



# Tulip City Gem & Mineral Club

# CONGLOMERATE

Monthly Newsletter of the TCG&MC  
PO Box 2082, Holland, Michigan 49422

Website: [www.Tulipcity.org](http://www.Tulipcity.org)  
Facebook: [www.facebook.com/tulipcityclub](http://www.facebook.com/tulipcityclub)

March 2022

Volume 55, Edition 3



Baker "egg"  
- Ken Hoekstra

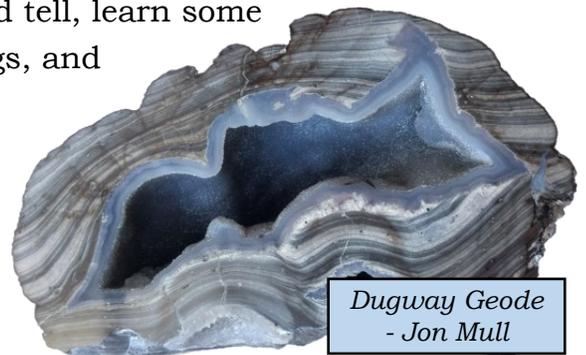
## Thundereggs, Geodes, and Vugs, Oh My!

I don't know about you, but for me, the word "nodule" is like chocolate, or ice cream, or vacation. It gets my attention. There are quite a few different types of nodules and some fascinating geologic processes that lead to their formation. One of the more unique nodules, or in this case, lithophysa (look that one up!) is the "Thunderegg." Thundereggs can be geodes but have more specific criteria for their composition, formation, and internal structure. There are easily as many variations in thundereggs as there are in geodes or agates. There will be some cool examples of "eggs" from Oregon and New Mexico, two prolific locations in the US. Our March program will also include some photos of amazing eggs that other collectors have found as well. We'll talk about how thundereggs differ from other agate and crystal containing specimens such as geodes and vugs (no, not bugs). At our meetings we have talked quite a bit about geodes and have been out to collect them on numerous field trips but we haven't covered thundereggs very much. There are a few members of our club that made trips out to Oregon many years ago to collect them. One of them, Ken Hoekstra, devotes much of his "hobby time" to cutting and polishing thundereggs and agates. He is going to share some stories about a couple of Oregon locations he has visited. He also has very graciously donated 10 eggs from the western US to be raffled off at the March meeting. Proceeds from the sale will be added to the scholarship awarded to GVSU this April. This will be in addition to the amount we gave out last year which was \$1800. Tickets will be \$1 each or 6 for \$5 so bring a little cash to the meeting. Join us for some old fashioned show and tell, learn some interesting details about thundereggs, geodes, and vugs, and test your skill for some cool give aways.

See you on March 30!

Your Editor -  
Jon Mull

See page 3 for a look at the "eggs"  
donated by Ken!



Dugway Geode  
- Jon Mull



# Events



## FOR OUR CLUB AND BEYOND!

### 2022 TCG&M Board

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- 3/26 **Basement field Trip - Sherwood & Katt**  
*10am until 3:30 pm w/ a break for lunch see Field Trips for details*
- 3/26 **Stark County GMC Annual Show - Stark County Fairgrounds**  
*305 Wertz Ave NW, Canton, OH Sat 9-5, Sun 10-5*
- 3/30 **Tulip City March General Meeting - Wednesday, 7pm**  
*Howard Miller Library, Zeeland*
- 4/01 **Tulip City Quartz Field Trip - Mt. Ida, Arkansas, Potosi, Missouri**  
*April 1-8 see Field Trips for details*
- 4/01 **White River Geode Field Trip - Bloomington, Indiana**  
*April 1-4 see Field Trips for details*
- 4/07 **Indian Mounds RMC Annual Show - Rogers Plaza Town Center**  
*972 28th St SW, Wyoming, MI, Thur & Fri 9:30-9, Sat 9:30-7*
- 4/13 **Tulip City April Board Meeting - Wednesday, 7pm**  
*Howard Miller Library, Zeeland*
- 4/23 **Basic Wire Wrapping - w/ Sue Goedert at Ken & Betty's**  
*10am or 1pm see Workshops for details*
- 4/27 **Tulip City April General Meeting & BANQUET - Wed, 6pm**  
*Howard Miller Library, Zeeland*
- 4/29 **Kalamazoo GMS Annual Show - Kalamazoo County Expo Center**  
*2900 Lake St SW, Kalamazoo, MI, Fri 4-8, Sat 10-6, Sun 10-5*

### Keep these on your calendar

7/23 - TCGM Picnic

9/16 - 9/18 - TCGM SHOW



***I am SOOOO happy to announce!*** We have filled the Show Chair position for 2022. Join me in welcoming Michelle Bennett, who will join Sue Goedert again as Co-Chairs! We thank Michelle immensely for taking on this role and thank Sue again for lending her talents. I know you will both be amazing!

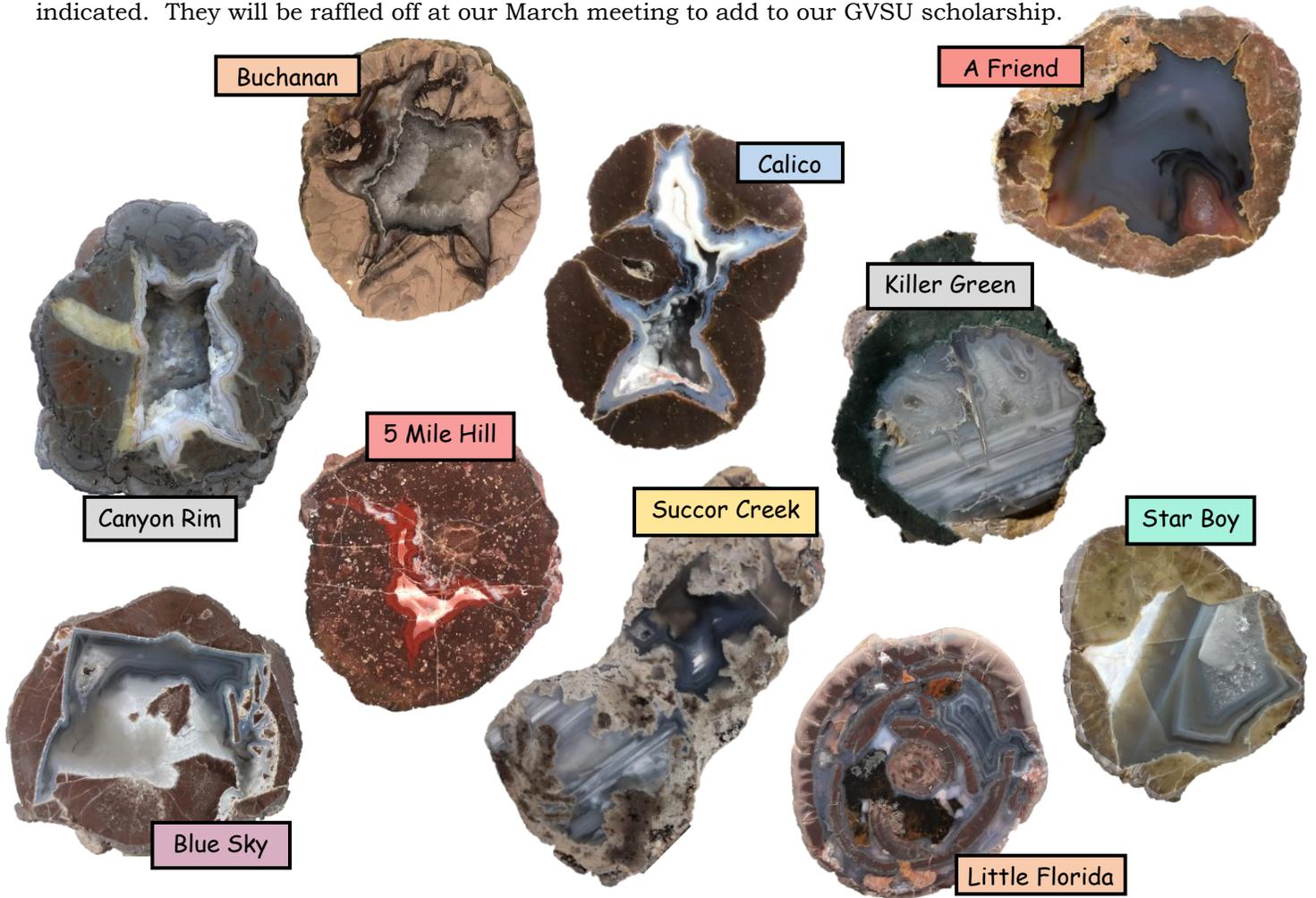
*Thank you*

### Meeting Snacks

Thanks to all of you that donated snacks at our last meeting. Now we will all get to enjoy a little treat while we chat and learn about our hobby. We have enough to get us by for the next couple months. We may reach out some time after May to replenish our supplies, but thanks again!

**“Ken’s Eggs”**

Each of the images below represents a pair of thundereggs from the “bed” indicated. They will be raffled off at our March meeting to add to our GVSU scholarship.



**~ Workshops ~**

**Basic Wire Wrapping:** April 23, 2022 at 10:00 am. Held at Ken and Betty Hoekstra’s house (5870 Julie Street, Hudsonville, MI) Cost for this class is \$25.00. You will need an oval or teardrop cab or two you would like to wrap, Sue will provide directions and bead mats and special tools to help with this. Class size is limited to 6, but if more want to learn she will hold a class the same day at 1pm. Ken will have cabs available to purchase as well. For questions call Sue Goedert at 616-337-1162.

**Cleaning Quartz crystals with Acid:** This would be a great demonstration for some time mid April after we have returned from the field trip to Arkansas. Stay tuned!



Botryoidal Wavellite  
Mt. Ida, AR

~ This months “Mascot” ~  
The masthead image is a small Quartz cluster from Mt. Ida, Arkansas. The primary crystal features a “window” showing a smaller crystal attached to the opposite face of the point making it appear as if it is inside the crystal. The main point is approx. 1” x 2”  
- Jon Mull



Tabasco Geode Pair  
cut & polished - Mexico



## Field Trips



### 3/26 - Basement Field Trip. Saturday 10am to 4pm

**10am** - Visit with Bob & Julia **Sherwood** located at 966 Lake St, South Haven. I-196 South to 109th Ave. (exit 26). Head towards the lake and turn north on Blue Star Hwy then west onto Lake St. park in designated driveways.

**12 pm - 1:30** - Break for lunch at Clementine's. From I-196, exit 20, Phoenix St.

**1:30 pm - 4pm** - Visit with Gary & Susan **Katt** located at 502 LaGrange, South Haven. From Phoenix St. head south on Broadway, then east on Superior St. House is at the corner of Superior and LeGrange

### 4/1 - 4/8 - Arkansas Quartz. Spring Break w/ Jon Mull

Travel to Mt. Ida, AR over Fri and Sat. Apr. 1 and 2. Collect at local quartz mines through Wednesday. On Thursday Apr. 7 travel to Potosi, MO to collect at Haunted Ridge on Friday for Druzy Quartz specimens and Missouri agates. Return home on Saturday. Please contact [solace247@yahoo.com](mailto:solace247@yahoo.com) about this trip.

### 4/1 - 4/4 - Indiana Geodes. White River trip

Travel to the Bloomington, IN area to collect geodes and fossils from local creeks (Hunter, Henderson, Salt, and Knob). Please contact [WhiteRiverRockClub092@gmail.com](mailto:WhiteRiverRockClub092@gmail.com) about this trip.

### 4/18 - 4/22 - Carolinas & Georgia. White River trip

Travel to the border of North and South Carolina and into Georgia to collect at the Little Pine Garnet Mine, Emerald Hollow Mine, The Diamond Hill Mine and Graves mountain, as well as area creeks for Savannah Agate. There will be stops at rock shops and a Graves Mt. rock swap as well as group rock cleaning and campfire gatherings. Please contact [WhiteRiverRockClub092@gmail.com](mailto:WhiteRiverRockClub092@gmail.com) about this trip. If you did not attend our February meeting you will need to reach out to Mike and Vicki.

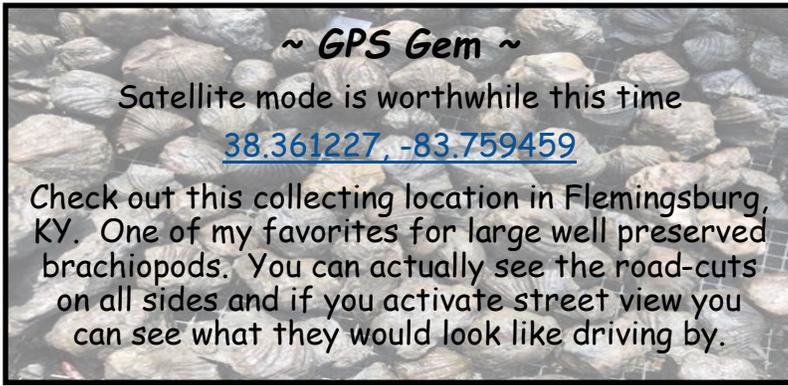


## Annual Spring Banquet

Our banquet will be Wednesday, April 27.

The theme will be Hawaii, so dig those Hawaiian shirts out of your closet and we will supply the leis! Social time will be from 6:00 to 6:30 and dinner will start at 6:30. Barring any unforeseen circumstances we are returning to an old fashioned potluck! Please bring one dish to pass unless you are bringing extra guests then bring two. Plates, silverware, cups, napkins, serving spoons and tongs will be provided. If your dish needs some other utensil please bring it just in case. As is our custom, we will be awarding scholarships to GVSU and Hope College and our guest speaker will be Prof. Steve Mattox from Grand Valley.





The article below was provided by Ken Hoekstra, from *Mineralogist Magazine*, 1948. It appeared previously in *Rockhound Tales* and *Jaspilite*, two other club publications.

### The Polished Surface

It is obvious that sharp, abrasive particles act as cutting agents which as they become successively smaller or finer, yield finer grooves. They will develop a very fine finish. According to a Mr. Bielby, polishing is a very different proposition. He believed that during the polishing process a melted or softened solid is wiped over the surface where it quickly hardens. This is known as the Bielby layer.

About this time electron diffraction was discovered. Electrons do not penetrate too deeply into the material so that it could be used to study the polished surface. Bielby was right, polished surfaces do flow.

The next question was, why do some polishing agents work on some materials but not others. It was discovered that the *melting point* of the polishing agent as compared to the *melting point* of the specimen was the answer, not their hardness. Now the ideal polishing agent would be one that is brittle, with a melting point *above* and a hardness *below* that of the material to be polished.

The melting point is not the only factor as evidenced by the fact graphite has a melting point of 3527° C, but the nature of its slippery substance makes it useless as a polishing agent. It must be a brittle substance.

Quartz changes to Cristobalite whose melting point is 1710° C. Zinc oxide will polish quartz, which is much harder but its melting point is 1800° C. The melting point of a diamond is slightly above 3500° C. Zirconium oxide will polish a diamond much better and faster than diamond powder because its melting point is 3532° C. On this basis diamond powder is unsatisfactory for polishing a diamond, tin oxide less efficient than zinc oxide for quartz and cerium oxide unsatisfactory for many types of glass.

Any knowledge of polishing is not of much use unless the material to be polished is properly prepared in the pre-polish stage. Sanding is the hardest and most critical step in gem cutting.



# Field Trip Report - GVSU Geology Department

*Submitted by Mary Johnson*

Saturday, February 26, found numerous rockhounds of all ages from 3 local clubs (Tulip City, White River and Indian Mounds) exploring the halls of the GVSU Padnos Hall of Science Geology Department! Hosted by GVSU Professors Peter Riemersma, Greg Wilson and Kevin Cole. So many people attended that we had to move to a larger classroom for the opening meeting.

We were introduced to some hydrology research being done at GVSU, saw many wonderful specimens in trays, through microscopes and ones too large to easily move and even had an opportunity to purchase some specimens for our own collections. We also saw lots of the equipment used for tumbling, cutting, polishing, etc.

A highlight of the tour was the many incredible display pieces in the hallway showcases. Some amazing fossils from Morocco made me very sorry Covid cancelled a planned trip there in 2020. We even saw a very familiar name featured-- a lovely piece of amethyst from the CHET SMITH collection!

If you haven't already visited the GVSU Geology Department, watch for future field trips there! It is definitely worth a visit. Thanks to all who made this trip possible!



## **Snowbirds in New Mexico: Chapter II**

### *The rock-reational adventures of Bob and Julia Sherwood*

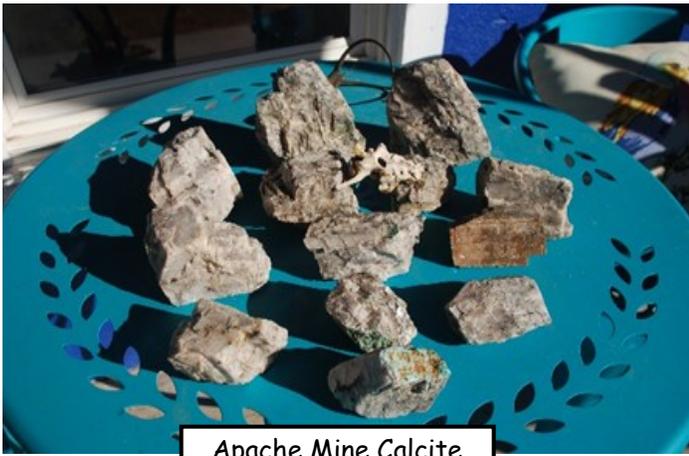
Our wide-ranging collecting adventures continued in February with a variety of fellow rockhounds. On Valentine's Day eve, Rick and Deb Smith from Holland arrived to spend a week collecting with us. That same evening, Julia's son Glenn arrived from California to spend time with Mom. We started with a bang the next day; went out about 10 miles to an area called Starvation Draw, named during the wagon-train days when the Apaches took advantage of wagons stopped at Cooke's Spring. The history of Deming is fascinating to anyone interested in the travails of "westward expansion" and the incursion of white men into Native American land. After collecting Psilomelane, a botryoidal, igneous manganese ore for a couple of hours, we headed back to town to enjoy the extensive Luna Mimbres Museum. This is a repository of cultural artifacts of the ancient Mimbres Culture; pots, weapons and jewelry of this Mogollon people (845 - 1450) plus an extensive rock collection donated by Paul "the geode kid" Colburn.

On Wednesday, we were invited by Elaine Angstman to visit the Baker Ranch plus an adjacent area where small pieces of petrified wood can be found. Elaine, an active member of the Central Michigan Club, has spent extended winters here for many years with her husband Jeff. As a member of the Deming Club also, she knows the area very well. The 5 of us joined Elaine and 3 of her friends to convoy to Hermanas. With Baker eggs, one never knows what is inside until the egg is sawed open, but the wood lying around was obvious to the practiced eye. Bob had several of our eggs sawed at the Deming Club lapidary workshop. Only one contained a small area of agate. He learned that smaller ones tend to have more agate! Too bad we had not heard that before we collected.

Thursday we went to the Blackie Mine near Hatch for colorful "candy rock" Rhyolite with a spicy lunch stop in Hatch, the chili capitol of "the world". Friday found us at Fluorite Ridge, digging in the tailing piles for the lustrous pale green remnants left from mining days, which started in the early 1900's and lasted until 1960. The headframe of one of the mines is still visible and acts as a marker for the site. That evening, we hosted a steak-fry at our small cottage for the 5 of us plus Doug & Jan Sjoquist who had come to Deming for 3 nights from their winter home in Green Valley, AZ. You can imagine the stories of former Club field trips which always had a Sherwood U-turn included.

On Saturday, Glenn left for home but the rest of us went out to Round Mountain, just into Arizona, with access through the Lazy B Ranch. The Lazy B is where Supreme Court Justice, Sandra Day O'Conner grew up and was married. She and her brother, H. Alan Day, wrote a charming book about growing up on that ranch and seeing Round Mountain on the horizon; *Lazy B, Growing Up on a Cattle Ranch in the American Southwest*. Near Round Mountain, the ground is literally covered for miles with Chalcedony, sized from 1/2" to 5" or more and varying in configuration from the typical "rose petals" to solid balls that reveal lovely banding when cut. It is difficult to decide which piece to pick up and believe it or not, many are thrown back down because they are not sufficiently interesting! When we all had collected "enough", we headed back to Deming for an early supper together. In the parking lot behind the restaurant, heading for the entrance on the other side, Julia, though holding Bob's hand, tripped over a rusty piece of rebar extending out of a broken concrete bumper and fell. At the Emergency Room, a CT scan revealed a pelvic fracture. Mobility with a walker is improving while the pain level is now very low. We expect to keep our departure for MI on 3/15.

Fortunately, our wish list of collecting sites was completed except for Peridot bombs from the Kilbourne Crater, found along the border to Mexico. Three days ago, Bob took Mike, our "pebble-pop" neighbor along to bring back a goodly haul of excellent material. It's too bad that Mike lives in MN & can't become an active member of Tulip City. See you all soon! **Photos on the next page!**



Apache Mine Calcite



Mimbres Museum visitors including Rick & Deb Smith & Julia Sherwood



World Class Baker Thundereggs from the collection of "the Geode Kid"



Famous Baker Ranch egg pit



Very Nice Round Mt. Chalcedony



Peridot Bombs after cleaning



Basalt Bomb with a tail

## - Junior Page -

### "Pumice Rock - The BOULDER that's easy to lift!"

Crater Lake National Park in Oregon was once ancient Mount Mazama. Mazama erupted about 500,000 year ago creating what is now a central feature of the park. There is a wonderful Indian legend about the origin of the hidden lake that formed after eruption. There is also an 1852 story about exploring miners, who did not find gold there, but rather "the bluest lake ever seen".

PUMICE is scattered around Crater Lake. Club member Ron Cranson was a Park Naturalist there and has written a book, "Crater Lake, Gem of the Cascades". Copies of the book will also be available for each family. Ron collected (outside Park boundaries) the Mazama Pumice to be given out.

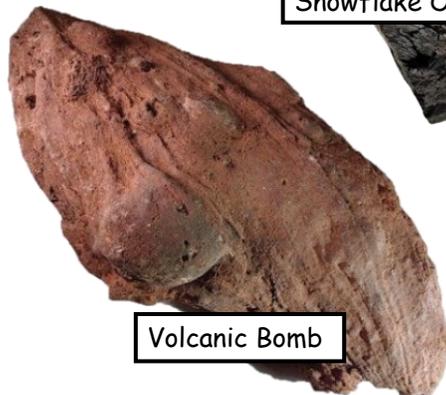
At the presentation by Jr Club Co-Chair Linda Winkelmann, Juniors will learn about Pumice, Scoria, Obsidian, Olivine Bombs, Rhyolite and a bit about Volcano types. All extrusive Igneous Rocks are formed near, on or above the earth's surface. Pumice is one of the FUN ones!! Will it float in water? Hope all kids can come on Wednesday, 3/30/22 at 7pm.

NOTE: After snack-time on the 30th, hopefully kids and parents can stay to learn about "Thundereggs", which are created in igneous-rich soils left after an eruption. That's both a volcanic and a sedimentary story.

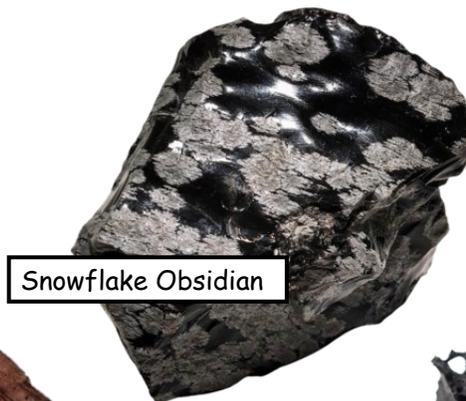
The previous page has pictures of volcanic bombs collected by Bob & Julia Sherwood in New Mexico !



Pumice in beaker of water



Volcanic Bomb



Snowflake Obsidian



Scoria

*Juniors can take home a piece of Pumice from the Mazama volcanic eruption about 500,000 years ago! Club member Ron Cranson collected the pumice outside the park boundaries when he was a Naturalist at Crater Lake National Park.*



Meetings are held monthly on the last Wednesday of the month at the Howard Miller Community Center 14 S. Church Street, Zeeland, MI at 7pm, unless otherwise noted in the **TULIP CITY CONGLOMERATE**.

Our Junior Club welcomes and encourages young rockhounds and meets separately during the meeting. To become a member, complete the form at [www.tulipcity.org](http://www.tulipcity.org)

Advertising rates for club members are: \$5 for business card size, \$10 for 1/4 page, \$15 for 1/2 page, \$30 for full page. non-member rates are double. Make check payable To: TCG&M with ad copy to Editor.

Our club is a non-profit organization sponsored by the Holland Recreation Department. it is a member of the Midwest Federation and the American Federation of Mineralogical Societies. The general purpose of this club is to develop interest in and increase knowledge of minerals, rocks, gems, fossils, and the lapidary arts. The objectives of this club shall be promoted whenever possible, through family participation.

### Tulip City Conglomerate

Jon Mull, Editor  
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