

# NEEDLES GEM & MINERAL CLUB



**PO Box 234  
Needles, CA 92363**

Editor:  
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## Blue Agate Newsletter On-line

<http://needlesgemmineralclub.blogspot.com/>

Updated frequently

E-mail Sally with info:  
[rockhound.ngmc@gmail.com](mailto:rockhound.ngmc@gmail.com)

## NEXT CLUB MEETING

**November 14 at 6 PM PT  
Needles Marina RV Park  
Recreation Room  
100 Marina Drive  
Needles, CA  
Program: None scheduled**

**Usually 3<sup>rd</sup> Wednesday each  
month Oct-May**

## BOARD MEETING

30 minutes before Club  
meeting each month

# Blue Agate News

Volume 2, Issue 7

November 2007

**New Meeting Place**  
**Wednesday November 14, 2007 6 PM PST**  
**Needles Marina RV Park**  
**Recreation Room - 100 Marina Drive**  
**Needles**

## Welcome New Members

*Allan Reed  
Bob Ferguson  
Pete Callaghan*

**The Blue Agate News** is published monthly except June, July, August and September. Articles are requested to be to the editor by the **15th** of each month, preferably by email at **rockhound.ngmc@gmail.com** or call (928)768-7437 or (307)231-2239. The Blue Agate News is also published via email - if you have internet, please share your address with the editor. This saves the club money and you will have the newsletter immediately. The Newsletter is in PDF format so it will be necessary to download Adobe Reader (free program) in order to view the newsletter. You can also view the newsletter on our Blog – Blue Agate News Online <http://needlesgemmineralclub.blogspot.com>.

Thanks BW's (both of you) for proof reading the Blue Agate News.

The Blog (Web Log) – **Blue Agate News Online** is free and can be updated frequently October through May. If you have information you want posted, please email it to Sally at the above email address or sign up to contribute directly to the Blog.

## NGMC INFORMATION YOU NEED TO KNOW

### **THE OBJECTIVES OF NGMC**

To promote public interest in collecting and studying rocks and minerals.

To preserve and perpetuate the lapidary arts.

To provide field trips to obtain lapidary material and minerals for preservation and display.

To provide an opportunity for the purchase, exchange and exhibition of specimens and materials.

The **NGMC meets** the third Wednesday of each month from October through May at **6 PM Pacific Time** unless otherwise notified.

### **NGMC OFFICERS - 2007**

President: Barb Ballard

928-768-6335

Vice President: Knox McCloy

928-768-9064

Treasurer: Frank and Mary Flynn

928-768-3588

Secretary: Sally Hayward

928-768-7437 or 307-231-2239

Past President: Corinne More

760-326-5005

Sergeant at Arms: Pat New

928-768-5640

Field Trip Co-Chairpersons: Barb Ballard

928-768-6335 and Corinne More 760-326-

5005

Assistant Field Trip Chairpersons:

Don McQuarie and Tom Harrell

Auditor: Ann Ferguson

### **Honorary Lifetime Members**

**George Truit**

**Norma Truit**

**Myrna Givens**

**Corinne More**

**Tom More**

**Membership dues** are payable at the November meeting and delinquent after January 1, 2008. Please send dues to the official Club address on the first page of this Newsletter, attention: Treasurer.

Membership per person: \$15.00 year

Name Badge: \$3.50

Field Trip Fee: \$1.00

"No Badge" fine: 25¢

### **2007 Refreshment Schedule**

January 2007 – Sally, Faith

February 2007 – Gisela, Corinne

March 2007 – Mary, Joan

April 2007 – Barbara W, Ramona

May 2007 Season End Pot Luck

October 2007 – Maty, Barb Ballard

November 2007 – Sandy, Paula

December 2007 Christmas Pot Luck

### **Upcoming Field Trips & Events**

**November 17, 2007**

**Saturday**

**Oscar's Jasper**

Meet 9 AM (Pac Time) at I-40 and Water Rd

Field Trip Leaders: Bob and Ann Ferguson

Various Great Jaspers – Fun Day

Call Ann or Bob: 928-768-7150 if you have any questions.



### FIELD TRIP GUIDELINES - NGMC

Leader will state approximately how far, road conditions, and if 4WD is required when each Field Tripper signs in.

Each car is to keep the car behind in sight and STOP if the car is not in sight (unless otherwise stated by the Leader).

Field Tripper will notify the Leader if they are hiking or driving to another site and their approximate return time.

Field Tripper will notify the Leader if they are leaving the group and sign out (with time).

Members wear Name Badges.

Handheld radios: Stay on Channel 6.

### Field Trip Reports

October 20, 2007, we went to gather Chalcedony at the Turtle Mountains with leader Barb Ballard. 9 vehicles, 13 NGMC members, 5 visitors and 3 canines enjoyed this trip. We met at the Kiosk about 9 AM and traveled west to the Chalcedony area. When we all arrived, every rock hound went in a different direction and all came back happy with their bounty! Overall a VERY successful day! Thanks Barb for the Great Trip!

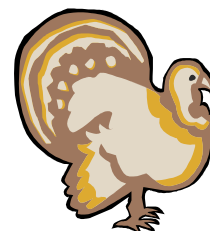


### COLLECTING ROCKS

Author unknown

I think that there will never be  
An ignoramus just like me  
Who roams the hills throughout the day  
To pick up rocks that do not pay  
For that's one thing I have been told  
I take the rocks and leave the gold.  
O'er deserts wild and mountains blue  
I search for rocks of varied hue.  
A hundred pounds or more I pack  
With blistered feet and aching back.  
And after all is said and done  
I cannot name a single one.  
I pick up rocks where e'er I go  
The reason why I do not know  
For rocks are found by fools like me  
Where God intended them to be.

Source: Rock Chip Reporter, 4/03, via Tips & Chips, 2/04



**IT'S TRUE:** Donkeys kill more people each year than plane crashes.

## Swarf...and how to tame it

Swarf is that milky liquid you get when you cut cabochons or facet stones. Although it appears to be harmless, swarf can be deadly to your plumbing system and lapidary equipment if not handled properly.

When you grind rocks to make cabochons or faceted stones, you're removing tiny bits of the rock and carrying them away from your work with water. When the water evaporates, the tiny rock bits are left behind as a sort of concrete gunk. Over time this gunk will harden like concrete.

So how do you tame the swarf? Never, ever dispose of your swarf in your plumbing system. Don't pour it down a sink or toilet because eventually that hunk will harden and eventually narrow your pipes. Because it's concrete-like when hardened, it will be almost impossible to remove! Instead, take your swarf outside to a non-important part of your garden and dump it there or if there is no garden handy, allow the swarf to settle in the bottom of a bucket for a day or two, then carefully pour off the new clear water, and scoop out the swarf, put it in a plastic bag and toss it in the trash.

Source: Mingus Rocky Times, Sept 2007, from Gem Cutters News, Nov 1984

## Chrysocolla and Turquoise Identification

By Donald Kasper

Last year I had the opportunity to go with friends to a copper mine we dubbed the Combat Mine in western Arizona. This is a Chrysocolla occurrence with Cuprite. Based on that, I have been asked if I can provide some tidbits about how to tell Chrysocolla and Turquoise apart. I won't repeat info you can look up for yourself in any online mineral source such as mindat.org about hardness, streak, cleavage, etc.

Color is a notorious way to identify many minerals, but for the coppers, it is often the first means used. The problem is that one mineral type can have many colors, depending on its occurrence of trace impurities. Turquoise to me is the baby blue color that uniquely sets it apart from the others. It's a dull powder blue. But, if iron is added it becomes Chalcocite or Variscite, or

Variquise, depending on the name you want to use. The iron makes it harder, and turns it green.

When I look at a stone of a copper mineral species, the first thing I look for is its matrix pattern. Small globs of blue in a background matrix of iron or other minerals to me are the best clue you have Turquoise. I am not aware of any Chrysocolla having a regular matrix pattern to it.

Chrysocolla is copper with quartz, so its look is vitreous. It becomes brittle where Turquoise tends to be soft and chalky. If it gets into quartz it becomes gem silica Chrysocolla. It's a rare form that is much more valuable because it becomes much harder, loses its brittleness and can be fashioned readily into durable jewelry. At the Combat Mine, we found it intruding into the quartz matrix of granite. Just to be tricky, it also infiltrates calcite found in the granite. The giveaway here is that the calcite has angular, rhombohedral cleavage, while the quartz never does. The best for our occurrence occurs with a deep red-brown copper mineral Cuprite.

Since hardness and color are so unreliable for these two copper minerals, I tend to look at the other mineral species that I find my target mineral commonly occurs with. Ever notice how Malachite and Azurite are so commonly associated? Ever see much turquoise with them? I haven't. I have a site in California where I find small bits of Turquoise with Fluorite. The azurites, malachites and chrysocollas are nowhere to be found.

One particularly interesting association related to me by the Baghdad mine geologist (a huge copper mine in western Arizona) is that you cannot find Turquoise without Pyrite. The Baghdad mine is in a quartz monzonite. It has zero Pyrite. It also has zero Turquoise. Go north to the Kingman mine (I toured this mine in the 80's), it has copious amounts of Turquoise. They used at that time heap leach processing. They dumped big piles of rock and put sprinklers on them. The pyrite in the rock made sulfuric acid, which dissolved the copper. Steel cans in a pond underneath reacted with the acidic water to precipitate the copper. The key to the reaction was the Pyrite. Pyrite and Turquoise—they again. I actually have a particularly expensive piece of Turquoise with small pyrite flakes in it.

With time, for your mineralized region of search, you can probably come up with more associations that increase the probability that the identification you have made is correct. Put another way, if you find mineral associations that are out of place, you have more suspicion that your identification was correct.

The formation of Turquoise is interesting and unlike Chrysocolla. One text describes Turquoise as occurring from the leaching of surface waters into interstitial cracks where it precipitates out. At the Number 8 mine in north-central Nevada, this means it forms in between layers of shale. It also means (according to the author) that Turquoise has never been found at depths greater than 100 feet. The only experience I have for myself finding Chrysocolla is going on that one day a year trip into the Cerro Gordo mine in the Owens Valley, California. There, plutonic rocks contact limestone. I found my Chrysocolla up in the limestone talus on a high ridge.

Not only is there value in finding mineral associations, but also this is the key to understanding the geology of where you are searching. First you can go to known sites to study the minerals and their associations and geologic setting. Then when you are in new areas that are not in any published books, you have a chance to find something new for yourself. It also allows you to expand upon known sites. For example, the literature states that Cuprite is found at the top of copper oxidation zones. Gee, back at the Combat Mine there were two tunnels. We dug the upper one. It has Chrysocolla and Cuprite. The lower one was blocked. Now, what would you say the odds are we go back to clean out the entrance to the lower one? If it can be done safely, would you ignore it? I would expect better copper occurrences from the lower tunnel, so it's on my list for another day.

Source: Don Kasper



## Rockhound Code of Conduct

I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I will discard no burning material - matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use.

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule," will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

Source: Revised July 7, 1999 at the AFMS Annual Meeting

## Nominating Committee for year 2008

Expect a phone call or email from the nominating committee. They are looking for folks to fill all officer positions. This includes but is not limited to President, Vice-President, Secretary and Treasurer. Isn't it time to step up and help run our Rock Club? Think of all the life skills you have that can help our Club.

**The Regular Business Meeting** was held October 17, 2007 at Fiesta Mexicana restaurant. Of course the food and service was wonderful! It was great to see many old friends after our four month dark period. What you missed: Groan - - - another change to the Bylaws. You should already have your copy via email or USPS. These will be amended at the next business meeting in November. The President appointed Gisela and Pat New and Paula Auckley to the Nominating Committee. Last I heard, they have the slate of proposed officers to present to the Club at the November meeting. Corinne announced she will serve as Field Trip Chairman and will be talking to members each month to lead field trips. I think there are some great places planned by some awesome new Field Trip 'Leaders'!

**Our November meeting** will be a week early, the 14<sup>th</sup> to be exact, in order to accommodate any members who travel during the long Thanksgiving weekend. Board Members remember to meet half an hour before the regular meeting. The meeting will be held in our new permanent location at the Needles Marina and RV Park Recreation Room. If you have any questions, please call Barb or Sally.

Also, check the Blog often as I post news there as I hear it.



Barb Ballard and Myrna Givens

**An old wives tale** to determine if that rock you just picked up is Turquoise: Wash the rock well, touch it with your tongue and if it makes your tongue feel dry, it **IS** Turquoise.

Source: Anonymous

### "It's too damned hot!"

When do rockhounds hibernate?  
 When the heat is ninety eight++.  
 Is there anywhere to go?  
 North my friends to Wyoming and Idaho.  
 What of those in Needle'wood'?  
 Stay inside, you really should.  
 The sun shines down, oh so hot,  
 Fine for rattlers - rockhounds; not!  
 But out you go to pick up float  
 With as much brain as a goat.  
 Rocks so hot - too hot to handle,  
 Like holding hands above a candle.  
 One hundred twenty in the sun,  
 Just ten minutes and you're done.  
 Come the Fall we'll find your bones  
 Nicely baked in sepia tones.  
 And at your funeral they will say;  
 "Silly fool why did he play  
 with the sun so hot that day?  
 Farewell dear rockhound;  
 On your way."

Source: Adapted from Mingus Rocky Times, August 2007



Don Hughes and Allan Reed

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**NEEDLES, CA 92363-0234**



Please send Exchange Bulletins to the address above  
Or email to [rockhound.ngmc@gmail.com](mailto:rockhound.ngmc@gmail.com)



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