



# THE AMMONITE



Newsletter of The Western Dakota Gem & Mineral Society – July 2009



## FROM THE PRESIDENT by Deb R

We will be meeting in the back room for the July and October meetings – be sure to come all the way inside when you get there. The September meeting will be in the usual room out front and there is NO MEETING IN AUGUST due to the club picnic. (I just had word from Jan G. that Minneluzahan Senior Center will allow us to keep our current rate if we use the back room. The rate is still subject to change in the future, so the club will still consider other options for places to meet for the future).

## CLUB CALENDAR:

MONTH	REFRESHMENTS	DOOR PRIZES	PROGRAM
JULY	Cliff N	Mickey S	Show review/Picnic set-up
AUGUST	Picnic	Picnic	Picnic
SEPTEMBER	Don & Annette R	Don & Annette R	??
OCTOBER	Melanie B	Deb R	??
NOVEMBER	Paula H	Rita H	??
DECEMBER	Dinner	Dinner	Dinner

## FEATURE STORIES:

### How Gem Hunting Works (Part 4 of 5)

by Ed Grabianowski

<http://adventure.howstuffworks.com/gem-hunting.htm>

### Gem-hunting Equipment

Without the proper gear, gem hunting would be futile and not much fun. For example, using your bare hands to chip out specimens or haul gravel could cause serious physical damage. Fortunately, geologic tools aren't too expensive -- items like gold pans and collection bags are very cheap, and even the most expensive tools can be had for under \$50. If you're going to spend most of your time as a gem hound, it's worthwhile to properly outfit yourself (it'll make your gem-hunting expeditions more enjoyable and fruitful). Several geologic and mining suppliers sell their goods via the Internet, and popular mining areas usually have outfitters' shops nearby. Here's the basic equipment needed for a proper gem-hunting expedition:

**Rugged clothes:** Climbing, digging and hauling rocks require clothes that can get dirty. Sturdy boots and pants are a must. Work gloves will prevent blisters.

**Rock hammer:** A geologist's hammer has a flat head at one end and a chisel at the other, perfect for splitting rocks. Longer hammers provide more leverage, while some gem hunters prefer to bring a selection of small chisels.

**Shovel:** A folding shovel will help you collect the most stubborn of gems.

**Goggles:** Hammering or chiseling rock can cause rock chips to fly up and enter your eyes -- wearing safety goggles can prevent this.

**Collection bag:** You don't want to shove specimens in your pocket next to your car keys -- a sturdy collection bag will keep your findings safe. Don't forget to bring newspaper to wrap each gem so they don't bang together and chip.

**Labeling system:** You can use an indelible marker and adhesive labels to note each find. Once the gem is numbered, you can mark the location and date of where and when it was found. Mark any other information you'd like to later add into your gem-hunting journal.

**Magnifying lens:** A 10x magnification is very useful for examining and identifying specimens, especially once you gain some experience and know what to look for.

More advanced equipment is optional. A GPS device is helpful if you'll be hiking -- although a cheaper substitute like a map could suffice. If you're looking for a particular type of gem, you might need specialized equipment, such as a pan for gold. In many cases, fee digs have this type of equipment available.

Once you find some worthwhile specimens, can you walk off the property, gem in hand? Let's explore the legal issues surrounding gem hunting on the next page.

*(To be continued in the next Ammonite).*

## ZODIAC STONES (part 7 of 12):

From Wikipedia, the free encyclopedia

Early civilizations such as India and Babylon have attributed gemstones with magical properties. Over time, astrologers assigned gems of certain colors to the twelve signs of the zodiac to help people influence the planets in their favor.

Sign	Dates	Stone	Sign	Dates	Stone
Aquarius	January 21 - February 18	Garnet	Leo	July 23 - August 23	Onyx
Pisces	February 19 - March 20	Amethyst	Virgo	August 24 - September 22	Carnelian
Aries	March 21 - April 20	Bloodstone	Libra	September 23 - October 23	Peridot
Taurus	April 21 - May 21	Sapphire	Scorpio	October 24 - November 22	Beryl
Gemini	May 22 - June 21	Agate	Sagittarius	November 23 - December 21	Topaz
Cancer	June 22 - July 22	Emerald	Capricorn	December 22 - January 20	Ruby



Sardonyx (banded agate)



Onyx from Australia



Onyx from Brazil

**Onyx** is a cryptocrystalline form of quartz. The colors of its bands range from white to almost every color (save some shades, such as purple or blue). Commonly, specimens of onyx available contain bands of colors of white, tan, and brown. **Sardonyx** is a variant in which the colored bands are sard (shades of red) rather than black. Pure black onyx is common, and perhaps the most famous variety, but not as common as onyx with banded colors. It is usually cut as a cabochon, or into beads, and is also used for intaglios and cameos, where the bands make the image contrast with the ground. Some onyx is natural but much is produced by the staining of agate. The name has sometimes been used, incorrectly, to label other banded lapidary materials, such as banded calcite found in Mexico, Pakistan, and other places, and often carved, polished and sold. This material is much softer than true onyx, and much more readily available. The majority of carved items sold as 'onyx' today are this carbonate material.

**Onyx** comes through Latin from the Greek *onyx* meaning 'claw' or 'fingernail'. With its fleshtone color, onyx can be said to resemble a fingernail. The English word 'nail' is cognate with the Greek word. The Beinecke Rare Book and Manuscript Library at Yale University was originally planned to be coated in green onyx. However, there wasn't sufficient green onyx in the world to build such a structure, so that the designers used marble. Onyx was known to the ancient Greeks and Romans. Use of sardonyx appears in the art of Minoan Crete, notably from the archaeological recoveries at Knossos. Onyx was used in Egypt as early as the Second Dynasty to make bowls and other pottery items. It is also mentioned in Exodus 25.

## FBI Sting Catches Alleged Archaeological Thieves in Southwest One arrestee tells his tale: "I'm guilty of arrowhead collecting"

By Brendan Borrell, June 16, 2009, [www.scientificamerican.com](http://www.scientificamerican.com)

Last week, federal agents swooped in on 23 of the 24 people indicted on charges of stealing archaeological artifacts from public land and Indian reservations in the Southwest. But after a 60-year-old physician committed suicide over the weekend, Utah senators are saying the raid was overkill.

The arrests were made following a two-year operation codenamed "Cerberus Action," after the multi-headed dog in Greek mythology that guards the underworld. The case involves 256 Native

American artifacts including woven baskets, pots, sandals, and an ax, which the Federal Bureau of Investigation values at \$335,685. Defendants were charged with violations of the Archaeological Resources Protection Act (ARPA), which prohibits the excavation and sale of artifacts from public land or Indian land, and the Native American Graves Protection and Repatriation Act (NAGPRA), which requires items retrieved from burial sites and other sacred objects to be returned to Indian tribes.

Throughout the Four Corners region where the operation was centered, the University of Utah once paid locals \$2 for an ancient pot, and the artifact-collecting mentality never seems to have faded. "I'm guilty of arrowhead collecting," 60-year-old defendant and Moab, Utah, resident Brent Bullock told *ScientificAmerican.com*, "as is two-thirds of this town."

Bullock, a former oil worker on disability who lives with his wife, is ticked off about finding himself in the spotlight. And he's not alone in complaining about a raid that also hit Durango, Colo., and Blanding, Utah. One sheriff has called the feds' tactics "heavy-handed," and on Sunday Utah senators Orrin Hatch and Bob Bennett demanded a Congressional investigation of the raids that included 300 federal agents, including a SWAT team.

The sting began in October 2006, when the FBI recruited a longtime dealer in archaeological artifacts, whose name has not been revealed, to purchase artifacts under video and audio surveillance. The challenge was not only to purchase artifacts, but to have the seller admit their provenance on public land. Melody Rydalch, the U.S. Attorney spokeswoman in Utah, would not comment on whether their "confidential source" had been implicated in previous crimes, but that is often the way agents recruit sources.

According to one affidavit, on December 11, 2007, the FBI's dealer visited the house of a 55-year-old high school math teacher named David Lacy. Lacy's home was filled with "hundreds of illegal artifacts," and Lacy sold the dealer \$11,200 worth, including a blanket made of turkey feathers and yucca leaves. But before the purchase was complete, the dealer pulled out a map of public

land, and Lacy pointed at the spot where the blanket was retrieved. Then, the FBI's dealer requested that Lacy sign a document, called a Letter of Provenance, indicating that the items were actually found on private property.

Bullock has a similar tale. According to court records, on July 26, 2007, he tried to sell a blanket fragment, fireboard, and stone hoe known as a Tchamahia. In a phone interview, he said that, like Lacy, he was also asked to identify the spot where the items were obtained and he subsequently signed a Letter of Provenance. He says agents later showed up at his house, placed his arrowheads and other artifacts in bags, and photographed them although they did not have permission to seize his or any other artifacts yet. "They ripped this place apart," he says. "This town is all stirred up."

Although *Archaeology* magazine has attributed a spate of looting in the Southwest to methamphetamine users, only two defendants had records of drug possession. Over the weekend, James Redd, a 60-year-old physician who has previously been caught trespassing on Native American burial sites, committed suicide. For the most part, however, many of the defendants, who ranged in age from 27 to 78, were like Bullock and appear to have clean records, according to the *Salt Lake Tribune*.

But federal agents dispute the notion that those arrested were mere hobbyists, and professional archaeologists are pleased the artifacts could one day be placed in public collections. That's no consolation for Bullock who could be looking at jail time for five felonies. "I've been treated like a felon, and I hope I'm not a felon," he says. "I made the wrong decision."

#### PLACES AND FACES:



**The 29<sup>th</sup> Annual Gem & Mineral Show**

The final tally for attendance and proceeds for the Show held June 27<sup>th</sup> & 28<sup>th</sup> should be ready soon - not all the bills have been received yet to get the net picture. A big THANK YOU goes out to everyone who helped, whether member, vendor/dealer or friend who volunteered their time and effort. As always, there would be no Show without you! Next year is the 30<sup>th</sup> Annual Show – let’s think of a good theme or special display to tie in with the anniversary.

*Enjoy a few photos of the Show . . .*



We received an extra prize donation this year, allowing us to award 2 Best of Shows and 1 Grand Prize items. Two prizes, one a gold nugget, were also awarded by the Black Hills Prospector’s Club.



1<sup>st</sup> Best of Show  
Sharon B.



2<sup>nd</sup> Best of Show  
Tom W.

(not pictured)  
Grand Prize  
John A.



**June 12, 2009 Minutes, by Hazel W.:**

The June meeting was called to order by Deb at 7:30 pm. The May meeting was approved and 2d. There are 28 family members and 44 singles. Several guests were in attendance: Bob and Ruth W, who provided some of the door prizes and Jacob who is Jan’s grandson.

Rita provided the treasures report for this month: Balance of \$9,189, Deposit of \$210.50, Bills paid \$267.92, Remaining balance of \$9,131.58. The treasury report was motion for acceptance by Mickey and 2d by Ellen.

Publicity: The rock show has been advertised in the rock shops in Keystone, Big Brothers and Big Sisters and the RC Journal will run the event notice for free. Calvin also recommended contacting the Quick Quarter for running the advertisement. The field trip for Saturday, 20 Jun, was cancelled due to too much rain.

Steve E is working on the website. A few comments stated there were too much advertising on the website. Steve is doing a wonderful job although not much can be done with the Google webpage. There will be some searching to try to find a better webpage. It was voted on to update the webpage at a small cost.

The rent for the meeting place is increasing to \$45 per month. Rita is going to check the Eagles to see if we can use their room to meet. This will be brought up for discussion at the next meeting.

A memorial picnic for Don B will be held at Canyon Lake on Sat, 13 June. Everyone is invited.

Estes Auction will be on Mon 29 June. A field trip will not be held after the rock show so those that want can attend the auction. Flyers will be handed out at the show with the address and phone number.

SHOW: The show will be 27 and 28 June. Volunteers are needed to set up and tear down. Set up will be at 8:00 on Friday and tear down will be at 4:00 on Sunday. If you would like to have an exhibit you must fill out necessary forms. Janet has the ticket sales; Linda will be in charge of the Silent Auction; Ellen in charge of children's activities; and Don will have the fluorescent display. There will be security overnight. A potluck will be at 6:00 on Friday night. It was decided that if you can't volunteer to help out that you must pay admission, free admission to those that are helping. You cannot sell at the silent auction if you are not a member.

#### Western Dakota Gem & Mineral Society 2008-2009 Officers and Chairpersons (area code 605)

<b>President:</b>	Deb R, 430 E. Idaho St., Rapid City, SD 57701.....	343-7850
<b>Vice President:</b>	Roger V, 4800 Summerset Dr., Rapid City, SD 57701.....	341-6299
<b>Secretary:</b>	Hazel W, 2415 Judy Ave., Rapid City, SD 57702.....	399-2670
<b>Treasurer:</b>	Rita H, 2569 Ambush Ranch Rd., Rapid City, SD 57703.....	348-3916
<b>Show Co-Chair:</b>	Jamie B, 1701 5 <sup>th</sup> St., Rapid City, SD 57701.....	415-6283
<b>Show Support:</b>	Donald R, 2701 Mystic Mt. Rd., Rapid City, SD 57702.....	348-8948
<b>Silent Auction Chair:</b>	Linda S, 11809 Eastridge Hill Dr, Black Hawk, SD 57718.....	716-4047
<b>Silent Auction Asst-Chair:</b>	Mickey S, 201 Patton St., Rapid City, SD 57701.....	791-1953
<b>BRC SD Rep:</b>	Donald R, 2701 Mystic Mt. Rd., Rapid City, SD 57702.....	348-8948
<b>BHRMUC Rep:</b>	Donald R, 2701 Mystic Mt. Rd., Rapid City, SD 57702.....	348-8948
<b>RMFS SD Dir.:</b>	Donald R, 2701 Mystic Mt. Rd., Rapid City, SD 57702.....	348-8948
<b>RMFMS SD Reps:</b>	Donald R, 2701 Mystic Mt. Rd., Rapid City, SD 57702.....	348-8948
<b>Field Trip Chair:</b>	Steve S, 11809 Eastridge Hill Dr, Black Hawk, SD 57718.....	716-4047
<b>Field Trip Asst-Chairs:</b>	Jan B and Calvin L	
<b>1 yr. Board Member:</b>	Jamie B, 1701 5 <sup>th</sup> St., Rapid City, SD 57701.....	415-6283
<b>2 yr. Board Member:</b>	Ellen T, 21653 Piedmont Meadows Rd., Piedmont, SD 57769.....	787-4659
<b>3 yr. Board Member:</b>	Dale J, 14974 Back Country Trail, Rapid City, SD 57703.....	393-2011
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<b>Publicity Co-Chair:</b>	Calvin L, 220 E. St. Joseph #2., Rapid City, SD 57701.....	593-1711
<b>Librarian:</b>	Steven E, P.O. Box 1123, Rapid City, SD 57709.....	484-5712

**Club Address:** 2701 Mystic Mt. Rd., Rapid City, SD 57702

**Meetings:** Second Friday of each month, 7:30 p.m., Minneluzahan Senior Center, 315 N. 4<sup>th</sup> St., Rapid City

**Dues:** Family - \$15, Single - \$10, Payable by cash, check, or money order. Senior Citizens free membership (does not include bulletin)

**The purpose of our club is to promote interest and education in geology, mineralogy, paleontology, archaeology, and lapidary, to sponsor and provide means of coordination the work efforts of groups and individuals interested in these science fields.**

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Western Dakota Gem & Mineral Society

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**Material in this newsletter may be used if proper credit is given.  
Material for this newsletter must be given to the editor by the  
25<sup>th</sup> of the month preceding that issue.**

