



ROCK TALK

White Mountain Gem & Mineral Club

Member of RMFMS and AFMS

Volume 14 Issue 6 June 2010

Temporary website address: wmgmc.uuuiq.com

Elected Officers

President	Nanz Marshall (928) 537-2524
Vice President	David Bingell (928) 367-4062
Secretary	Tonie MonDragon (859) 338-2296
Treasurer	Larry Legge (928) 537-2524
Editor	Charlene Bingell (928) 367-4062
Field Trip Chairman-	Open

Board Members:

Ursula Wilson	(928) 532-5703
Eunice McQuiston	(928) 536-7209
George Stokes	(928) 229-0328
Karen Stokes	(928) 229-0328

Volunteer Positions:

Show Chair	Larry Legge (928) 537-2524
Advertise & PR	Larry Legge (928) 537-2524
Librarian	Jan Pertruzzi (928) 368-4688
Door Prizes/50-50 Raffle	Kathleen Varhol
Auctioneer	Bill Stalder (928) 368-4496
Highway Clean Up	Nanz Marshall (928) 537-2524
Coalition Trips/Historian/Sunshine	Eunice McQuiston (928) 536-7209
Education (Schools/Libraries)	Open
Web Master	Ron Dale Ron.bunnie@gmail.com

President's Message

June 2010

We are half way through the year and there is much yet to do and see and collect.

This month we go to our seven claims and have a great day among friends in a wonderful surrounding.

We will have also done our community service and cleaned our one mile of the highway.

The Show was relatively well received, but we sure could have used MORE VOLUNTEERS. Too few were responsible during the two days of and not enough were there for taking down all our stuff. What's up with that?

Your White Mountain Gem & Mineral Club has many things to offer and all of them are fun. Come and get involved with the great folks who enjoy the Club.

Here we go for summer! Welcome back seasonal members!
Always,

Nanz

"Rock Talk" is published monthly by The White Mountain Gem & Mineral Club, Inc. Any comments members wish to have published in "Rock Talk" need to be turned in or called in at the general membership meeting to the Editor. Membership dues are \$15.00 for single membership and \$20.00 for couple/family. Dues are due the first of January of every year along with a completed application. Meetings are held at J.B.'s Restaurant on the Deuce of Clubs, Show Low, AZ., 1st Tuesday of the month, social hour starts at 5:30/meeting at 6:30.

Meeting Minutes

Minutes of General Meeting White Mountain Gem & Mineral Club June 1, 2010

President Nanz Marshall called the meeting to order at 6:30 p.m. There were 36 people present, of whom six were guests or new members: Bob Shoop and John Ferguson, Bob Cronover, Luanne and Lloyd and Patricia.

A motion to approve the May minutes as published was made by Peggy Lancaster and seconded by Sumner Christie and approved unanimously.

Nanz called for officer and board reports. Vice President David Bingell handed out a thank you memento to the members present for their help at the show. David also reported that he was still working on a scholarship program proposal. David announced that his educational program for this evening would continue the theme of Cultural Gemstones.

Treasurer Larry Legge did not have his monthly report ready and would report on the show results next month. Tonie made a motion to move the Edward Jones account funds to the checking account for better interest results until something more lucrative was available. The motion was seconded by David Bingell. After discussion the motion was approved unanimously.

The Secretary reported that the minutes of the April 24 Board Meeting would be presented to the Board at break for their approval and publication.

Editor Charlene Bingell stated that the dates on the May newsletter had been corrected and the corrected copy was on the website.

Nanz Marshall will be the field trip leader for June and the trip will be to the claims on Escudillo Mountain. The members will meet at the Saffire Restaurant in Springerville on the morning of Saturday, June 19th and caravan to the site. The group will leave promptly at 9 a.m. and no guests are allowed at the claims, only club members.

Nanz repeated the Board recommendation that the Club not rent tables out but allow members to borrow up to 6 tables in exchange for a donation. A motion was offered

by Charlene Bingell and seconded by Linda Stalder and approved unanimously by the membership.

Under new business Eunice asked when the next highway cleanup would be scheduled since the last one was cancelled due to weather. Discussion was held and a date of June 12 was agreed upon. Members and guests interested in helping do our community service were requested to meet at the Big K parking lot and be ready to leave promptly at 9 a.m.

The meeting then took a ten minute break and resumed at 7:06 p.m.

Jim Ferguson reported that he had contacted the Lakeside Ranger Station and they told him that in the National Forests only incidental collection of petrified wood was allowed, meaning 3 or 4 pieces. A ranger at the Heber Station still states that no collection on forest land is allowed.

The Lakeside station stated a permit was available but they had none at present.

David explained that he would continue speaking about "non-traditional" gemstones from cultures outside the mainstream consciousness of what makes a gemstone valuable or worth collecting. Tonight David told about the history and cultural significance and types of clay, specifically Thai amulets. David passed around his collection and explained what made some more valuable than others.

Next the drawings were held. Tisha Peterson won the door prize of a dichroic necklace donated by the Bingells. Jim Ferguson won the 50/50 drawing of \$11.50, Mark won the petrified wood specimen and Bob won the polished geode. The meeting adjourned at 8:00 p.m. upon motion by Charlene Bingell, second by Eunice McQuiston, and unanimous approval. The silent auction was to close 3 minutes later.

Respectfully submitted,
Tonie MonDragon, Secretary

Minutes of the Board of Directors White Mountain Gem & Mineral Club May 15, 2010

President Nanz Marshall called the Board meeting to order at 12:06 p.m. on Saturday, May 15, 2010. All nine Board Members were present.

Nanz asked for any reports by Board members. Secretary Tonie MonDragon stated that she has researched rules for Executive Meeting of a Board and according to the American Association of Law Libraries:

On occasion, when matters of a confidential nature are discussed, the Board goes into Executive Session. Only the elected Board members are in the meeting room during an Executive Session. No minutes are taken of Executive Sessions, but if decisions are made, a summary statement is read into the record when the open meeting resumes.

The Board minutes of April are amended to state:

While in Executive Session the Board decided to send a letter to a member who was disruptive at the April general meeting, asking that he not be disruptive in the future, and offering a meeting with the Board if that member chooses to discuss the letter.

Nanz reported that a membership vote will be taken at the next meeting to ratify the Board's proposed policy on borrowing Club-owned tables.

Eunice inquired about the show banners and three banners are up. One is in Snowflake, one is at Earth's Upper Crust and one is at Wal-mart. Nanz and Larry are going to place an ad in the White Mountain Independent and arrange for a portable electrical sign to be placed near the intersection of Hwys 260 and 77.

Nanz gave a report on the Show. We have additional raffle prizes donated by Club members Ursula Wilson, Eunice McQuiston and Nanz and Larry. Earth's Upper Crust is also donating a raffle prize. Nanz showed the placemats she would have for the juniors at the show as well as a book of earth science activities she has ordered. Nanz said we would have the PA system and a video display running at the Show. Board members reported on distribution of the show flyers.

Larry had the forms to change the Statutory Agent and they were signed by Tonie MonDragon.

The Board went into Executive Session. In Executive Session it was decided to exercise Article III, Section 3 of the Bylaws with respect to the disruptive member. A letter was prepared and signed by all Board members

and will be sent by registered mail requesting that member's appearance before the Board on May 24th.

The board resumed their open meeting and a motion to adjourn was made by Ursula Wilson, seconded by David Bingell and approved unanimously. The meeting adjourned at 1:37 p.m.

Respectfully submitted,

Tonie MonDragon, Secretary

**Minutes of Board Meeting
White Mountain Gem & Mineral Club
May 24, 2010**

The board meeting was held at the home of Tonie MonDragon and was called to order at 5 p.m. Present were Nanz Marshall, Larry Legge, David Bingell, Charlene Bingell, Ursula Wilson, Eunice McQuiston and Tonie MonDragon. Karen and George Stokes were unable to attend.

Tonie read the minutes of the May 15, 2010 Board meeting. Upon motion by Eunice McQuiston and second by Ursula Wilson, those minutes were approved as read.

President Nanz Marshall stated the reason for the meeting was to provide a member of the Club an opportunity to respond to the Board's letter to that Member. The Member had sent an e-mail communication stating that he would not be attending. However, an e-mail communication was not considered an appropriate response to a request for his appearance, as it did not bear a signature. The Board would stay convened for at least twenty minutes to allow the appearance.

Eunice inquired of David if he has made progress on his proposal for a scholarship program. David reported that he was still researching the scholarship programs of other organizations but was thinking of a total giving program of \$4,000 per school semester. There was discussion about the application process which David will research further. If there were no applications in any category, the money would be held over until the following semester. David was thinking that three club members would prescreen the candidates and provide two recommendations in each category to the Vice President for final selection. David will report to the membership with his recommended

program, method of application and method of distribution.

Tonie brought up the subject of investing the Club's surplus cash into a better interest account, and Nanz will put this on the general meeting agenda.

There being no further business David Bingell made a motion to adjourn, seconded by Charlene Bingell. The motion passed unanimously and the meeting adjourned at 5:30 p.m.

Respectfully submitted,

Tonie MonDragon, Secretary

[Note: These minutes were later approved by the Board at the June 1, 2010 general meeting upon motion by Nanz Marshall, second by David Bingell, and unanimous vote of the 7 board members present.]

Next Meeting

Mark your calendars: Our meetings are always the first Tuesday of the Month- Next month will be **July 6, 2010** - at JB's Restaurant on the Deuce of Clubs in Show Low- social hour starts at 5:30 meeting starts promptly at 6:30 PM.

Web Site Info

We have a problem with the website. It appears that our present web host is no longer supporting linking our domain name (whitemountain-azrockclub.org) with our domain name on their site (wmgmc.uuuq.com), which means that anyone trying to use whitemountain-azrockclub.org cannot get to our site. Please temporarily use this address until we can get the problem solved- wmgmc.uuuq.com

Birthdays

Happy Birthday May and June babies! Spring has sprung- CELEBRATE!

June

Kathy Amator - 29
Sandra Angelo - 19
Sumner Christie - 10
Eunice McQuiston - 24
Wendy Hall - 19

July

Charlene Bingell - 25
Larry Legge - 21
Nanz Marshall - 10
Steve Miller - 12
Tonie MonDragon - 3
Mary Ann Moseley - 15
Diane Braswell - 30
Peggy Lancaster - 31

FIELD TRIPS

Club Filed Trip- June 19, 2010

This is our annual field trip to our claims in the Escudilla Mountains- MEMBERS ONLY.

Meet- Springerville Safire Restaurant - 411 East Main St

Time- 9 AM

High Clearance Vehicle

Bring- Water, food, buckets, shovels, bug spray, hats

This will also be a time to clean up trash on the claims as well.

Come enjoy the fun, sun, rocks and socialize with your fellow rock hounds!

Questions call Nanz.

Field Trip Report

On May 22nd, the wind blew eight members and four guests all the way to the DoBell Ranch where it continued to blow!!!!

Upon arriving, Gordon DoBell gave us a tour of the museum and for those who had not been there before, it was a trip back in time-the 40's and 50's. I heard a few comments about the chrome sided kitchen table that included, "we had one like that while growing up". Gordon explained that is grandfather had lived in the house while operating the first rock shop at the original entrance to the Petrified Forest. He showed us other memorabilia pertaining to the PF also. Someone asked about rattle snakes-two spotted in as many years. Strange that this subject came up, because two or three snakes were spotted this trip but luckily they were not rattle snakes.

After leaving the museum, six rockhounds took off for the pit and the rest of us wandered around looking at the petrified wood closer in. Sumner C. found pieces of iron to use when making his sculptures and new member Jim M was over heard saying that he would be using the wood pieces he had found to build a water feature. How pretty this must be! Karen S. and I picked up small pieces for the grab bags, Bill and Linda had about two buckets of pieces that they probably will use when they do their mini rock shows for area school children, and Scott C. was dreaming about "large" rounds that he would like to have. When he backed his van up to the pile, I knew he had found what he wanted.

Guests on the trip were Sandra and James J, his sister, Bridget and nephew, Jacob. Bridget and Jacob are moving to Ohio so it was great that they had this experience. Thanks for giving this trip a try.

Thanks everyone for coming. Hope you had a good day. The shower sure felt good!

Eunice

VOLUNTEER WANTED - Field Trips - 2010

WANTED: Someone to assume the title and responsibilities of the "Field Trip Chairperson

Coalition Trip for June

Coalition Field Trip - Friday, 25th June 2010

Verde River Rockhounds send you a warm invitation to the June Field Trip to Ash Fork in northern Arizona. We will be collecting Mayer Onyx at a stone yard. Several years ago the well known quarry at Mayer was sold to an Ash Fork company. They quarry the onyx in 10 foot cubes and transport it to Ash Fork where it is sliced and diced to make high quality and expensive kitchen and bathroom fittings. A significant amount of the material ends up as rejects, usually due to faults and cracks. We will be collecting among the rejects. There is a fee: 13 cents per pound: a 20 pound chunk will cost you \$2.60, a quarter of a ton is just \$65. Payment **MUST** be in cash, no checks, no credit cards. Mayer onyx has amazing patterns and cuts and shapes easily.

Ask Fork sits astride the I-40, 53 miles west of Flagstaff, 96 miles east of Kingman and 50 miles north of Prescott on Hwy 89. Please note that this trip is on a Friday: the stone yard is closed at weekends. We will meet at the gas station at exit 144 and leave there at 10am. While at the gas station check out the counter tops inside: they are made from high quality Mayer Onyx. From where we park it is 5 yards to the material. You need a bucket and although most material may just be picked up on the surface you may wish to bring hammers and chisels to break up the bigger chunks. This stone yard has numerous other types of rock, some rejects and some finished pieces: you may collect these also, but the price per pound may vary. We will probably be at the site for about two to three hours. Afterwards, if you are interested, members of the Verde River Rockhounds will lead you to abandoned flagstone quarries nearby. There you can collect free from a huge variety of already cut pieces and slabs.

A word of warning: it may be very hot. Ask Fork is at 5,200ft but in June it can sizzle. Bring lots of water, sunscreen and a hat. If you plan to come please call Richard Casmier on 928-592-0232 or email him at

rcasmier@aol.com

Coalition Field Trip-sponsored by The White Mountain Gem & Mineral Club

July 24, 2010

Rockhounds belonging to the Coalition of Rock Clubs in Arizona and the Fluorescent

Finders, a regional chapter of the Fluorescent Mineral Society, are invited to spend some time just north of St Johns, Arizona where you will have the opportunity to find Petrified Wood, Fossils, and Fluorescent Calcite.

Location: St.Johns Landfill

Meet at: Wilber's IGA parking lot, on your left as you enter town from the southwest.

Time: 9:00am, leave parking lot by 9:15.

Vehicle: any will do

Weather: if threatening, or raining, the trip will be canceled

What to bring: containers, plenty of drinking water, lunch, chairs, and since this will be surface collecting-a screwdriver or small pick will do. There is absolutely no shade so please wear a hat.

Terrain: painted high desert

Rules to follow: No ATV's, all fines to be reported at gate as you leave, no trespassing onto private property, park well off the main road, and no littering or other destruction of property.

Waivers: each person will be asked to sign a waiver of liability for the White Mountain Gem & Mineral Club, Inc. and Blue Hills Environmental Assoc., Inc. Each vehicle will be given a number and if you should have to leave before our "out" time, which is 2:00, please give the number to the gate attendant.

Any Questions? Please call Eunice McQuiston at (928)536-7209 or email me at rocknglow@frontiernet.net Have a great day!

[Magdalena "minders"](#)

Just a reminder to call and make your reservation for the field trip in September, 24th & (25th).

If the Western Motel is full (remember there is a RV park in the rear), there is two other motels in the area. They are The High Country Lodge (575)854-2062 and The Eagles Nest (575)854-3135.

As of the middle of April, there were two rooms still available at the Western Motel (575)854-2417, one regular size room and one small room suitable for one person.

Tentative plans for this trip will be to the Indian Reservation for fossils and Septarian Nodules.

Any questions, please call Eunice at (928)536-7209

Education

This month's education program was about clay amulets from Thailand. David brought in two trays full of amulets with crocodiles, birds, elephants and Buddhas, to name a few. He told us that by using traditional ceramic techniques, the Thai people have a "gem" that is very unique to the world. Most people in the West aren't familiar with this gem, so in our study of cultural gemstones, Tuesday night's meeting was devoted to "phra somdej" and "sarira."

Clay needs temper or grog in order to be worked, and this can come from a variety of sources to include sacred herbs, ashes of sacred books, and it can also be the ashes left behind by the incense of worshippers at temples. Other ingredients like crushed somdej, gemstones and sarira, along with other components, like gold, silver or bronze metals are added.

The oldest clay amulets in Thailand are about 130 - 150 years old and differ little from the ones that came from other parts of Southeast Asia. The first clay tablets were made during the Tang Dynasty (c. 618-907 ad) and were incorporated into 8 areas of the building. They are next seen as mobile units in Mongolia where they received the name "Tsa-tsa," which is significant, as some larger ones are still called a Tsa-tsa, a Mongolian word, in many parts of Asia.

On the back of many of these amulets are secret, arcane markings that only the monks know their true meanings. They are simply referred to as "Sacred Yan" markings.

Some amulets can sell (actually "rent," as it is believed that something like this cannot be bought and sold) for

tens of thousands of dollars and even exceed 8 digits in their value!

Next, we discussed Sarira – a Sanskrit word. These are found after the cremation of a monk or nun who has attained enlightenment. As the Buddha was dying, his disciples begged that he leave behind something to remember him by. The Buddha was a little dismayed as he believed his teachings were enough. He finally relented, and after his cremation, 53,000 sarira were discovered in his ashes after his cremation.

These sarira are considered to be exactly the same as those left behind by the Buddha. When a person attains enlightenment as the Buddha did, they are called "realized beings." Upon their death and subsequent cremation, these ringsel (the Thai word for sarira) can be found in their ashes.

There are some unusual things reported about sarira. They are hard as rocks, they change colors and can nearly go completely clear, and they can change in number from more to less, or less to more. They can completely disappear from their container and reappear somewhere else in the temple or home. It is a great gift to receive even a single one. Sometimes they are used in jewelry.

Strictly speaking, these are not human remains, but the remnants of enlightened beings. They are referred to as "sacred pearls" or "holy pearls." Their role in Thailand and throughout the Buddhist world is incalculable, but they are, in fact, another type of gemstone that has tremendous value associated with them.

Nickname Contest

Put your thinking caps on and help your Club come up with a nickname. This is a contest with reward. Submit your suggestion(s) to Nanz by mail or phone before the June meeting. There is no limit on the number of entries, but please keep it clean. No inappropriate entry will be listed for vote. All the entries will be published anonymously in the June newsletter. Those of you who can't attend the July meeting may mail in their vote for selection. After the votes have been tallied, the winner will be announced and receive a free pass to the silent auction table every month they attend until the end of the year. If the winner is unable to attend the meetings due to location, a single request for a specimen will try to be filled and mailed to them.

This nickname will not replace our registered title of the White Mountain Gem & Mineral Club, Inc. It will just

be a fun and hopefully shorter reference to us. You've heard of the Rimstones and the Leaverites, that's just two or three syllables.

Let's have some FUN with this!

Rock and Gem Shows

18-20--SANDY (SALT LAKE CITY), UTAH: Show, "Gem Faire"; Gem Faire Inc.; South Towne Exposition Center/Exhibit Hall 5, 9575 S. State St.; Fri. 12-7, Sat. 10-6, Sun. 10-5; \$5 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

18-20--SANTA MONICA, CALIFORNIA: Show; International Gem & Jewelry Show Inc.; Santa Monica Civic Auditorium, 1855 Main St.; Fri. 12-6, Sat. 10-6, Sun. 11-5; adults \$8; open to the public, professional jewelers, artists; contact International Gem & Jewelry Show Inc., 120 Derwood Circle, Rockville, MD 20850, (301) 294-1640; e-mail: info@intergem.net; Web site: www.InterGem.com

18-20--WHITTIER, CALIFORNIA: AFMS/CFMS show, "Hidden Treasures"; North Orange County Gem & Mineral Society, American Federation of Mineralogical Societies, California Federation of Mineralogical Societies; So. California University of Health Sciences, 16200 E. Amber Valley Rd. (www.scuhs.edu); Fri. 10-5, Sat. 10-5, Sun. 10-5; adults \$6, children under 14 free; speakers, field trips, display cases, raffle, kids' room, demonstrations, vendors, supplies, jewelry, beads, fossils, gems; contact Don Warthen, (626) 330-8974; e-mail: odwarthen@verizon.net; Web site: www.nocgms.com

26-27--COLORADO SPRINGS, COLORADO: Show, "Rock Fair at WMMI"; Colorado Springs Mineralogical Society; Western Museum of Mining and Industry, 225 N. Gate Blvd.; Sat. 9-4, Sun. 9-3; adults \$5, children \$2; vendors, rocks, minerals, jewelry, children's area, rock, mineral and fossil identification, speakers, demonstrations, gold panning, metal detecting; contact Ronald "Yam" Yamiolkoski, (719) 488-5526; e-mail: info@csms.us; Web site: www.csms.us

July 2010

2-4--FARMINGTON, NEW MEXICO: Show; San Juan County Gem & Mineral Club; Farmington Civic Center,

200 W. Arlington St.; Fri. 10-6, Sat. 10-6, Sun. 10-5; free admission; door prizes, rocks, gems, minerals, Farmington Freedom Days; contact Mickie Calvert, P.O. Box 1482, Farmington, NM 87499, (505) 632-8288; e-mail: mickie2@earthlink.net

9-11--DURANGO, COLORADO: Show; Four Corners Gem & Mineral Club; La Plata County Fair Grounds, 2500 Main Ave.; Fri. 10-6, Sat. 10-6, Sun. 10-5; free admission; jewelry, kids' activities, gold panning, jewelry making tools, gems, minerals, fossils, beading supplies, door prizes, mineral displays, raffle, silent auction; contact Bill Birza, P.O. Box 955, Durango, CO 81302, (970) 385-6850; e-mail: wcbirzzz@durangolive.net; Web site: www.durangorocks.org

24-25--FLAGSTAFF, ARIZONA: Show, "Flagstaff Jewelry, Gem, and Mineral Show"; Val Latham, Sharon Szymanski; Radisson Woodlands Hotel Flagstaff; Sat. 10-5, Sun. 10-4; contacts Sharon Szymanski, (480) 671-6191, or Val Latham, (602) 466-3060

<http://www.rockngem.com/showdates.asp>

Exploring Minerals

DINOSAUR COPROLITES

One of the byproducts of digestion is waste material, which is conveniently excreted from the body at an end of the body opposite from the mouth region in most animals. This waste material can be in the form of a gas, liquid, or solid, but when preserved as a solid is politely called **feces**. A socially acceptable but often giggle-inducing colloquial synonym for fecal material used by modern trackers is "**scat**," and these same people will refer to the study of scat as "**scatology**." Coprolites are fossilized feces, and dinosaurs were no different from other animals in leaving such deposits after digesting their meals.

Despite their common association with bathroom humor, dinosaur coprolites are valuable trace fossils for figuring out the paleodiets (or feeding behavior) of dinosaurs. Coprolites can show either body fossils of plant material (indicating an **herbivorous diet**) or bones (indicating a **carnivorous diet**). Modern grizzly bears of North America (*Ursus horribilis*) will leave scat containing

both plant and animal matter (indicating an **omnivorous diet**), but no dinosaur coprolites have demonstrated an omnivorous diet by choice for dinosaurs (as far as I know). Nevertheless, herbivorous dinosaurs almost certainly would have ingested plant-dwelling insects and other arthropods while feeding, thus making them "accidental" insectivores.

Coprolites also provide information about habitats and the presence of dinosaurs in areas otherwise lacking dinosaur body fossils or other trace fossils (such as tracks). Preservation of coprolites is dependent on their original organic content, water content, where they were deposited, and method of burial. For example, coprolites made by carnivorous dinosaurs (theropods) were more likely to be preserved than those made by herbivores because of the high mineral content provided by bone material of the consumed prey animals. An good preservational environment would have been a floodplain associated with rivers, where the feces deposited on a dry part of the floodplain dehydrated slightly before rapid burial by a river flood. Other environments where coprolites were likely to have been preserved include "watering holes" (ponds), swamps, streams, and muddy areas associated with estuaries or lakes.

<http://www.envs.emory.edu/faculty/MARTIN/ichnology/Dinocopro.htm>

The King of Coprolites

One of the most famous of all coprolites was discovered in Saskatchewan, Canada, in 1998. This gigantic poop fossil (which looks pretty much the way you'd expect) is 17 inches long and 6 inches thick, and was probably part of an even larger chunk of dino dung. Because this coprolite is so big—and contains fragments of bone and blood vessels—archeologists believe it may have come from a carnivorous *Tyrannosaurus Rex* that roamed North America about 60 million years ago. For most coprolites, though, the exact identities of the dinosaurs that produced them will remain forever a mystery.

See next picture for above article

<http://dinosaurs.about.com/od/dailylifeofadinosaur/a/dinosaurpoop.htm>



<http://factoidz.com/httpsocybertycomhistoryhow-coprolite-helped-win-the-first-world-war/>

In the 19th century England, coprolites were mined for agricultural and industrial applications. Coprolites are high in phosphates which made them valuable for fertilizer. The coprolite mining had declined in the late 1880s but during the early part of World War I, the industry was revived out of necessity. The phosphates from fossilized dinosaur dung were needed to make munitions, explosives. There is even a street called "Coprolite St." near Ipswich Docks in Ipswich where the munitions factory that processed coprolites once stood. So in a very real sense, dinosaur poop helped the Allies in the war against Germany. Who would have guessed?

Fossilized Dinosaur Droppings



(Image by author: obverse view of a coprolite from my collection)

Fossilized animal droppings are often overlooked because they do not resemble anything familiar to the fossil prospector. Very small specimens can resemble stones or other inorganic rock formations or other natural concretions of minerals, such as bogi stones. Paleontologists study coprolites because they serve as evidence of the animal's diet. From this we can learn what they ate and even of

what parasites they may have carried in life. We can learn if the dinosaur ate only plants, was omnivorous or if it was exclusively a meat-eating predator. Sometimes coprolites are found to contain bone fragments or be of a high calcium and/or protein content from having digested remnants of their prey. This can solidly identify the associated dinosaur as a meat-eater and even the study of fecal remains of ancient humans can conclude if they included or raised domestic mammals for a stable food source.

Coprolite fossils are mainly composed of the compound calcium phosphate, hence their use as fertilizer and later out of necessity, explosives and other munitions creation.

Other organic matter sometimes is present in coprolites such as bones and flesh of whatever was in the digestive tract of the animal. Most terrestrial animals dung fall apart long before it can become fossilized so finding a coprolite is quite rare despite the aggregate volume excreted by any indigenous animal specie during its lifetime. Marine and aquatic animal coprolites are more common because they often were buried in silty sediments before they could fall apart and thus, preserved *in situ*. A land animal's droppings would be subject to wind and rain erosion long before fossilization might occur. But in some rare cases, a fresh fecal spoor if quickly buried in sand or soil, it can become preserved. Eventually, to become fossilized. Coprolites are seldom identified as having come from a particular specie of creature or animal. The more ancient the specimen the more difficult the taxonomy of identifying it becomes. It is of higher probability that a match has occurred when the same type of fossilized coprolites are found associated with the bones of specific dinosaurs and in multiple locations across continents. Only then with some degree of high certainty can one say that so-and-so sample of coprolite is confirmed as being the fecal spoor of a particular specie of dinosaur. A taxonomic similar coprolite found elsewhere can be reliably guessed as being from the same general if not specific specie of dinosaur.

<http://factoidz.com/httpsocybertycomhistoryhow-coprolite-helped-win-the-first-world-war/>

White Mountain Gem & Mineral Club
P.O. Box 3504
Show Low, AZ 85902-3504

Member:
Rocky Mountain Federation
Of Mineralogical Societies



**American Federation of
Mineralogical Societies**



Helping with our Highway Clean Up

Donate One Hour of your time!

Saturday June 12, 2010

9:00 AM

**Big K-Mart Parking lot
(Highway side)**

Call Nanz with questions

Come Early to sign a waiver- Gloves recommended.