



## Wickenburg Gem & Mineral Society, Inc.

P.O. Box 20375, Wickenburg, Arizona, 85358

E-Mail — wgmsociety@gmail.com

www.wickenburggms.org

The purpose of this organization shall be to educate and to provide fellowship for people interested in rocks and minerals; to foster love and appreciation of minerals, rocks, gems, and the Earth.

Membership shall be open to all interested people.

## Poisonous Desert Dwellers—part 1

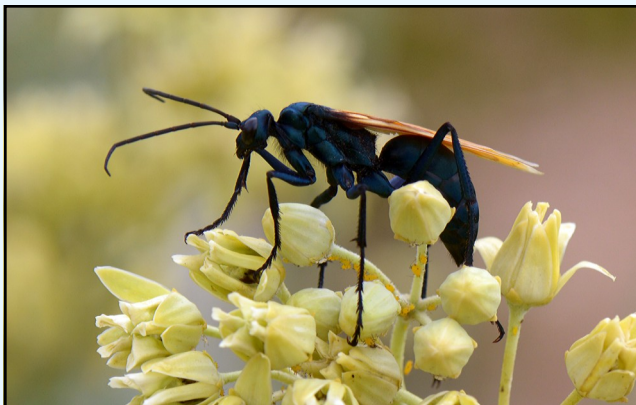
### Tarantula Hawks (*Pepsis* sp.)

Tarantula Hawks aka Tarantula Wasps are most active in the summer, so this is one for which you should look out. Technically, they are more interesting than dangerous, as they are not particularly aggressive. However, on a pain scale of 1-4, their sting (especially that of *P. grossa*) is one of only two that rate a 4. In comparison, a fire ant rates a 1, honey bee a 2, and velvet ant a 3. And the stinger can be up to 1/3 inch long (a characteristic that discourages most predators)!!! In absence of an allergic reaction, the sting is not dangerous enough to require medical attention.

If you have not seen one, the ones occupying Arizona's deserts are about two inches long, with blue-black bodies, and orange/rust wings. There are about about nine species in North America, although 250 species are found in South America — and they are found on most major continents. The two most common species in Arizona are *Pepsis grossa* (formerly *formosa*) and *Pepsis thisbe*. The former is distinguished from the latter by its usually orangish/reddish antennae.

The smaller males are not hunters — they eat and mate. Females paralyze tarantulas and then drag them into the spiders' burrow, or digs a burrow, in which they seal the spider, with a single egg. Stan and I were biking in the White Tanks one time, and saw a Tarantula Hawk dragging a tarantula. She would drag it a few inches, and then fly high to seemingly scope out the route. Then she returned to the spider, and dragged it a bit farther. Looked like a LOT of work!

Ctrl/Click on the picture below to be linked to Stan Celestian's Flickr page, and an informative video about Tarantula Hawks.  
<https://www.flickr.com/photos/usageology/18217657445/in/dateposted/>



Tarantula Hawk (probably *Pepsis thisbe*, as the antennae are black), on Desert Milkweed at Barking Gecko Ranch (aka the Celestian residence).  
 Photo by Stan Celestian



| INSIDE THIS ISSUE                           |   |
|---|---|
| Poisonous Desert Dwellers — Tarantula Hawks | 1 |
| Meeting Minutes                             | 2 |
| Show List, Upcoming Field Trips; Club Info  | 3 |
| Minerals in Our Everyday Lives — Beach Sand | 4 |

## Meeting Minutes — May 8, 2015

The meeting was called to order at 7 pm by VP Marty Hagan. Guest Madison Mueller was introduced, with a total of 21 people in attendance. There were no minutes available from the April meeting. The treasurer's report was given by Debbie Keiser and approved.

The Arizona Corporation papers and fees need to be updated. Helen Dudley was the club's representative. With her recent death the papers have been sent in with Dale Keiser as the clubs contact person.

The meeting room contract has been signed and paid for 2015-16 Friday night meetings.

Field trips: Places to go, and ways to make future trips more successful was discussed, including an attendance sign in paper for all people participating on an outing. Mel Canter brought a sample of a First Aid Bag to take out on future outings. A soft bag runs between \$100 and \$200, and a smaller metal box is \$150. No decision was made at this time.

2015 Show: Nov. 28 and 29<sup>th</sup>:

80 tables and one table cart have been delivered and donated to the Hassayampa Elementary School, with the understanding that the School will furnish 120 tables for us to use for our show. Club members are asked to bring gently-used items and prizes to be used for door prizes during the show.

The WGMS board awarded the 2015 \$3,000 Scholarship to Larken Vargus, from Bagdad High School. He will be attending NAU in Flagstaff, studying mechanical engineering. He wants to work on ways to extract copper and ways to help with the mining industry. There were 2 scholarship applications from Bagdad High School and 2 from Wickenburg.

Old Business: A \$50 donation will be sent to the Friends of the Library in memory of Helen Dudley. Dale Keiser had a thank you note and picture from the 15 West Valley Explorers 4H group that he had taught a rock class to in April. The 4H kids had shown Dale their Mineral Story Boards, that they were entering in the County Fair. Debbie will ask if they want to show the boards at our next Gem Show. Dale has also volunteered to work on the new (3 fold) membership application.

*Continued.....*

New business: The club will be needing a secretary and program chair next year. Jim Koning volunteered to do the September program, Mel Canter October, Joyce Ramage November and the Christmas party for December.

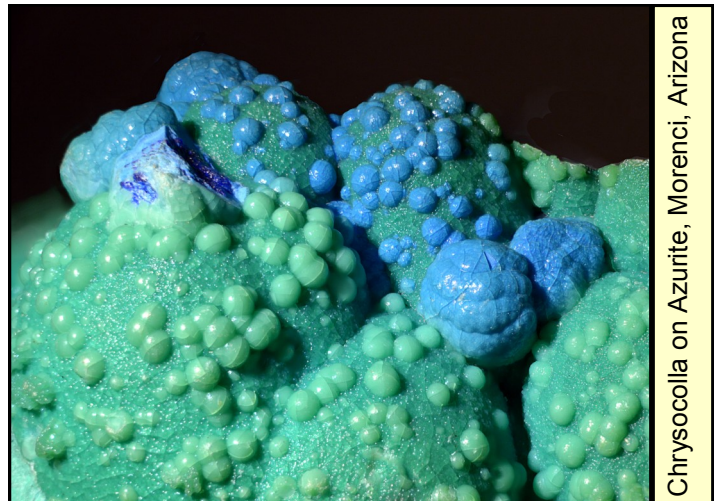
Show and tell: Prize went to Mel Canter.

Door prize: Won by Erma and Al Roe.

Next meeting will be September 11<sup>th</sup>. Desserts and snacks at 6:30 with the business meeting at 7pm.

Respectfully submitted,

Debbie Keiser, Substitute Secretary



Chrysocolla on Azurite, Morenci, Arizona

## NOTES FROM THE EDITOR

Have a geological interest? Been somewhere interesting? Have pictures from a club trip? Collected some great material? Write a short story (pictures would be great). I'd like topic suggestions also.

Deadline for the newsletter is the end of the month.

Mail or Email submissions to:  
Susan Celestian, editor  
6415 N 183rd Av  
Waddell, AZ 85355  
azrocklady@gmail.com

<http://www.wickenburggms.org/>

If you ever have photos from a club field trip, send a couple to Dale, for posting on the website.

**UPCOMING AZ MINERAL SHOWS**

**July 31-August 2 - Prescott, AZ** Prescott Gem and Mineral Club; Prescott Valley Event Center; 3201 N Main St; Fri-Sat 9-5, Sun 9-4; Admission \$5 adults, \$4 seniors, \$4 students, children 12 and under free.

If you are travelling, a good source for out-of-state (or in-state) gem and mineral shows AND clubs is

<http://www.the-vug.com/vug/vugshows.html> or <http://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=AZ>

For out-of-the-country shows:

<http://www.mindat.org/eventlist.php>

A good source for a list of Arizona Mineral Clubs and contact information is

[http://whitemountain-azrockclub.org/Public\\_AZ\\_Clubs\\_Links.html](http://whitemountain-azrockclub.org/Public_AZ_Clubs_Links.html)

**UPCOMING WGMS FIELD TRIPS**

NO FIELD TRIPS ARE SCHEDULED, DUE TO SUMMER BREAK

*DATES SUBJECT TO CHANGE*

If you all have some place that you would like to go, let Bob Bartlett [623-388-0749](tel:623-388-0749), Marty Hagan [602-469-7770](tel:602-469-7770), or Craig Jones [208-681-4770](tel:208-681-4770) know. We have some dates to fill in. This is your club. Let's go out and have some fun.

**Check the website for field trip announcements.**



Upper photo: Tiger Longwing (*Heliconius hecale*). Lower photo: The Clipper Butterfly (*Parthenos sylvia*). Both seen at Butterfly Wonderland, in Scottsdale. This would be a fun place to go on a hot summer day! Be sure to take your camera. <http://www.butterflywonderland.com/>

**Officers and Chairpersons**

- President:** Craig Jones .....208-523-9355
- Vice President:** Martin Hagan ..... 602-469-7770
- Secretary:** Sue Jones ..... 208-523-9355
- Treasurer:** Debra Keiser ..... 928-684-1013
- Program Director:** Dale Keiser ..... 928-684-1013
- Publicity:** currently open position
- Membership:** Roma Hagan ..... 602-469-7662
- Editor:** Susan Celestian ..... 602-361-0739
- Field Trip:** Craig Jones, Bob Bartlett, Marty Hagan
- Show Chair:** Beth Myerson ..... 480-540-2318
- Scholarship Chair:** Steve Hill ..... 928-533-3825
- Historian:** Jeanine Brown ..... 928-684-0489

Meetings are held the **2nd Friday most months** at **Coffinger Park banquet room**. Potluck dessert at 6:30 pm. Business meeting at 7:00 pm. **Exceptions: February and December** meetings are held on the **first Friday of the month**. We don't meet in the summer — **no meetings in June, July or August**.

**Membership Dues:** \$15.00 Adults per Person  
\$ 5.00 Juniors and Students

**Meeting Dates for 2015**

**Wickenburg:** Jan 9, Feb 6, Mar 13, Apr 10, May 8, Sept 11, Oct 9, Nov 13, Dec 4,

**Stanton meets** Thursday after the Wickenburg meetings. Apr 16, May 14, Sept 17, Oct 15, Nov 19, Dec 10 (subject to change)

MINERALS IN OUR EVERYDAY LIVES



## SAND: An Ant's Eye View

Summer is a time for travelling, and often our destinations include a balmy beach. Whilst romping in the waves, take a moment to peer at the sand between your toes. Sand is a reflection of the rocks from the source area(s) and of the energy of the water, that abrades, sorts, and deposits it along a shoreline. Below are some sand samples. *Increase the view magnification to see them better.* Photos by Stan Celestian



### JONES BEACH, LONG ISLAND, NY

This is a fine-grained sand of primarily glassy, highly-durable quartz grains. Note the scattered red grains — these are garnet. The small size of the grains indicates a long history of transportation, with prolonged abrasion. That is also reflected in the roundness of the grains, and as is typical of beach sands, many of the sand grains are frosted, due to grain-grain impacts within the high energy environment.



### GREEN SAND BEACH, HAWAII

This sand is composed of mostly olive-green olivine grains, with scattered black grains of obsidian. The grains are relatively large, as the source is directly behind the beach, and the grains have experienced very little transportation. However, they have been aggressively abraded in a high energy surf. It is a particularly pretty sand!

<https://www.youtube.com/watch?v=xA-6TtxyBfk>



### OOLITE BEACH, ANTELOPE ISLAND, UT

As the name of the beach implies, this sand is composed of oolites. These round grains are created at or near the beach in hyper-saline water. A small piece of sand or shell acts as a nucleus - and upon that, calcite is deposited. As the grain rolls around in the waves, deposition occurs all around the nucleus, resulting in a spherical or near-spherical grain. Oolites typically get no larger than 2 mm.



### SUNSET BEACH, OAHU, HAWAII

This is a coarse-grained sand composed of coral and shell fragments. Note the absence of any volcanic components — no basalt, obsidian, or olivine. This is a beach just shoreward of a coral reef, and the shell fragments overwhelm any volcanic contributions. This is a high energy beach and the fragments have been rounded and polished by abrasion.



### BIMINI BAY, BAHAMAS

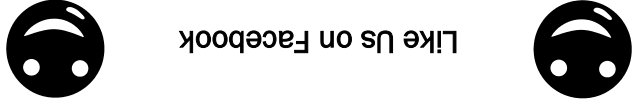
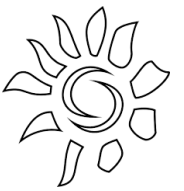
This is another sand composed of shell and coral fragments. Note: the sand is bi-modal (2 grain sizes), and they are not smooth and polished. The former could mean that the small grains reflect a quiet environment, and the larger grains were introduced during high energy storms. The lack of polish is either due to it being a generally low energy environment, or the nature of the shell material. *The pink grains are foraminifera.*



### CHOLLA BAY, ROCKY POINT, MEXICO

This is a very fine-grained sand of primarily glassy, highly-durable quartz grains. The shallow-dipping bay floor extends out from the mainland for over a mile, thus there is a lot of water/seafloor friction, and the beach environment is fairly low energy. As a result, the grain size is very small. Larger quartz grains are probably introduced by storms, while shell fragments originate nearshore.

Susan Celestian, editor  
For Wickenburg Gem and Mineral Society, Inc  
6415 N 183rd Av  
Waddell, AZ 85355



Like Us on Facebook

<https://www.facebook.com/pages/Wickenburg-Gem-and-Mineral-Society/111216602326438>