

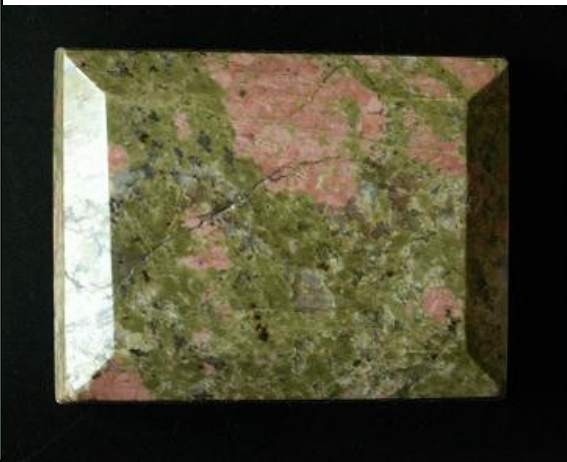
Jade State News



UNAKITE. An attractive stone that is easily available to both beginning and advanced jewelry and lapidary hobbyists - Unakite adds striking beauty to any creation. Discovered in 1874 by Professor Frank H. Bradley, a geologist at East Tennessee University, it was named for the location where it was first discovered - the Unakas mountains of North Carolina. Subsequently, it has been found in the river valleys of Virginia (where it is washed down from the Blue Ridge Mountains) and as pebbles and cobbles on the shores of Lake Superior where it was deposited from ancient glacial drift. It is prized for its contrasting green and pink colors. Unakite deposits are not limited to the United States, and the stone is also found in South Africa, Sierra Leone, Brazil, and China and Wyoming.

Unakite is usually found with a mottled appearance - with various shades of green and pink with little translucent patches, as the photo on this page depicts. Its hardness of 6 to 7 on the Mohs scale comes from its typical composition as an altered granite containing pink orthoclase feldspar (6), green epidote (6 to 7), and generally colorless quartz (7). Unakite is considered a semiprecious stone and will take a good polish. It is often used in jewelry as beads and in rings and pendants. Other lapidary uses include stone eggs, spheres and carvings - including animals - such as the bear on the cover of this month's issue!

It can be tumbled, formed into chips, spheres, pyramids, hearts, wands, small boxes and other containers, paperweights, free forms and scarabs for jewelry. Quick & Leiper in their "GEMCRAFT - HOW TO CUT AND POLISH GEMSTONES " recommend polishing with cerium oxide on a felt buff. Unakite has even been used as tile on the main terrace of the Smithsonian National Museum of Natural History in Washington, D.C. (Article from Pasadena Lapidary Society-Rockhound Ramblings 11-1-2011)



Club News

Shoshone Rock Club—

JSN Report-Shoshone Rock Club (Powell) May and June 2011

May 20, 2011

Two guests were introduced at the SRC meeting, Yvonne Kidd and Martin “Bob” Smith, plus our guest speaker was Shirley Cox, whose mother and father were charter members of SRC. Shirley gave an interesting program on Northern Plains Indians and she displayed many artifacts, along with several beautiful scrapbooks from a total of 39 she had inherited from her parents. Some of the tribes in the Northern Plains Indians discussion were: Crow, Sioux, Blackfeet, Northern Cheyenne & Shoshone. After refreshments were served, guest, Martin Smith had brought a number of rock and fossils he was hoping to have identified. This was a fun exercise and everyone learned something. Between the artifacts, scrapbooks and rock to be identified, this concluded the meeting. 18 members and guests were in attendance.

June 17, 2011

Two guests were introduced at the SRC meeting: Gary Worrell and Yvonne Kidd. Jane Neal reported on the Boys and Girls Club program she and Lynn had provided in May, stringing faceted beads. Both boys and girls ended up making 3 or 4 bracelets. SRC members were to bring in rocks for Show and Tell, or possibly inclusion in the club display case at the State Show in Cody and Mary Ann and Jane had fun setting up a possible display. Some excellent examples of WY material and more were brought in. Mary Ann had planned on dating the material in the showcase for education of all. Several items of interest were noted that jade found in the Granite Mountains of WY is the oldest in the world at 2.5 billions years, and also green aventurine/quartz found in the Snowy Range was even older at 3 billion years and came from a craton. The proposed state bylaws changes were read by Mary Ann and were approved. A report on the state show was given and the club was asked to bring desserts to the dinner before the state show, Friday July 8th. State board members will be providing dinner. Club members had previously signed up to help the Cody 59ers with various committees for the state show. Connie Shilling former secretary of SRC in 2008 returned some secretary minutes in her possession via Mary Vogel. 18 members and guests were in attendance.

Respectfully submitted, Linna Beebe, Sec.

Riverton Mineral and Gem Society—

The Riverton Mineral and Gem Society elected officers for the coming year at their meeting on November 14th. President for a second term is Linda Richendifer, Rich Rodgers is Vice President for a second term, Holly Skinner is secretary, and Vonda Huish is treasurer for a second term.

Dan Cunningham presented a program on Quartzsite and Quartzsite rhyolite and showed samples of the rhyolite.

Jon Kaminsky, Assistant Field Manager of the Lander BLM Office discussed the draft management plan and answered questions club members had about the proposed plan. Club members were encouraged to make written comments to BLM about their concerns with Public Lands management. He said BLM is charged with management of Public Lands for all users and they need substantive comments from the public in order to do that fairly.

Louis Gillette is working on the 2012 Field Trip Schedule and expects to have it completed by May. There are still a few weekends available if you can lead a trip.

Club News

Riverton Mineral and Gem Society

May 7, 2011

Bird's Eye Chert Field Trip

We had 22 people and a dozen vehicles--people from Riverton, Lander, Powell, Evanston, Dubois and Dallas, Texas. Visitors Mary Ann Northrup from Powell and her son Don Northrup from Evanston wanted to see new scenery. George Wood from Texas, an oil geologist, just happened to be between wells that day and was real happy to go along.

Some of the club members showed me what they found. Doug Wilson found a clam shell. Sharon Agars found a purple rock with fossils in it, but lost track of it when I moved my pickup

I was doing some hard rock mining and that was *hard* rock. Linda Reichendifer worked on the piece I left of the chert and did get some small pieces.

Mary Ann Northrup said the chert was layers of algae and coral.

Then we went to Tough Creek and most of the people found some wind-worn samples. From some of the comments I received, I think it was a fun trip.

Jeanine Rodgers took the pictures.

—Rich Rodgers



A Rockhound is a kind of nut whose mind is kind of undercut.
He swings a pick and drives a Jeep and dreams of agates in his sleep.
He'll pick up any kind of stone, or piece of glass, or even bone.
If he can't name it, he'll assert that he has found a piece of chert!

From Ghost Sheet, 6/88 via SCRIBE #1,V14-90

13TH ANNUAL CHEYENNE MINERAL, FOSSIL GEM & ROCK SHOW

AMERICAN LEGION Post #6
2001 E. Lincolnway, Cheyenne, WY



MAY 19-20, 2012

Sat. 9 am until 6 pm

Sun. 10 am until 4 pm

Admission: \$3

Children 12 and under FREE
if accompanied by an adult

EXHIBITS – JEWELRY – FOSSILS

PETRIFIED WOOD – GRAB BAGS

FLUORESCENT MINERALS – DEALERS

FACETING DEMONSTRATION

FREE GOLD PANNING – SILENT AUCTION



See Large Dinosaur Models
Bring your camera

FREE Mineral Coloring Books while supply lasts

Show information: Bob King (307) 632-2702

Hosted by the Cheyenne Mineral & Gem Society

CHANGE AVAILABLE IN 50¢ PIECES WHILE SUPPLY LASTS

This year, as in the past two years, the Cheyenne Mineral & Gem Society has given a \$1,000 to a University of Wyoming geology student who is a resident of Wyoming. This year's recipient is Evan Soderberg of Laramie. Evan was chosen by the geology faculty and received his \$1,000 check at the club's Christmas Party which was held December 10.

Our club now has a new club treasurer: Steve Bade, 2969 Kelley Drive, Cheyenne, WY 82001.

Bob King - Cheyenne

What color was your fossil?

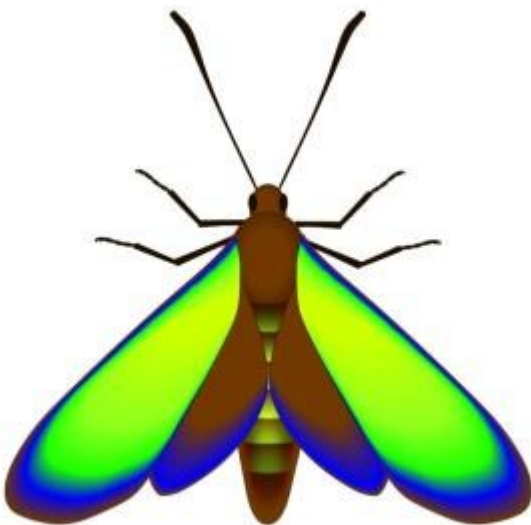
The brightest hues in nature are produced by tiny patterns in, say, feathers or scales rather than pigments. These so-called “structural colors” are widespread, giving peacocks their brilliant feathers. Many animals use this type of color for communication, notably butterflies and moths (Lepidoptera), which display the biggest range of structural colors and put them to uses from advertising their toxicity to choosing the best mates. But despite the importance of structural colors in their lives, little is known about how lepidopterans developed these key social signals. Now, in the Nov. 15 issue of PLoS Biology, palaeobiologist Maria McNamara (Yale University) and colleagues bring us closer to the origins of structural colors by reconstructing them in fossil moths that are 47 million years old. This is the first evidence of structurally colored scales in fossil lepidopterans. The fossil moths came from the Messel oil shale in Germany, a site famous for exquisite fossil preservation.

Although the original colors of the fossil moths were not preserved, the researchers were able to reconstruct them because the tiny color-producing patterns in the moth scales were intact. “The level of detail preserved in the scales of the fossil moths is just spectacular,” said McNamara. The fossil moths owe their color to a stack of layers inside the scales. These layers form a fossil multilayer reflector, which usually produces iridescent color that changes depending on viewing angle. But other details of the fossil scales suppressed this effect, producing instead muted colors. “The moths basically wanted to appear the same color from different angles— they didn’t want flashy iridescence” said McNamara. Today, the front wings of the ancient moths look mostly blue, presumably because the chemistry of the cuticle was altered during the process of fossilization. The researchers reconstructed the original colors via mathematical analysis of the scaled ultrastructure, revealing that the wings had actually been yellow-green when the moths were alive. Modern butterflies and moths use bright, contrasting colors to communicate with each other, and muted greens to camouflage themselves in leafy habitats. This makes it likely that the fossil moths used their yellow-green wings to blend in with leaves, suggesting that this strategy for hiding in plain sight had evolved as early as 47 million years ago amongst lepidopterans.

The fossils are thought to be from extinct relatives of today’s forester moths, which feed on flower nectar. If this was also true of these ancient moths, their yellow -green wings would have stood out while feeding. The researchers suggest that being easy to see on flowers could have served as a warning to predators. Modern forester moths can synthesize cyanide, makes them taste bad, and their ancestors may have already developed this capability.

These findings shed light on the evolution of tactics for predator avoidance and deterrence in forester moths. In addition, by showing that the original structural colors of fossil moths can be reconstructed, this work leads the way toward finding the origins of the many ways butterfly and moth species use this type of color to communicate with each other as well as with predators. “Reconstructing the original colors of ancient animals gives us really good insights into their behavior” said McNamara. “These moth fossils hint that we can even do this for fossils that don’t have obvious color.”

—Public Library of Science (2011, November 15) *Fossil moths show their true colors.*



Editor’s Note: I can imagine the day when we’ll be able to tell the colors of other fossilized creatures. There’s no reason to suppose that the ancient past wasn’t as colorful as the present., and maybe more so. Wouldn’t the dinos running around on the red Chugwater formation rocks be better camouflaged if they were red or pink?

Historian

Richard Heumier

I am pleased to report that I have finally finished the State Show Manual. There are three books and one flash drive to back up the work of the books. One manual will go to the Chairperson of the 2012 State Show (Dale Tikalsky). Manual #2 will go to the Chairperson of the Riverton Club for the 2013 State Show. The third manual and flash drive will remain with the State Historian. My idea was to create a manual that anyone could use to help guide a club in putting on a State Show. I have had great feedback from everyone, but only the future will tell! The Rex Young Club in Torrington will be the first to actually use this manual. Wishing happy trails to you.

I have continued looking up the past officers for the State Board Directory. This is the club officers of each year, the state officers for each year, the State Show Persons for each year and the location, dates and times of the State Show for each year. I then file them in the State Directory for future use.

I pulled the State Trailer to Riverton after the last meeting, then pulled it to Torrington so that Dale Tikalsky could pick it up for use at the next show. Dale signed for and picked up the trailer on Monday, November 17. It has new license tags for the next year.

Winter is closing in on us, so rock hunting will slow down to a halt in the Wind River Basin area except for a few special days when the weather is good. Go rock hunting anyway!

Happy hunting,

Richard Heumier, State Historian

WSMGS Board

The Wyoming State Mineral and Gem Society Board of Directors meets approximately every three months to conduct business and plan for the future. The meeting agenda for the November 15, 2011 meeting contained the following items: the Dinosaur (we have a baby dino to go with the big Triceratops that travels to the State Show), Historian's report, State Show Manual, Jade State News, Web Site, Logo Contest, State trailer (license tags, insurance, inventory), planning for the 2012 and 2013 State Shows, permission to use the bucking horse (it is trademarked by the U of W) in the Jade State News and on the website, and recruiting new clubs.

The current Board of Directors are:

Connie Case — President Mary Ann Northrup — Secretary
Stan Strike — Vice President Richard Heumier — Historian
Jane Neale — Treasurer



WSMGS President
Connie Case and the
baby Triceratops (as yet
unnamed)

State Lands

Great new tool for access to state lands —Written by Dustin Bleizeffer <http://wyofile.com>

The Office of State Lands and Investments just launched a great new online mapping application to navigate access to state lands, which are open to the public. Here's the url for the site; <http://onanypc.com/statelandaccess>



Editor's Note: If you're using WSGS or other written materials that use Range and Township locators, this map is very handy for narrowing down an area. You can zoom in and out, locate roads, get aerial and topographic views.

The state administers about 3.5 million acres of surface estate held in-trust and managed almost exclusively for the benefit of Wyoming schools. State lands are typically located on Sections 16 and 36 of each township, and are represented as blue squares on maps as part of a complex checkerboard of surface ownership. In addition to energy development, logging and agriculture, state lands provide myriad hunting and recreational opportunities. But access is tricky, because you MAY NOT cross private lands to access state lands without specific approval.

According to a news release today, the new interactive mapping tool on the Office of State Lands and Investments web site is intended to help determine where state lands are located, and where potential access points exist.

"Access to state lands is very important to the people of the state. These maps will hopefully provide a useful tool to guide the thoughtful and appropriate use of State trust lands," Gov. Matt Mead said in a prepared statement. "Too often the Board of Land Commissioners is in the position of mediating disputes between sportsmen, landowners and other state lessees after the fact. These maps help provide information on the front end and hopefully this will limit these sorts of conflicts going forward."

The Office of State Lands and Investments listed a phone number for more information; (307) 777-8510.

Rules for public use of State Lands are found at <http://slf-web.state.wy.us/Surface/brochure.pdf>

WSMGS Board Award

Jim McGarvey, who has held numerous positions in the Wyoming State Mineral and Gem Society, was awarded a Certificate of Appreciation for his many years of service at the meeting of the Board on November 15th in Riverton. Along with the certificate, Jim received a bolo tie and a gift certificate. The Board is very grateful for all of Jim's help in promoting rockhounding over the years. WSMGS President Connie Case presented the certificate.



Club News

CODY 59ERS ROCK CLUB

The Cody 59ers Rock Club took several field trips this Summer and Fall which were advertised in the Cody Enterprise and resulted in several new members. Trips were taken to the Pryor Mountains (agates, petrified wood), Lysite (agate, petrified wood, jasper), Cedar Ridge/Tensleep (plant fossils), LU Bench/Dry Creek (petrified wood, chalcedony), and Tuff Creek/Bird's Eye Pass (banded iron, jasper, agate, petrified wood). Club members have recently presented programs on Fossils of the Bighorn Basin, Using Geologic Maps, fluorescent rocks, and an Introduction to the 59ers Lapidary Equipment.

In order to promote lapidary as one of our club objectives, our club purchased 5 pieces of used lapidary equipment: Beacon Star 6 " trim saw, Beacon Star 10" trim saw with vise, Beacon Star 3-6" wheel diamond grinding arbor, Beacon Star 2-8" expandable rubber polishing arbor and a 4 1/2 # Lot-O-Vibrating Tumbler. We are presently looking for a facility to house our equipment and evaluating the necessary repairs and supplies to use it.

Our Christmas Party was held at the Sunset House Restaurant and included a gift exchange. Our New Year resolutions are to apply to the WY Secretary of State to become a Nonprofit Corporation and to rewrite our by-laws.

—Stan Strike

Shoshone Rock Club —Powell

BOARD MEETING: An announcement for the scholarship luncheon to be held at Northwest College on Nov. 8, 2011, and two of our members will attend. Art Schatz will be attending for the Lions Club and Jane Neale will attend and possibly Lynn Neale. The Christmas party potluck will be Friday, December 16th. The main course will be provided by Mary Ann Northrup, and members are to bring side dishes and table service. Members are also to bring a rock, fossil or other to trade in place of a gift exchange. Members, former members and guests are invited to attend.

CLUB MEETING: President Mary Ann Northrup called the meeting to order with 20 present, and four of those were guests, Robert and Nancy Brown, and DeAnna and Jerry McGee. The estate rock collection auction of former members, Ruby and Virgil Green netted the club a little over \$400.00. Art Schatz and Lynn Neale were thanked for their efforts in cleaning and bringing the approx. 600 pound collection to the Boys and Girls Club for the sale on Oct. 1. Guest Robert Brown won the door prize, brought in by Jane Neale. Astrid Northrup present a wonderful program to the Boys and Girls Club this month and then repeated the program for club members on "Wind Energy". Mary Vogel had an assortment of goodies for the usual raffle, and Art and Judy Schatz were thanked for being the hosts for refreshments.

November 18, 2011

President Mary Ann Northrup brought the regular club meeting to order 7:30 PM at the Powell Library club meeting room. 16 were in attendance with one guest, Kim Winters. Mary Ann brought to our attention that the BLM would like comments on the Resource Management Plan. There were four plans offered and Alternative A (Current Management) was recommended which has been in effect for the past 24 years. Linna Beebe offered to send a notice to the BLM for the club and also to members via e-mail with a brief description of the four different plans, where by members can send in comments. Comments must be in by Dec. 7th.

The Christmas party potluck will be at the Willwood Club house on Friday, Dec. 16th at 6:30 PM.

Club News

Shoshone Rock Club —Powell continued

The main course will be provided and members are to bring side dishes and table service plus a rock, fossil or other to swap instead of a gift exchange. Dues are due in December. A suggestion that all officers and board members continue one more year was motioned for approval by Lynn Neale and Carl Brown seconded. Motion was approved. Bob Englebach won the door prize donated by Lynn Neale. Program for the evening was fluorescent rocks by Lynn Neale. Lynn brought in quite a number of specimens, but said this was just a small portion of his collection. Other members brought in samples to see if they might fluoresce. Mary Ann had some tumbled zoisite & ruby and the ruby fluoresced bright red. Carl and Sharon Brown provided refreshments for the evening. Mary Vogel brought in a selection of items for the club raffle to make a few dollars for the club treasure. A great program by Lynn and interesting to all.



Lynn Neale gave a very interesting program with assorted samples of fluorescent rocks, septarian nodules, zoisite with ruby, fluorite from England, and much more. The mineral light or multi-band violet lamp has been in the club since 1975 or so and is available for use of members to borrow.

—Linna Beebe

Editor's Note: This issue was produced in a new version of Microsoft Publisher running in Windows 7. Both are new to me. You'll notice that the Internet address links don't work because I could never get them to work. So you'll have to copy and paste them into your browser. Maybe by next issue I'll have it figured out. I tried Help, but it wasn't any help.

This issue is a little early, but better early than never, right?

Thanks for your patience. —Gene Case