Jade State News

Wyoming State Mineral & Gem Society, Inc.

Award Winning WSMGS Website: wsmgs.org

Volume 2019, Issue 3

WSMGS OFFICERS

President: Jim Gray
pres@wsmgs.org

Vice President: Linda Richendifer
vpres@wsmgs.org

Secretary: Leane Gray
sec@wsmgs.org

Treasurer: Stan Strike
treas@wsmgs.org

Historian: Position open
hist@wsmgs.org

Jade State News Editor: Ilene Olson
jsn@wsmgs.org

RMFMS State Director: Stan Strike
wydir@wsmgs.org

WebMaster Tech: Marlene Sibley
webmaster@wsmgs.org

The WSMGS conducts meetings quarterly and as special events require

2019 Rock Show

The 2019 WSMGS State Mineral & Gem Show hosted 21 multi-state dealers and 5 demonstrators. During the three-day show from June 21-23, with more than 1,000 attendees. The raffle consisted of 23 items donated by dealers and individual club members.

Four lectures were hosted at the Cody Library: "Wyoming Jade," by Wayne Sutherland; "Fossils of the Bighorn Basin," by Cliff Manuel; "Dinosaurs of the Bighorn Basin," by Jessica Lippincott; and "First Native Americans," by Doug True.

Children were provided a Kids' Area, which included five activities: Creating Pet Rocks, Sand Search, Making Fossil Cupcakes, Gluing Polished Rocks on Magnets, and earning prizes by Spinning the Rock Wheel.

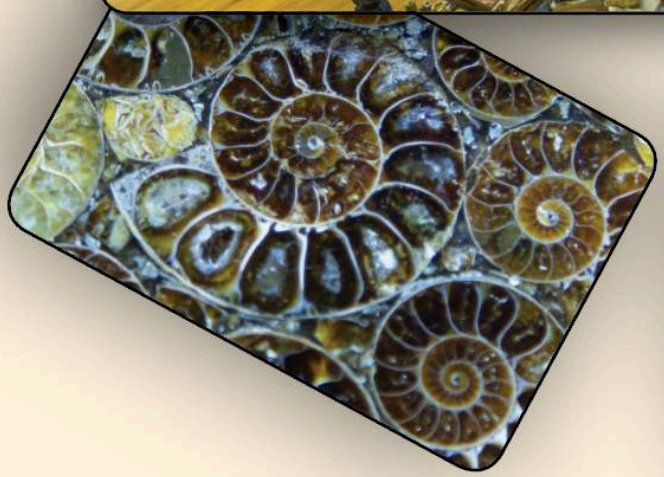
In addition, four field trips were offered to allow participants to collect local materials and to educate them about the local geology.

The photos on the following pages illustrate the highlights of the **2019 WSMGS State Show.**

continued on page 2

2019 Wyoming Gem and Mineral Show continued from page 1

The Show: June 21-23, 2019



Photos by ILENE OLSON

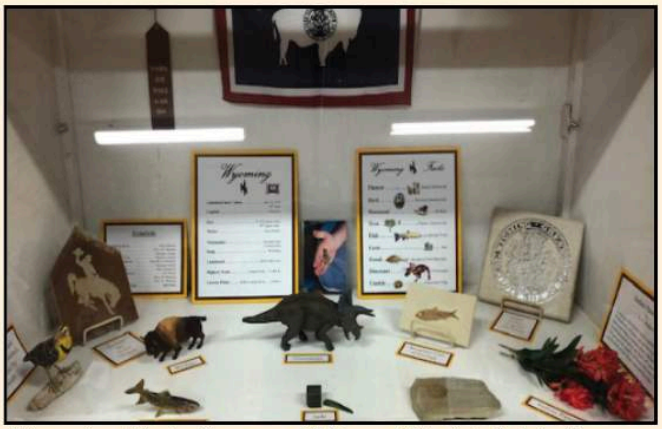
2019 Wyoming Gem and Mineral Show continued from page 2

Display Cases...

Cody 59ers: First place club case, People's Choice and judges.

Sublette: Second place club case, People's Choice and judges.

Shoshone Rock Club: Third place club case, People's Choice and judges.



Wyoming State Gem and Mineral Society's Heritage Case.

Individual/Dealer case: Cauda Povanis jewelry. (Ron Johnson)

Individual/Dealer case: Gary Olson lapidary display — Shoshone Rock Club

Photos by STAN STRIKE

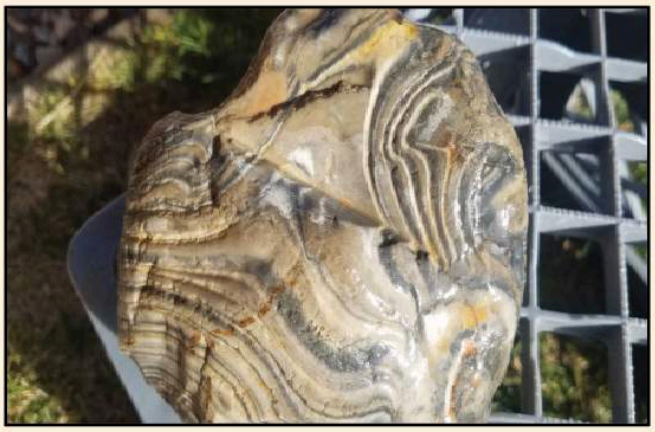
2019 Wyoming Gem and Mineral Show continued from page 3

Activities for Kids and Rockhounds...

The Cheatham children from Rush Valley, Utah, spin a wheel to find out what rock prizes they win.

Children enjoy rock painting and other crafts.

Fossil search! Children examine sand on paper plates to find tiny fossils hidden there.



This fortified jasper was one of the rocks found by field-trip participants.

Field-trippers keep their eyes on the ground in hopes of finding a treasure to take home.

Experienced guides provided information about area geology during field trips.

Photos by STAN STRIKE, NELLA FLURKEY and ELYSE LYNN

Navigation and Rockhounding — Part 1

By Wayne Brantley

WayneBrantely@hotmail.com

For rockhounds to locate collecting sites, such as mines and prospects, certain navigation skills and tools are generally required. Navigation is the process of planning, recording, and controlling the movement of a craft, vehicle or person from one place to another. The word navigate is derived from the Latin roots navis meaning "ship" and agere meaning "to move" or "to direct." By this definition, rockhounds searching for an old mine or mineral deposit in the forest are often like ships in a sea of trees moving from a starting point to a collecting site. Different navigational techniques and tools have evolved over the ages in different cultures, but all involve locating one's position compared to known locations or patterns. In this day and age, the four main tools for land navigation include: 1) Road Maps; 2) Topographic Maps; 3) Compass and 4) Global Positioning Satellite.

[1] Road Maps

The first rule of navigation: You must know your present location to be able to plot your course to the next location. A map with good detail and information is a must, and it must be current. If you are traveling from state to state, you will need a map showing the major roads. If you plan to visit a county to look around for a rockhound site, a good county map may be available from the local chamber of commerce or courthouse.

[2] Topographic Maps

Each state has an "Index Map" that shows the name and location of each topographic map in a grid pattern overlayed on the state map. You will need an index map to tell which area a map will cover. You can get an index map from your state geological survey or map dealer.

A topographic map gets its name several different ways: it may be from a town or some other location or feature located on the area that the map covers. The map's name is located in the bottom right corner along with the year that it was published.

There are over 54,000 quadrangles (map sheets) that cover every inch of the United States. The USGS primary scale for mapping topographic maps is 1:24,000. This means that one-inch on the map equals 24,000-inches on the ground, the equivalent of 2000 feet. These size quadrangles are called 7.5 minute quadrangles because they show an area that is 7.5 minutes of longitude wide (east and west) by 7.5 minutes of latitude high (north and south). These paper sheets are approximately 29 inches by 22 inches.

Topographic maps use a wide variety of symbols to represent human and physical features. Contour lines are used to represent elevation by connecting points of equal elevation. So these imaginary lines represent the actual terrain. A steep slope is represented by contour lines being close. Contour lines that are far apart represent a more gradual slope. When contour lines are extremely far apart, then the terrain is essentially flat. Each quadrangle uses a contour interval (the elevation difference between contour lines) appropriate for that area.

While relatively flat areas may be mapped with a five-foot contour interval, rugged terrain may have a 25-foot or more contour interval so that individual lines may be seen instead of being on top of each other. The contour interval for each map is usually printed on the bottom center under the scale. Through the use of contour lines, an experienced topographic map reader is able to visualize the direction of stream flow and the character of the terrain.

Contour intervals are real important for hunting rocks and minerals in the mountains! Contour lines form "v"shapes in valleys or along stream

Navigation and Rockhounding, Part 1 (continued from page 5)

beds. The point of the "v" always points uphill. On a topographic map, blue represents water. Green represents orchards and forested areas, white is cleared land. Purple markings are those that have been "photo-revised," or added to the map since the original map was published and the date of the revisions is noted. Red areas represent urban areas. Maps will often indicate special buildings of significance within the urbanized area, courthouse, etc and these are most often represented by black symbols. Roads and highways are represented in black and red.

The topographic map's name, date published, scale, contour line intervals, revised date, road classification, are all on the bottom of the map. Both true north and magnetic north are also shown and they are not the same. The difference between the two is referred to as magnetic declination and this differs for each topographic map, although it rarely differs more than a few degrees.

One very important thing to note on a topographic map is the "polyconic projection"! This will tell you the "datum" of the map. If you get a Global Positioning Satellite (GPS) unit, it will ask you for the "datum" because this must be the same as the map that you are using! If you enter the wrong datum into the GPS it WILL NOT MATCH THE MAP YOU ARE USING! The datum is usually listed in the bottom left corner of the map.

Topographic maps are also available in digital format. You can get the 1:250,000, 1:100,000, and 1:24,000 for most states. They are called DRGs (digital raster graphics) and can be viewed with numerous DRG viewers or in GIS programs. They are just scanned paper maps that are projected to a certain coordinate system. Most states have their topographic maps downloadable for free, so you can print off sections if you want.

Another very good resource is the national map viewer put on the web by the USGS (this is something that you really need to have broadband to use easily). It is still a work in progress as they are adding topographic sheets as well as geological maps and a bunch of other things at the following website. http://nationalmap.gov/ Another good internet source is TopoZone that has most scanned topographic sheets on line at http://www.topozone.com/

If you plan to rockhound in known sites that can be reached by road, all you need is a good road map and maybe some friendly directions. But, if you decide to look for old mine sites, prospects, or geology formations, you will need navigation skills to make your trip a safe and more pleasurable one. Maps have a location language called "coordinates". In school we remember the teacher saying something about "latitude and longitude" but this was just something else we thought we would never use, until now. Coordinates come in different types of "languages" on a large scale the use of degrees/minutes/seconds (or decimal equivalent) are commonly used. Most geologists, search & rescue, and map users that deal with a smaller area use the UTM coordinates system. You MUST understand how to use a coordinate system in order to navigate using topographic maps, compass, and GPS. Here are some links that can explain the UTM coordinate system...

Using UTM system

UTM Coordinates

The information that you read on the web about using the UTM coordinates system can be confusing. So, if you didn't understand how to use it, I will show you a simple "country boy" way when we talk about the GPS below.

[3] Compass

A compass is your main tool! It is the navigation tool that always points North ... unless you are standing at the North Pole (magnetic) then the only direction that it will point is South! There are many good compasses to choose from but the best is a Brunton Compass. ***Brunton Compass***

Navigation and Rockhounding, Part 1 (continued from page 6)

• Basic info about a compass... ***Click Here***

Most compasses that you'll see read 0-360 degrees ... 0-degrees is North, 90-degrees is East, 180-degrees is South, and 270-degrees is West. This "standard" type compass is called an "azimuth" compass.

Now we all know that geologists, being a "little different" than the rest of us, will use a compass that's called a "quadrant or 0-90 quad." So, in some books or maps you might see a compass bearing stated ... South 2 degrees East. (S2degE). On an azimuth compass this bearing would be 178 degrees. Another example might be North 25 degrees West (N25W). On an azimuth compass, this would be 335-degrees. But anyway, the following is a link that you might need to find out what direction some "ist" is trying to tell you. ***Click Here***

If you begin at point A on the map and want to go to point B, you need to plot a straight line from point A to point B on the map, measure the azimuth and use your compass to follow this azimuth in the field. Since there are generally obstructions between different points, it is often necessary to plot a series of points to reach your final destination. This is especially true when your destination is far from your starting point. Using known and obvious landmarks such as road and trail crossing is the best way to achieve your final goal.

A compass can be used to mark your present location on a map if you can see and identify two or more landmarks in the area of your location. Position determination is performed by taking azimuths to at least two (biangulation) and preferably three (triangulation) visible landmarks that are also identifiable features on a topographic map. You MUST be positive about the identification of the landmarks! The problem I encounter most often is that I am unable to see two or three landmarks in the areas where I hunt for old mine sites or prospects! In many places in the forest, I'm only able to see just feet in any direction!

This brings us to the fourth main tool ...

[4] Global Positioning Satellite (GPS)

According to the Department of Defense, "GPS is operated by the Department of Defense. It consists of a constellation of 27 satellites (24 active and 3 standby) in 6 separate orbits. It reached full official operational capability status on 17 July 1995. GPS users can obtain a 3-D position, velocity, and time fix in all types of weather, 24 hours a day. GPS users can locate their position to within ± 18 ft on average or ± 60 to 90 ft in a worst case."

When the GPS became a new navigation tool for public use it had one major fault: the US Government was involved! For security reasons, the US military placed an "error" in the system to make the civilian model less accurate than its military counterpart. This error was called "selective availability", making civilian units be off by as much as 150 yards! This gave a lot of bad press to this new tool and it was considered by many to be nothing more than a joke.

After May 1, 2000, when the selective availability was removed, many GPS users found that the accuracy of GPS exceeds the resolution of U.S. Geological Survey topographical quad maps! The rules have changed! Garmin states that, "Today's GPS receivers are extremely accurate, thanks to their parallel multi-channel design. Garmin's 12 parallel channel receivers are quick to lock onto satellites when first turned on and they maintain strong locks, even in dense foliage or urban settings with tall buildings. Certain atmospheric factors and other sources of error can affect the accuracy of GPS receivers. Garmin® GPS receivers are accurate to within 15 meters on average. Newer Garmin GPS receivers with WAAS (Wide Area Augmentation System) capability can improve accuracy to less than three meters on average."

This navigation tool has gotten more people lost than any tool in history for two reasons: 1) they think it's the only tool they need to navigate with and 2) they don't fully understand the instructions

Navigation and Rockhounding, Part 1 (continued from page 7)

and how it's used! This you need to remember... Don't use the GPS as your only navigation tool, if you do, you'll be looking for trouble... not rocks! To understand some of the workings of a GPS, Garmin has a great site... Click Here

[5]-Computer & Satellite Maps

Many rockhounding locations have been described in printed materials by Township and Range or by Latitude and Longitude. Where does a rockhound find these locations on a map or be able to "Fly Over" them to take a closer look before driving and hiking to collect specimens? The following computer websites allow you to identify these locations and to see the map terrain before leaving your home!

A. For detailed information including identifying township and range and ownership of land parcels: gis.statelands.wyo.gov/GIS/OSLIGIS/StateLandAccess

The State Land Access Information Application is a tool developed by OSLI to assist users to determine if certain state lands are legally accessible. State land is distinguishable from federal public lands for the reason that it is held in trust and managed for the exclusive intergenerational benefit of Wyoming public schools and other designated beneficiaries.

http://www.nrcs.usda.gov/.../nrcs/main/wy/technical/dma/gis

Wyoming Parcel Viewer Developed by the Wyoming Department of Enterprise Technology Services, this web-based application allows the user to access basic land ownership data. Water Resources Data System (WRDS) Wyoming water and climate data map made available via multiple applications. Contact: Randy Wiggins, State GIS Coordinator, (307) 233-6778

B. Earthpoint is a website that allows the user to choose specific coordinate systems to identify locations using Google Earth. There is a fee to use this service: Option 2 costs only $10 for usage over an extended time and if you qualify Option 3 is free.

www.earthpoint.us

C. Google Earth Pro allows the user to get a real time satellite view of specific locations. Select: Borders & Labels, Places, and

Roads to make it easier to identify the location the user is searching for or discovers as an interesting place to rockhound.

www.google.com/earth/versions/.

Editor's note: This article was published online by Wayne Brantley in 2007. To view the article, visit ***https://mcrocks.com/ftr07/WayneNavigation.html.***

To contact the author, email ***WayneBrantely@hotmail.com***

2019 Gillette Rock Show

The 2019 Northeast Wyoming Rockhound Club annual Rock Show will take place on Saturday, October 26, at the Gym of the Boys and Girls Club of Campbell County. Doors will open to the public at 9 a.m. and close at 3 pm. We will have vendors set up to show their goods, along with a silent auction table and gift bags for kids, as long as they last. The building is located at 410 Lakeside Ave., in the old Lakeside Elementary School. Please PM Jeffrey Hulings on Facebook with any questions or for info on how to become a vendor.

Geology of Curt Gowdy State Park

A Wyoming State Geological Survey Publication (2019)

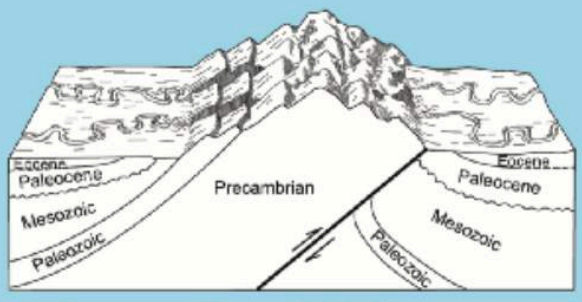
INTRODUCTION

Welcome to Curt Gowdy State Park. Situated in Laramie and Albany counties, Wyoming, Curt Gowdy State Park covers an area of 3,400 acres (5.3 mi2) in the southern Laramie Mountains at an elevation of approximately 7,600 ft above sea level. The highest elevation in the south- ern Laramie Mountains (9,055 ft) is located in the Sherman Mountains to the west of the park. Curt Gowdy State Park, founded in 1971, was originally named Granite State Park and included the Crystal and Granite Springs reservoirs. It was expanded in 2005 to include the Upper North Crow Reservoir, the area of Hidden Falls, and the canyon below the dam at Crystal Reservoir.

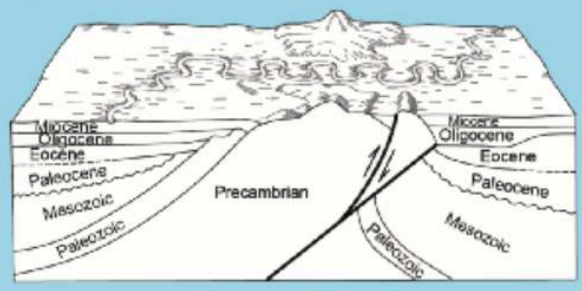
Geologic Evolution Of The Laramie Mountains

The Laramie Mountains, which lie between Cheyenne and Laramie, expose sedimentary rocks along their flanks and are cored by crystalline Precambrian basement rocks that range in age from 1.43 to 1.78 billion years old. The mountains formed during the Laramide orogeny, a mountain-building event that began about 70 million years ago. The mountains in southeastern Wyoming were uplifted along thrust faults that allowed deep, older crystalline rocks to ride up and over younger sedimentary rocks. The result of this thrust faulting can be seen approximately 3.5 miles east of the park entrance on Wyoming State Highway 210 where steeply dipping beds of sedimentary rocks tilt eastward toward Cheyenne.

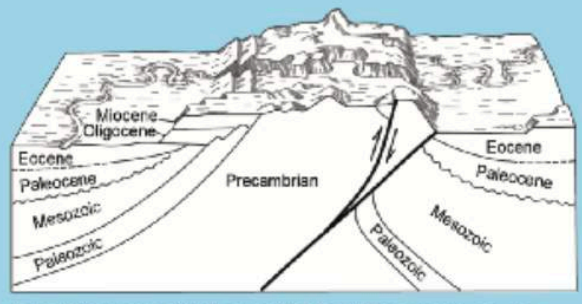
Active uplift and mountain building related to the Laramide orogeny ceased in Wyoming around 35 million years ago and was followed by regional erosion of the mountains. Rivers and streams removed material from the mountains, depositing it in nearby sedimentary basins. Over time, these basins filled with enough sediment to bury most of the Laramie Mountains, leaving isolated peaks and hills dotting a broad, flat plain. Gradually, river systems eroded much of the sediment that covered the mountains, once again exposing the crystalline and tilted sedimentary rocks.



Late Cretaceous to Eocene (70–35 million years ago) uplift of the Laramie Mountains.



Late Eocene to mid-Miocene (35–11.6 million years ago) erosion and burial of the Laramie Mountains.



Late Miocene to Holocene (11.6 million years ago to present) exhumation of the Laramie Mountains.

Sources: Brady, 1949
Frost and others, 1999
Houston and Marlatt, 1977
Mears, 1993
Ver Ploeg and Boyd, 2007

For more information, visit:

http://wyoparks.state.wy.us/index.php/about-curt-gowdy

http://www.wsgs.wyo.gov/public-info/tour-vedauwoo

https://www.fs.usda.gov/main/mbr/home

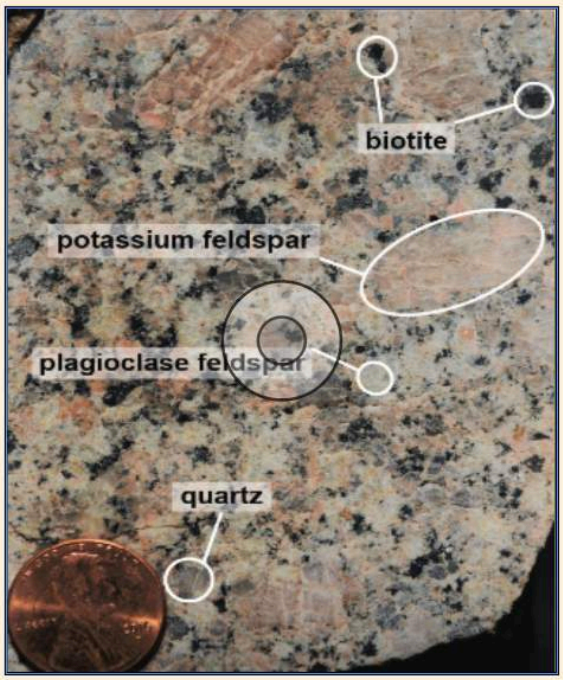
Geology of Curt Gowdy State Park (continued from page 9)

SHERMAN BATHOLITH

The rock exposures in and around Curt Gowdy State Park are primarily associated with the Sherman batholith. The Sherman batholith is a large mass of igneous rock that crystallized from magma deep within the earth approximately 1.43 billion years ago. These rocks, now exposed due to uplift and erosion, can also be seen at Vedauwoo, a nearby U.S. Forest Service recreation area.

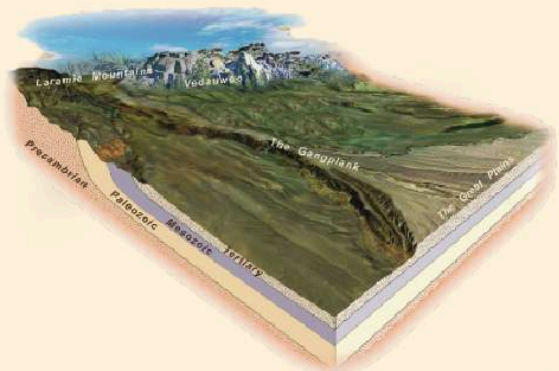
The Sherman batholith is composed of three different granites: Sherman, porphyritic (pȯr-fə-ˈri- tik), and Lincoln. These granites formed from the same intrusive magmatic event, but each has unique identifying characteristics.

Sherman Granite: the most common rock type in the Sherman batholith. It is a coarse-grained (crystals 5–50 mm), reddish-orange, biotite hornblende granite. This granite is composed mostly of pink potassium feldspar, white plagioclase feldspar, and gray quartz crystals. The biotite crystals are dark colored, shiny, and flake off in thin layers. Hornblende is also dark, but does not flake. Sherman granite exhibits a rare texture called "rapakivi," named for similar rocks found in Finland. This texture consists of pink potassium feldspar crystals encircled by white plagioclase feldspar. The rapakivi texture of the feldspar crystals suggests that chemistry and temperature conditions evolved as the magma cooled deep within the earth's crust.



Porphyritic Granite: an orange-gray, biotite hornblende granite. The term "porphyritic" describes a texture that consists of large size variations among the different minerals that make up the rock. The pink potassium feldspar grains are much larger than the other mineral grains in this granite (see photo), suggesting that they crystallized at slower rates within the magma than the smaller grains.

Lincoln Granite: a medium-grained, red-orange to orange-gray biotite granite. It is chiefly composed of quartz, potassium feldspar, plagioclase feldspar, and biotite. The crystals in this granite are 1–5 mm and generally uniform in size, distinguishing it from porphyritic granite and Sherman granite.



Block diagram showing the "Gangplank," which ties the Great Plains to the Laramie Mountains.

THE "GANGPLANK"

Located just southeast of the park, along U.S. Interstate 80, there is a narrow strip of relatively flat-lying rocks on the eastern flank of the Laramie Mountains. This geologic feature is the "Gangplank," a natural land bridge that slopes from the valley floor to the Precambrian core of the Laramie Mountains. Composed of valley-filling sediment, the "Gangplank" is the site where the Transcontinental Railroad first crossed into the mountains from the plains.

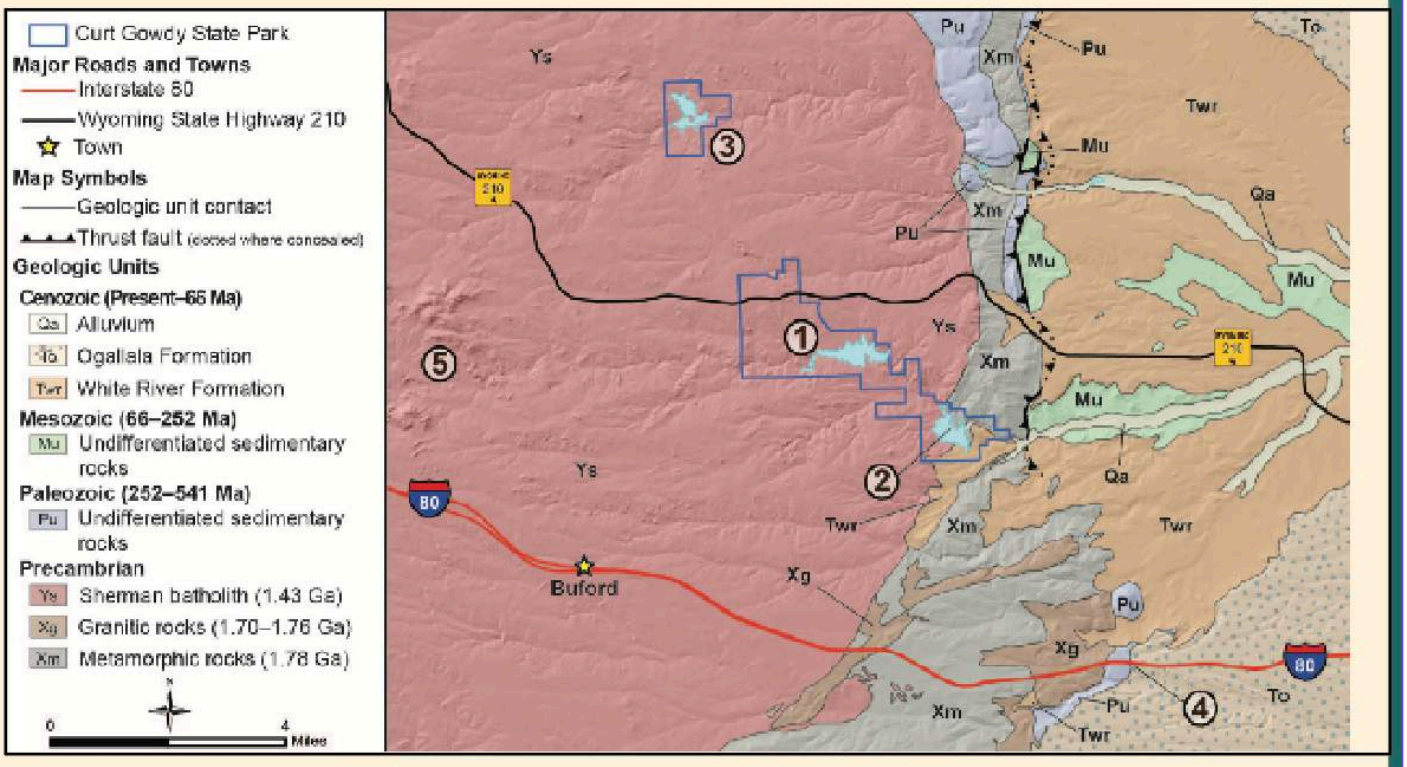
Geology of Curt Gowdy State Park (continued from page 10)

HYDROGEOLOGY

The park contains three large reservoirs: Granite Springs, Crystal, and Upper North Crow. Together these reservoirs store up to 10,600 acre-feet of water (1 acre-foot = 326,000 gallons) and serve as a major source for Cheyenne's municipal water supply. Crow Creek, its tributaries, and numerous small springs supply water to all three reservoirs. In addition, Crystal and Granite Springs reservoirs receive snowpack runoff from high-altitude reservoirs in the Medicine Bow Mountains to the west. Gravity is used to move the water more than 50 miles through a system of pipelines.

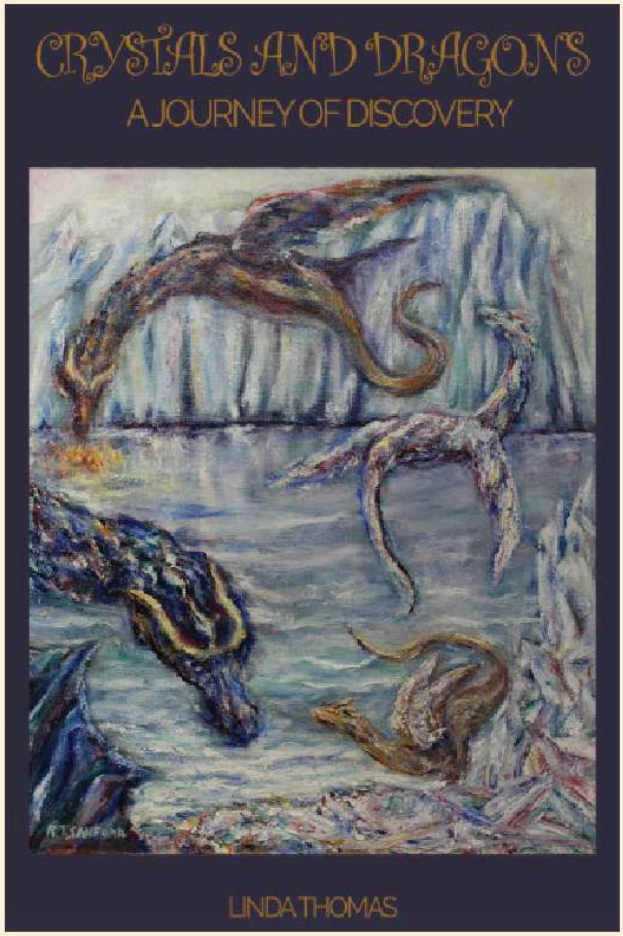
The rock fractures seen in the granite throughout the park form a shallow groundwater system. During the spring, these fractures rapidly convey water from snowmelt to the many small springs present in the park and throughout the southern Laramie Mountains. Groundwater moves so quickly through this fractured rock aquifer that flow rates from the springs are highest a few weeks after snowmelt and then decrease rapidly. By early autumn, flows from many of the springs are reduced to a trickle, and smaller springs may dry up completely.

Upper end of Granite Springs Reservoir where Middle Crow Creek flows into the reservoir in a canyon cut into Sherman granite.



Bedrock geologic map of a portion of the southern Laramie Mountains. Ages of rocks are in millions of years ago (Ma) or billions of years ago (Ga). 1) Granite Springs Reservoir, 2) Crystal Reservoir, 3) Upper North Crow Reservoir, 4) the "Gangplank," and 5) Sherman Mountains.

Crystals and Dragons: A Journey of Discovery



Linda Thomas is a member of the Shoshone Rock Club in Powell, Wyoming. She is the owner of the Eternal Ice Healing Center and was honored at the 22nd Annual Coalition of Visionary Resources Banquet as the 2019 Silver Winner for her recently published book: *Crystals and Dragons: A Journey of Discovery*. This book contains many detailed photos of mineral crystals that all rockhounds will value and appreciate for its information and beautiful photographs.

Crystals and Dragons is full of information that will take you into the world of holistic healing at a time when we all could use choices. It takes you through ways to choose your stones, ways to cleanse and charge them and even ways to protect yourself from being bombarded with negative energies. It contains amazing photos and useful information that will aid you in using the stones to help others and yourself.

To contact Linda Thomas for additional information or to purchase the book *Crystals and Dragons: A Journey of Discovery*, go to:

Eternal Ice, 894 Lane 11½, Powell, WY 82435
www.eternal-ice.com; eternalice@bresnan.net

Lapidary Hints: Getting the Polish Out

Examining Ultrasonic Units For Lapidary Projects

By Bob Rush

Ultrasonic cleaning units are very effective at removing excess polish from cabochons, as well as many other materials. There are also many different cleaning agents sold for use with these units, but I mix my own agents. Most of the time I use about two teaspoons of cheap liquid dish soap and a tablespoon of cheap liquid ammonia (not the sudsy type), which I add to hot water. This mixture works well for most of my applications.

With regard to a cab that has a druzy or crystalline pocket, the polish will cling to the rough areas and resist vigorous scrubbing activities. Removal of this residue is quickly and easily accomplished with an ultrasonic unit. Using the combination of liquid detergent and ammonia in the unit, all you need to do is dip your piece into the solution. A cloud of polish will emanate from the druzy or crystal pocket. In a minute or less all of the polish will dissipate. However, it is critical that you remove the polish shortly after the piece is polished. If the polish has time to dry, it will be more difficult to remove.

If you are using the ultrasonic unit to remove polish from the dop stick, do not add the ammonia to the solution, because it will degrade the dop wax.

Do not use any bleach in the unit, because it will damage the stainless tank. Also, do not use the unit on opal or porous stones.

Lapidary Hints: Flat Lapping Rock Material

By Jim Brace-Thompson
Rock and Gem, December 2017

Flat lapping is a technique for grinding and polishing surfaces on sliced geodes, nodules, slabs, and petrified wood rounds. It's also great for producing items such as bookends. It all starts by slicing a rock in a slab saw then proceeding to one of **two types of flat-lapping machines: vibrating or rotating**.

• A vibrating lap consists of a round metal tray atop a base containing a motor that shakes the tray. Smear the tray with grit and water to produce a "slurry", then place stones flat-side down on the tray and hit the 'on' switch.

As with rock tumbling, start with coarse grit (8O-grade) and proceed through ever finer grits (e.g., 220,400), and finally a polish. This is sometimes called "free abrasive lapping" because the grit is floating freely between the metal tray and the rock. If you have a small rock or thin slab, you may need to place a weight on top of it to ensure a good contact between the rock and the surface of the lapping machine. You also should "refresh' the grit periodically with water from a spray bottle to maintain a smooth slurry between the machine and your rock.

• A rotating flat lap is a machine with interchangeable silicon carbide-or diamond-impregnated plates of varying coarseness. This is sometimes called fixed abrasive lapping because the grit is bonded to the grinding surface. You start with a coarse-grained plate and proceed through plates of ever finer grit, holding your stone against the rotating plate. Compared to vibrating laps, rotating flat laps work much faster and allow for greater control as you hold your rock and examine progress throughout the grinding process. One way to check your progress is to draw a line across the face of your rock with a magic marker. Once all traces of the marker are gone, you know you've achieved a smooth, uniform polish across the surface of your rock.

A Picture is Worth A Thousand Words

For sale: Wyoming State Mineral & Gem Society's former trailer, a 2008 5-foot by 8-foot Interstate Victory, $1,000.

Recently purchased by WSMGS: 2005 Homesteader-714HT trailer, 6 feet, 8 inches by 6 feet 8 inches by 16 feet, $2,000.

Annual WSMGS Board Meeting June 2019

I. Roll Call: All WSMGS affiliated clubs represented by delegates except Riverton Mineral & Gem Society.

II. Secretary's Minutes: 6/14/18 minutes were approved (Stan Strike moved Dorine Strom seconded, motion carried) as prepared by Secretary Leane Gray.

III. Annual Treasurer's Report: Treasurer's report approved as presented by Treasurer Stan Strike. Report is attached.

IV: Reports:

President's Report by Jim Gray

Jim Gray commented about the Cheyenne and Sublette shows that both were nicely done and well attended. He reported that the Kemmerer Club has been vacillating about doing a show this year and a final decision has not yet been made.

Annual Membership Report

Annual Membership Report was approved as prepared by Vice President, Linda Richendifer, and read by President Jim Gray.

October 31, 2018 WSMGS Membership was 761, of which 619 were dues-paying members, 30 junior members, 65 pebble pups, and 47 life/honorary members.

Club Location	Dues-Paying	Junior	Pebble Pups	Life/Honorary	Total
Casper	40		1	6	47
Cheyenne	90			13	103
Cody	79	2	14	4	99
Fossil Basin	8				8
Gillette	32	6	3		41
Marbleton	179	18	47	4	248
Powell	42			6	48
Riverton	128	4		14	146
Torrington	21				21
Totals	**619**	**30**	**65**	**47**	**761**

Annual Historian Report

Annual Historian Report was a reminder to all Clubs to submit their information no less than annually to the Historian. The position of Historian is vacant; please submit interest or nominations to Jim Gray, President pres@wsmgs.org Jim will send an email to all Wyoming Clubs seeking a candidate to fill this position. Duties are posted on the wsmgs.org website.

Jade State News

(Editor Ilene Olson, jsn@wsmgs.org). Please submit news items via email.

RMFMS WY State Director Report

1. 2019 RMFMS Convention – August 2-4, 2019, in Prescott, Arizona.

Stan, Jim & Leane will be going to Prescott. Each club is entitled to two votes, per Stan's report, so it is important to submit Proxy forms to Stan if no representative is able to attend. Stan has sent two requests for these proxies and some of the WY clubs have not yet responded. He will send another request for either delegates or proxies. Four clubs have responded. Natrona County Rock Hounds club is not a RMFMS member.

2. Stan's State Director Report is attached.

Annual WSMGS Board Meeting June 2019 (continued from page 14)

WSMGS Website

The website domain has been renewed to 10/30/21, and the logo has also been renewed to 2021. It is important NOT to change the bucking horse logo in any way.

WY RMFMS Public Lands Access Committee Report (PLAC)

RICH GEROW, the recent report was published in a recent newsletter.

Old Business

A. State Trailer Replacement – a larger used cargo trailer has been purchased. There were two Clubs who donated toward the new trailer (Sublette and Natrona).

B. To sell the old trailer, a minimum of $1,000 is desired. Jim asked the members present if any of the clubs are interested in buying it, allowing 30 days for the clubs to decide: Roger Lyon so moved, Greg Jones seconded, motion carried. Stan reported that there is a private individual interested in buying it if no Club wants it.

New Business

A. 2019-21 WSMGS Officers Elections

a. President: Jim Gray was nominated by Stan Strike, Linda Dandy seconded, motion carried.

b. Vice President: Linda Richendifer was nominated by Dorine Strom, Stan Strike seconded, motion carried.

c. Secretary: Leane Gray was nominated by Roger McMannis, Linda Dandy seconded, motion carried

d. Treasurer: Stan Strike was nominated by Greg Jones, Dorine Strom seconded, motion carried.

e. Historian: no nominations were received, motion to allow the board to advertise for an elect an individual to fill the historian position made by Stan Strike, Leane Gray seconded, motion carried.

f. Jade State News Editor: according to the WSMGS by-laws this is a position appointed by the Board President. Ilene Olson will serve in this capacity.

B. Amend By-Laws

Jim Gray opened a discussion about revising the WSMGS by-laws pertaining to the annual WSMGS gem and mineral shows. He provided a handout with the changes highlighted in yellow focusing on the safety measures taken at the shows for protection of vendors, volunteers and attendees; and the assurance that the Club(s) have insurance to protect the venue, the club members, the WSMGS and the RMFMS (see the handout attached to these minutes). Roger Lyons made a motion to accept the changes, Greg Jones seconded, motion carried. These changes will become a part of the WSMGS By-Laws effective immediately.

A discussion regarding the exact coverage of members and non-members by the RMFMS insurance policy occurred with the conclusion being that Stan Strike and Jim Gray will seek clarification of this issue at the RMFMS convention in August and report back to the Board and Clubs.

C. Increase Club Participation with WSMGS and with each other including showcases at the annual show, submitting articles to the Jade State News, and interacting with other Wyoming Clubs. Jim Gray asked the members present for any ideas of how to increase the involvement of all of the Clubs in the WSMGS annual show and with each other. Stan Strike reported that the Cody club provides two nights' motel and fuel money for the travel of delegates to the annual show. Stan indicates that he provides articles to the JSN for inclusion in the newsletter. He also stated how important it is for clubs to send in news items and pictures to the JSN about what is happening within their clubs. Jim reported that the Sublette club sends in to the Historian and JSN editor each month the meeting minutes and any pictures from meetings and field trips.

D. Rockhound of the Year Awards

Annual WSMGS Board Meeting June 2019 (continued from page 15)

1. CLUB Rockhound of the Year awards were:
Cody 59ers – Nella Flurkey
Shoshone Rock Club – Mary Vogel
Riverton Mineral & Gem Society – Linda Richendifer
Sublette County Rockhounds – Tom Marchwick
Cheyenne Gem & Mineral Society – Jan and Mark Shively
Natrona County Rock Hounds – John Hines
Northeast Wyoming Rock Hounds – Ryan and Vanessa Grove
2. CLUB Junior Rockhound of the Year award was:
Northeast Wyoming Rockhounds – Hayden Minchow
3. The 2019 STATE Rockhound of the Year award was:
Sublette County Rockhounds – Jim and Leane Gray

E. Upcoming gem and mineral shows
Natrona County Rockhounds, July 12-13, 2019, at the Ramkota Hotel in Casper.

Adjournment
Roger Lyons made a motion to adjourn, Greg Jones seconded, motion carried.

Attachments:

ARTICLE VII-ANNUAL WYOMING STATE MINERAL AND GEM SOCIETY SHOW

Section 1. Bids For WSMGS State Mineral & Gem Show. Any bid(s) for a future WSMGS Show(s) shall be presented or mailed to the WSMGS secretary at least 60 days prior to the annual membership meeting. Such bid(s) must be made by a member club in good standing. The site for any future show(s) will be selected at the annual meeting by a vote of the members. In the event that no bid is received for the next year prior to the annual meeting, the 60 day provision may be waived and bids will be considered during the annual meeting. If at the conclusion of the annual membership meeting no show site has been awarded, the Board of Directors may act on the behalf of the Society.

Section 2. Duties of Host Club: WSMGS member clubs hosting the WSMGS State Show will sign a WSMGS State Show Agreement Form and are expected to utilize the guidelines and practices of WSMGS to provide a quality experience for the public, dealers, and club members. The WSMGS Club hosting the WSMGS State Show is responsible for the following but not limited to the following duties:

(a)contracting a suitable location with set-up locations for all dealers/demonstrators

(B) ENSURING THE SHOW LOCATION HAS ADEQUATE SPACE, EXITS, AND IS SET UP TO ENSURE THE SAFETY OF ALL PARTICIPANTS AND ATTENDEES.

(C) securing liability insurance LISTING WSMGS AND THE SHOW LOCATION AS ADDITIONAL INSURED WITH WAIVER OF SUBROGATION and providing security covering the set up through final show dates. HOSTING CLUB WILL PROVIDE A COPY OF THE INSURANCE TO WSMGS PRIOR TO THE SHOW SET-UP DATE.

(d) sending and receiving dealer/demonstrator contracts

(e) providing all WSMGS member clubs with State Show information and forms for entering club & individual display cases with judging criteria

(f) statewide and local promotion of the show.

Section 3. Profits.

(A) WSMGS member clubs hosting the WSMGS State Show will provide a financial statement of the income, expenses, and resulting profit associated with sponsoring the WSMGS State

Annual WSMGS Board Meeting June 2019 (continued from page 16)

Show. (B) A check equaling 20% of the Total Profit should be written to WSMGS and included with the show's financial statement and sent to the WSMGS Treasurer.

(Income, expenses, and profit associated with food sales or items sold via a club table should not be included in the financial statement required by the WSMGS.)

(C) Financial losses or liabilities incurred during or as a result of sponsoring the WSMGS State Show will be the sole responsibility of the WSMGS member club hosting that State Show.

Section 4. Dealers. No less than five (5) and no more than (12) commercial dealers are to be contracted for any WSMGS State Show unless approved by the WSMGS Board of Directors.

Treasurer's Report — Stan Strike

WSMGS Annual Financial Report — Wyoming Community Bank

EXPENSES -

Check#	**Written**	**Bank Date**	**Written To:**	**Amount**
1134	5/16/18	5/23/18	Wyoming State 4-H Found.-State Fair Geology Winner	$50.00
1135	5/24/18	6/4/18	Jennifer Flowers-May Jade State News	$75.00
DEBIT	5/23/18	5/23/18	Cody Walmart-Roy Certificates & Frames	$30.29
1136	5/23/18	6/4/18	WDGMS-RMFMS Convention Fees:RMFMS WY State Director	$43.00
1137	5/29/18	5/31/18	Art,Sand,& Steel-2018 State Roy Winnerstone Engraving	$52.50
1138	5/29/18	6/11/18	Blue & Gold Awards-Engraving 2018 wiiner on ROY Award	$8.40
1139	6/14/18	6/21/18	Jennifer Flowers-Wsmgs Annual Meeting Travel	$150.00
1140	6/14/18	6/18/18	Rod Baltes-Wsmgs Annual Meeting Travel	$150.00
1141	6/14/18	VOIDED	Jim Gray cashed Stan Strike's check & bank refused 2 party check	**$150.00**
1142	6/14/18	7/5/18	Fossil Country Frontier Museum-Annual Museum Award	$100.00
DEBIT	7/19/18	7/20/18	The Nest Hotel-2 Nights for RMFMS Meetings Rapid City	$283.40
1143	7/21/18	8/1/18	Jim gray-payment for voided check # 1141	$150.00
1144	8/11/18	8/22/18	Stan Strike: total gas cost RMFMS convention Rapid City	$64.27
DEPOSIT			WSMGS-SubletteCounty 2018 State Show 20% Proceeds	
DEBIT	8/30/18	8/31/18	iPage-3 year renewal of wsmgs.org domain name	$50.97
1145	24-Aug	8/27/18	Jennifer Flowers-August 2018 Jade State News	$75.00
DEBIT	9/24/18	9/26/18	WY Sec.of State-renewal of Incorporation Annual Report	$27.00
1146	10/29/18	11/1/18	Park County Treasurer-WSMGSTrailerRegistrationRenewal	$51.27
1147	11/16/18	11/26/18	RMFMS-WSMGS Board Dues & Insurance	$12.60
1148	11/19/18	12/6/18	Jennifer Flowers-Nov. 2018 JSN	$75.00
1149	12/2/18	12/4/18	The Ivy 8th Street-Marlene Sibley's Gift Certificate	$50.00
1150	2/3/19	2/8/19	Jennifer Flowers-February Jade State News	$75.00
DEPOSIT				
1101	4/15/19	4/17/19	8th Street IvyRestaurant-Marlene's Easter gift Certificate	$50.00
1102	5/18/19	5/29/19	WY STATE 4-H FOUND.-STATE FAIR GEOLOGY WINNER	$50.00
1103	5/30/19	6/6/19	Jennife Flowers:May JSN + consulting service	$100.00
1104	5/22/19	5/24/19	Walmart-ROY Frames/ & Certificates	$25..51

Annual WSMGS Board Meeting June 2019 (continued from page 17)

Check#	Written	Bank Date	Written To:	Amount
1105	6/4/19	6/17/19	Blue & Gold: ROY Plaque Engraving	$10.50
1106	6/11/19	6/12/19	Anonomous:2005 HomesteaderCargo Trailer-Model 714HT	$2,000.00
1107	6/11/19	6/17/19	Park County Clerk-Trailer Title	$15.00
1108	6/11/19	6/13/19	Park County Treasurer:$80 Sales Tax $47.82 License	$127.82
1109	6/11/19	6/14/19	Ace Hardware-Trailer Locks + Extra Keys Made	$40.49
1110	6/12/19	6/14/19	Art, Sand, & Steel-State ROY Award Engraving	$52.00
1111	6/11/19	6/13/19	Car Quest-Reducer Sleeve(2 5/16" to 2"	$18.71
1112	6/20/19		Shoshone Rock Club-Vendors/Delegates/Workers Meal	$100.00
1113	6/21/19	6/25/19	Boomgaarrs-Tie-down straps & DuctTape	$49.88
1114	6/22/19	6/24/19	Walmart-ShrinkWrap	$20.63
1115	7/5/19		U.S. Post Office-ROY;Cheyenne/Fossil Basin + stamps	$27.00

INCOME	+	+	+ + + + +	INCOME		$ BALANCE
Check#	Check From:		Date Written	Date Deposited	Check Amount	
1638	Riverton M&G		11/23/18	12/10/18	$198.00	$2,226.90
1400	Shoshone RC		11/14/18	12/10/18	$63.00	$2,289.90
1639	Riverton-JSN Donation		11/26/18	12/10/18	$100.00	$3,185.40
1329	Cheyenne M&G		10/21/18	12/10/18	$154.50	$3,339.90
5295	Cody 59ers RC		11/24/18	12/10/18	$121.50	$3,461.40
1021	Rex Young Rock club		11/21/18	12/10/18	$31.50	$3,492.91
P.O	Fossil Basin Min. Society		12/27/18	1/22/19	$12.00	$3,504.91
97	NE WY Rockhounds		1/3/19	1/22/19	$57.00	$3,561.91
2511	Natrona Co.Rock Hounds		1/15/19	1/22/19	$60.00	$3,621.91
						$3,546.91
2513	Natrona Co. R.H-Trailer			4/3/19	$500.00	$4,046.91

BANK BALANCE:

1/31/19 - $3,621..91; **2/28/19** - $3,546.91; **3/31/19** - $3,546.91; **4/30/19** - $3,496.91; **5/31/9**1- $3921.40; **6/30/19** - $1,486.37

Wyoming RMFMS State Director's Report, by Stan Strike

2019 RMFMS Convention — Prescott, AZ

The Wyoming State Mineral And Gem Society, Inc. (WSMGS) Board consists of six members who conduct electronic meetings quarterly and an Annual Meeting at the State Mineral and Gem Show. The RMFMS WY State Director is a member of this board. The WSMGS presently has 9 affiliated Wyoming clubs located in Casper, Cheyenne, Cody, Gillette, Kimmerer, Marbleton, Powell, Riverton, and Torrington.

The WSMGS Board provides the following benefits for its WSMGS affiliated clubs:

- Conducts Annual Meeting for delegates representing WSMGS affiliated clubs;
- Promotes communication between WSMGS clubs with Membership Directory;

Annual WSMGS Board Meeting June 2019 (continued from page 18)

- Coordinates the annual WSMGS State Mineral & Gem Show (designates a host club, organizes judging of display cases, promotes show advertising, provides recognition awards, provides WSMGS trailer & contents, and secures RMFMS liability insurance);
- Publishes the Jade State Newsletter quarterly with WSMGS news updates, educational earth science articles, lapidary techniques, and WSMGS Affiliated Club News;
- Provides a WSMGS website (wsmgs.org) that provides WSMGS affiliated club information, WSMGS forms/documents, and educational topics related to rockhounding;
- Archives historical records for WSMGS affiliated clubs;
- Forwards RMFMS & AFMS communications to WSMGS clubs;
- Maintains alias email addresses to protect WSMGS club & board members' privacy;
- Allows WSMGS clubs use of WSMGS' 501(c)(3) status for WSMGS approved purchases;
- Provides reminders concerning required state, federal, WSMGS, and RMFMS deadlines.

1. The WSMGS total affiliated membership as of October 31, 2018 was 714 members — an annual increase of 116 members, which was a gain of 49 members in two new affiliated clubs and a gain of 67 new members in the other seven clubs.

2. The WSMGS has updated its Dues Form to accurately provide membership data as to adults (18+), juniors (12-17), pebble pups (under 12 years), and honorary/life. This recognizes the AFMS guidelines and the RMFMS dues/insurance requirements.
   For a breakdown of membership numbers, please refer to Club Membership Report on Page 5.

3. The WSMGS has two (2) new affiliated clubs located in Gillette(Northeast WY Rock Hounds) and Kemmerer-(Fossil Basin Mineralogical Society) . The WSMGS Board has helped these new clubs to thrive by providing information to become incorporated as a WY nonprofit Corporation, to develop Articles of Incorporation & ByLaws, as well as to register with the IRS. The new clubs also were provided forms to join the RMFMS.

4. The WSMGS will continue to encourage the collection and archiving of copies of all WSMGS affiliated clubs legal documents and in their absence the WSMGS Board will help to develop updated or new documents. The WSMGS will also continue to remind and monitor their WSMGS affiliated clubs/societies that they complete the required Wyoming State and IRS reporting.

5. WSMGS communicated to our affiliated clubs a "help & suggestion" document to successfully register with the IRS (new requirements for 2017 & 2018) and complete the required IRS 990-N form. See a summary on the WSMGS website, http://wsmgs.org/jsn/2018-02.pdf, on page 10.

6. 2019 Wyoming Mineral and Gem Shows (See details wsmgs.org-Rockhounding WY-Upcoming Events):
   Cheyenne Mineral & Gem Society May 18-19, 2019
   Sublette county Rock Hounds-June 14-16, 2019
   Wyoming State Mineral & Gem Show-Cody- June 21-23, 2019
   Natrona County Rockhounds- July 6-7, 2019
7. Communicated 2019 RMFMS Convention and Mineral & Gem show information and required forms. Will collect proxies from all WSMGS clubs not attending the House of Delegates meeting on August 3, 2019 in Prescott, AZ.
8. The WSMGS Board will be represented at all 2019 Wyoming Mineral & Gem Shows.

WSMGS CLUBS

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 (Sept-May) 6:30pm
Park County Courthouse, EOCrm, Cody

President: ..... Nella Flurkey
Vice-President: ..... Roger Lyons
Treasurer: ..... Aubrey Smith
Historian: ..... Stan Strike

Shoshone Rock Club

P.O. Box 256,
Powell, WY 82435

shoshonerockclub@wsmgs.org

Meets 2nd Tuesday 7:00 p.m.
Powell Library
317 E. 3rd Street, Powell

President: ..... Dorine Strom
Vice-President: ..... Mary Vogel
Treasurer: ..... Linda Thomas
Secretary: ..... Cresta Peterson
JSN: ..... Ilene Olson
Historian: ..... Linna Beebe
Field Trips ..... Les hunt

Cheyenne Mineral & Gem Society

P.O. Box 21412
Cheyenne, WY 82001

cheyennemgs@wsmgs.org

Meets 2nd Wed.-7:00pm (August-May)
IBEW Union Building-810 Fremont
Street-Cheyenne

President: ..... Donna Arnold
Treasurer: ..... Jan Shively
Field Trip..... Mark Shively

Natrona County Rockhounds

P.O. Box 123,
Casper, WY 82644

natronarockhounds@wsmgs.org

Meets 1st Monday 7pm (April-Dec)
Shop Open: Tue & Fri 6-8pm at
Clubhouse, 5211 Rambler, Mills

President: ..... Mac Goss
Vice-President: ..... John Hine
Treasurer: ..... Kenny Platte
Secretary: ..... Danny Hill

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: ..... Helen Vogel
Secretary: ..... Joyce Trowbridge
JSN: ..... Joyce Trowbridge
Historian: ..... Joyce Trowbridge
..... Dale Tikalski

Fossil Basin Mineralogical Sociey

PO Box 176 Kemmerer, WY 83101

rexyoungrockclub@wsmgs.org

Meets 3rd Wednesday (Jan-Oct) 6-7pm
Kemmerer Chamber of Commerce

President: ..... Don Stuart
Vice-President: ..... Ellen Potter
Treasurer: ..... Ellen Potter
Secretary: ..... Sue Giorgis
Field Trips: ..... Walter Henderson

Sublette County Rock Hounds Club

P.O. Box 1351 Big Piney, WY 83113

subletterockhounds@wsmgs.org

Meets 3rd Saturday (March-Dec)
1:00pmThe Bench Grill,
415 Winkleman, Marbleton, WY

President: ..... Jim Gray
Vice-President: ..... Mike Schaffer
Treasurer: ..... Leane Gray
Secretary: ..... Deb Jess

Northeast Wyoming Rockhounds

2107C N. Hwy 14-16
Gillette, WY 82716

newyrockhounds@wsmgs.org

Meets: odd # months
check email for dates

President: ..... Jeff Hulings
Vice-President: ..... Dennis Brown
Treasurer: ..... Beth Raab
Secretary: ..... Vanessa Grove

Riverton Mineral & Gem Society

P.O. Box 1904, Riverton, WY 82501

rivertonmgs@wsmgs.org
www.RivertonMGS.com

Meets 2nd Monday 7:00 p.m.
(Jan.-May, Aug.-Nov.)
Senior Center 303 E. Lincoln, Riverton

President: ..... Linda Richendifer
Vice-President: ..... Stan Grove
Treasurer: ..... Cristy Quinn
Secretary: ..... Holly Skinner
JSN ..... Kim Brown
Historian..... Rob Baltes
Field Trips ..... Ted Knowles