
 Assuming you have a used motor, you can build this grinder for about \$110. And, it's only \$60 or so if you build or have your own splash shield. Share your ideas on how to be more cost effective when doing lapidary work. With the price of equipment and materials these days, we all need more good ideas.

contuned on Page 2

DIY Grinder

Diamond wheel coatings are only a few microns thick. Compare this with masonry saw blade diamond deposits of 1/8 to 1/4 inch thick which is several hundred times more than on wheels. Saw blades are only 1/32 inch wide but if grouped together with spacers in between, you can create a wide grinding surface. The photo here shows a simple grinder with 6 seven inch blades separated by water hose washers between each blade. Spacing between blades is about 1/8 inch but vou will find that this is not noticeable when grinding. The width of the 6 blades is about 1 inch. The grinder runs quietly and aggressively removes material. You can install water spray to control dust but a

