

Rocky Reader

The Monthly Newsletter Of The
Toledo Gem And Rockhound Club

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June, 2016

The video COLLECTABLE CARBONATES is the JUNE program!

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PRESIDENT'S MESSAGE

Drs. Jim Harrell and Mark Camp gave us a wonderful tour of the collections at the University of Toledo. About twenty club members (adults and juniors) attended. We were treated to a tour of the display collections and Egyptian specimens. Despite being retired, Dr Harrell is still busy identifying the composition of many of his specimens so that he may determine the origin (quarry site) of artifacts from museums and new excavations.

I would like to take this opportunity to thank everyone who worked so hard to make the Spring open house a success: the committee: Nancy Grove, Joe Motter and Sue Szempias; Kristie Bowersox and Amy Towell for the geology walks; Pete, our treasurer, who took orders for spaces and collected monies; Chet King, Amy Schufeldt and Helen Beddoes for demonstrating faceting; Michelle Grigore, Terri Jones and Steve Cielinski for demonstrating metalcraft; Nancy Grove for the dreamcatcher project; Chetty King for the bracelet project; Audrey Senghas, Shirley Steib, Patti Page-Ross and Pat Hillard for the gem tree projects. The heavy lifting (putting up the signs) was done the night before by Chet King and Jeff Wheeler. Kudos to Matt Killam who got out of bed at 6AM to let us into the gardens. We even had extra volunteers: Jim Leslie, JoLynne Hall and Sandy Collins came to help with gem trees and Gene and Tonia Wallace came to demonstrate lapidary.

SPRING OPEN HOUSE

The first open house under the new one day format went well. We estimate that 200+ people came thru that day.

The set-up started promptly at 6:00 am. Customers started coming in at 9:00 am. Displays were added in the center of the sales area that highlighted the clubs various activities. The craft center was busy with classes being taught by: Chet and Debby. In the conference center Chetty King assembled bracelets, Nancy Grove did dream catchers and Shirley Steib, Pat Ross, Audrey Senghas and Pat Hillard did gem trees.

Amy Towell and Kristie Bowersox from the University of Toledo led two geology walks thru the gardens at 10:00 am and 2:00 pm. Unfortunately a brief rain/sleet shower disrupted the afternoon walk.

A raffle was held. Tickets cost \$1 each or 6 for \$5. The raffle collected \$60. Deb Hoffmaster donated a titanium necklace won by Shirley Stieb, Nancy Grove donated a sphere won by Jeff Wheeler, Bonnie Wheeler donated an opal necklace won by Nancy Grove, Joe Motter donated a beaded necklace won by Sally Byehnar, Nancy Grove donated a piece of specular hematite won by Shirley Stieb and Nancy Grove donated a geode and holder won by Pat Ross.

Jeff Wheeler paid \$5 for extra sales space, and 40 dollars was donated to cover the raffle and demonstrator tables for a total of \$105 collected to help offset the conference center rent.

The same one day format will be used at the Fall Open House scheduled on November 13th from 9am to 5pm.

A suggestion was made to sell gem tree kits at the next open house to raise additional funds to offset the cost of the open house rent. Another fund raiser would be to add a silent auction portion to the monthly raffle. More information on this next month.

CASES, CASES, CALLING ALL CASES!!!!

It's time to start thinking about putting in a display case at our show in September. This is our biggest opportunity to show the public what the club is about and what we do. The case sizes are: Club case - 48"W x 30"D x 12"H and new cases - 48"W x 30" D x 22 3/8"H. Club members typically put in items they make, collect or buy. i.e. cabs, slabs, specimens or rock/gem/collecting information. If you have a club related business you can put your card inside the case to help advertise your business. If you plan to have a table(s) at the fall open house, a flyer will be provided to advertise that you will be there. You can reserve a case(s) by e-mailing me at nancy7536@att.net or you can contact me at the monthly club meetings.

Ordering Club Logo Merchandise

Club name badges with logo, first and last name are \$5.50 each. Clothing is royal blue with the club logo in gold. Adult or child t-shirts - S, or M are \$10. There are extra charges for Large and XL. Adult men's polo shirts are \$20, women's are more. Sweat shirts are \$25, more for L and XL. There is a minimum order of 10 shirts. There is no minimum order for badges.

If you are interested in placing an order, please e-mail the following information to Linn Petersen at PetersenLinnA@aol.com: Your Name. The item (badge or shirt) to be ordered. A description of the item INCLUDING SIZE e.g. ladies medium polo shirt, child's large hooded sweatshirt, your contact information (you will be notified if the minimum order has been met and given instructions for payment). Please Note: IF we can make the minimum order, it will likely be SOME TIME before another order will be processed. If you want shirts, order NOW!

TOLEDO GEM AND ROCKHOUND CLUB MEETING MINUTES

May 18, 2016

The potluck preceded the meeting

- 1) Pledge of Allegiance at 7:05 pm
- 2) Secretary Report Moved for approval by Amy Shufeldt and seconded by Jim Hintz, members approved

**Crystals...Minerals
Cutting Stock.....Tools
New and Used
Equipment
Buying Used Equipment
and Mineral Collections**



R & E Rocks

654 Culley Rd

Holland, OH 43528

Owned and Operated by
Ed and Ruby Reynolds,
Club members
By Appointment Only:



419-382-1089 or 419-340-8801

- 3) Treasurer Report – Finance Report Approval? Moved for approval by John Hull and seconded by Linda Maiani and members approved
- 4) New Business (General Request) Lynn Petersen described requests for badges and shirts & sweatshirts. Anyone interested can discuss and place an order at the June meeting.
A thank you note from UT for the check donation was recognized.
- 5) Old Business: none to report
- 6) Group Reports:
- Field trips – John Capuano briefly described the Canada September trip for silver since Harold was not at the meeting.
 - Open House (Nancy) The one day event included ten sale tables and some demo tables. Between 200 and 250 attended. The next one day event is planned for November 13th.
 - Beaders (Nancy) see the Rocky Reader calendar for dates
 - Show (John) – planning continues, Library case displays will be reviewed next month
 - Rocky Reader (Debby) - deadline midnight Monday May 23
 - Metalcrafters (Debby) – meet June 9 & 23 (Thursday's 6:30)
 - Sunshine (Joe) – none to report
 - Extreme Beaders (Kathy) see the Rocky Reader calendar for dates
 - Faceters – (Elie) Chet demonstrated to two members and has one spot available on the 2nd weekend in June, contact Chet if interested
 - Juniors (Steve)
 - Membership – 32 members were present
 - Gardens (Chet) - Arts in the Gardens, gala event May 24th, general public on the 25th and 26th
Members who volunteer 2 to 4 hours will be able to include entry to the show and hours help the club. Call Nikki at the Gardens to volunteer.
 - Gemcrafters – (Bonnie) – see the Rocky Reader calendar for dates
- 7) Next Meeting June 15 - film: Collectable Carbonates.
- 8) Snacks - Mike Mayers
- Meeting adjourned at 7:45pm
- Respectfully submitted, Mike Mayers Club Secretary

Thelma Postlewaite's Family News

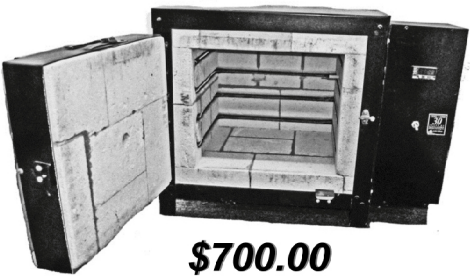
Kimberley Erdman	3	Ruby Mendez	12
Linn Petersen	7	Linda Maiani	19
Ann Harris	7	Lavonne Sparks	21
James Hintz	8	Christine M. Jones	24
Ron Dover	11	Gene Wallace	25
		Carrie Pierce	28

CLASSES

June 11 & 12. Introduction to Faceting. Instructor Chet King (419-841-4272). Chet will take up to TWO people for this short introduction.

June 18 Gemcrafter class. Contact Bonnie Wheeler for more information - 419-824-2049
b86fiero@buckeye-express.com

November 19-20, 2016. Ronda Returns! - two spaces left - (Brought to you with proceeds from the metalcrafter auction) Ronda Coryell (www.rondacoryell.com) returns for another fantastic workshop. This time the projects will be two rings and a hollow bead. The workshop price is \$300 with substantial discounts for early registration, work at the club show and donation to the metalcrafter auction. E-mail Deb Hoffmaster (debhoffmaster@gmail.com) for details and a registration form.



\$700.00
List \$1100.00

AIM Kiln Custom Built for glass, ceramics & enameling
Model 1210 240 volt 19 amp 2000°F max temperature
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GARDEN NEWS

The following events are scheduled for April and early May:

June 5, 2016, 9:30 am - 12:00 pm Sunday Short Hort

June 15, 2016, 6:00 pm - 8:00 pm Weed & Wine

Volunteers are needed for the Crosby Festival, June 24-26. Volunteers get free admission. To volunteer, contact Nikki Eggerstorfer, Volunteer Coordinator at 419-536-5592 or nikki.eggerstorfer@toledogarden.org

FACETEERS

Chet King will do introductory classes on the SECOND weekend of May. Chet will take up to two people for this short introduction. Call Chet (419-841-4272) for more information. Otherwise, contact Elie Ghanime 419-450-0160, eghanime@buckeye-express.com for more information about faceteers.

FIELD TRIPS

A field trip to the Sudbury Region of Canada is planned for September. Contact Harold Burleson hburle@msn.com or haroldburleson12@gmail.com to be informed of future field trips. Many quarries now require up to date Mine Safety training for admission.

BEADERS

The Beaders meet on the third Monday of the Month at 6PM. If you are interested in beading, contact Nancy Grove nancy7536@att.net for more information.

EXTREME BEADERS

The Extreme Beaders meet on Tuesdays beginning at 9AM. Participants must be able to work independently on their own projects. If you would like to join, but need instruction, contact Kathy Petersen mlrlyt@AOL.com for more information.

GEMCRAFTERS

THANK YOU DON BORRMANN for the huge piece of lepidolite which will be a future Cab Of The Month - awesome!! THANK YOU KATHY AND PETE PETERSEN - you know why!!!!!!

We have two newly mounted rack and large cup type holders on the pegboard near the bathroom. Small tools, scissors and other items are located there. The cups can be lifted off the bar for easy viewing of the contents and are accessible to those of us under six feet tall.

We will be installing a new FOR SALE BULLETIN BOARD in the craft center for use by ALL club members who have club related items for sale or trade. This will be a great way of letting members know you have a piece of equipment or a small quantity of an item/items you no longer need. We recommend that members who have large quantities of items for sale support the club by placing an ad in the Rocky Reader and/or paying for a table or two at the Fall Open House.

INTRODUCTION TO CABOCHON CREATION training in June will be by appointment only. Please contact Natalie Hill at: Natalie.Hill.Designs@gmail.com. JUNE CABOCHON OF THE MONTH will be Purple Sage Jasper from Utah.

We have installed a new 20 inch diamond blade in one of our big saws. A new 18 inch diamond blade is included in a \$1,500 parts and supplies order being placed by the end of May. We are thrilled to announce the acquisition of a brand new DIAMOND PACIFIC TITAN GRINDER WITH 8 INCH WHEELS!! This big and beefy machine has been dubbed "The Beefster" by our group members. Individual group member training on this large machine is ongoing on Wednesday evenings and Thursday afternoons. Our standard courtesy rule applies with each member being allotted 45 minutes of use after being trained so that other members have the opportunity to use it. Open use of the machine will begin after all group members have been trained. The Gemcraft moderators, Bonnie Wheeler - Natalie Hill - Greg Feight

JUNIORS

The Juniors had a good time, enjoyed climbing in Seneca Caverns and learning about how a breakdown cave forms. There is also a fossil *Dunkleosteus* in the cave limestone underground so that was nice to see. The June Juniors meeting will be canceled as I will be attending Boy Scout Camp Pioneer with Sedric. Enjoy your school vacations, go find rocks! For more information, contact Steve Shimatzki - sjs132@gmail.com.

METALCRAFTERS

We will meet June 9 & 23 (6:30-8:30). Please confirm your attendance by e-mailing Debby at least 24 hours in advance and pay the \$2.00 session fee. Please wear long pants and sturdy shoes (no sandals) to all metalcrafter meetings.

We are a collaborative group. We expect that members have their own materials and sufficient experience to work independently. If you are new to silver work, please register for one of the beginning pendant classes. If you are new to the group, but have previous experience please e-mail me (debhoffmaster@gmail.com) to arrange orientation during a scheduled meeting. For more information, contact Debby Hoffmaster, moderator, debhoffmaster@gmail.com

Coming Events from Chetty King's Flyer Table

June 3-5. 55th Annual State Line Club Show. Fulton County Fairgrounds, Junior Fair Building, Wauseon, OH. Friday 12-6, Saturday 10-6, and Sunday 11-4

June 4-5, Mansfield, OH. Richland Lithic & Lapidary Society annual show; Richland Co. Fairgrounds, 75 N. Home Rd.; Contact: Tom Kottyan at 419-562-1152 or themineralhouse@netzero.net.

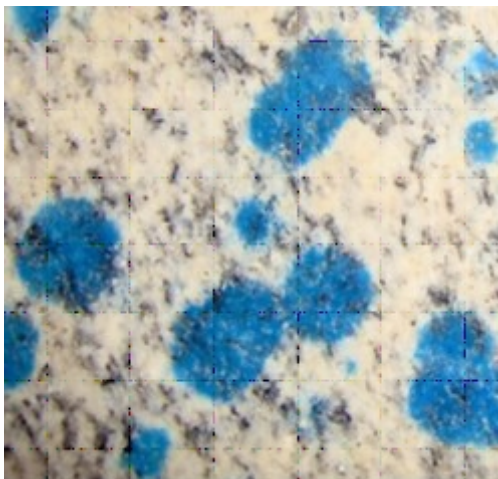
June 11th 8am-1pm. The Sac & Fox Lapidary Club 2016 ANNUAL ROCK SWAP. Howard Park Court & Grimes Fairfield IA 52556. Set-up is \$7.00. Bring your own tables. If it rains you will not be able to set up on the grass. Contact Florence Stevens for more information: 1-641-470-1517

Additional Show dates are listed on the Midwest Federation website <http://www.amfed.org/mwfi>
Click on Calendar and then on the month you are interested in from the list at the left.



Juniors at Seneca Caverns The line up from left to right is as follows: Serenity Shimatzki, Sedric Shimatzki, Deven Kielhorn, Leah Huff

"K2-Blue" by Anastasia Chaparro



K 2-Blue is found at the base of K2 in the area of Gilgit-Baltistan at an altitude of about 15,000ft. It is a unique and rather rare occurrence. Azurite and Malachite are almost chemically identical. Azurite's Formula is: $\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$, Malachite's Formula: $\text{Cu}_2(\text{CO}_3)(\text{OH})_2$. If it were not for the elevation and environment in which K2 was created, there would probably be green malachite balls inside of the matrix instead of blue azurite. This particular formation of azurite is needle like and forms ball like aggregates which lends to unique cutting of rough. No matter which angle you slice it at you will come out with perfect little balls in a 360 circle because these azurite balls are 3 dimensional.

Azurite often forms with malachite however due to the altitude in which k2 blue is formed, the copper does not oxidize as much, which is a rarity in itself. Yet, I have seen it included with light green balls which probably means that it was mined at a lower elevation where

there was more water available to mix with the oxygen to allow oxidization. Water holds less oxygen at low barometric pressure (high altitude), therefore the azurite stays blue. Azurite holds less water in it than malachite so the copper in malachite will oxidize faster. This explains the color changes and why they are

usually found together. The oxidization of azurite actually changes it into malachite. If K2-Blue were formed at a lower altitude it would change colors and chemical composition.

The azurite floats permanently suspended in albite and quartz. The strontium is grey and turns a (very faint) yellowish brown color when it hits the air which leaves an unusual warm colored matrix with a cool colored blue in its midst. The circumstance of its formation has lent it some very unique and beautiful qualities. It also contains titanium which show as tiny sparkly flakes flashing in the light, surrounded by darker flecks of chromium and manganese which polishes easily and is surprisingly easy to cab. Especially if you are used to working with harder crystals.

When it was first analyzed, the tests showed that it was ALBITE, Quartz/Microcline. When further tests were completed, it was determined that K2-Blue consisted of Blue Orbs of Azurite, with Manganese, Titanium, Strontium, and Chromium, as Secondary Minerals of Concentration. These tests were ordered by Gary Andruss who is a rockhound adventurer, however the website now states that you can order directly from Pakistan instead of through him.

The website is: <http://k2blue.com/> From: The Rockhounder May 2016 Via Hound's Tale 4/16



10 Most Deadly Rocks and Minerals

We often wonder if the Earth beneath our feet could swallow us up. The truth is more insidious. Drop that rock you just picked up . . . you could get poisoned. This list details the ten most toxic and potentially deadly minerals that crystallize in the Earth's rocks, presenting a dangerously deceptive array of stony beauty. These rocks don't have to be thrown to hurt you.

10 Coloradoite: Coloradoite is a recently discovered crystalline mineral originating in magma veins. The mineral is a mercury telluride compound formed when mercury fuses with tellurium, another extremely toxic and rare metal. Coloradoite therefore poses a doubly toxic threat to anyone daring to handle it. The combination of the two elements poses the risk of serious poisoning if carelessly handled. If heated or chemically altered, deadly vapor and dust is released by this strange mineral. Interestingly, the mineral may be mined for its tellurium content. Tellurium minerals may combine with gold, but were previously not recognized. In a strange twist of fate, the streets of Kalgoorlie in Australia were mined in a bizarre gold rush after the realization that gold-bearing tellurides had been used to fill potholes.

9 Chalcanthite: Seductive blue chalcanthite crystals are composed of copper, combined with sulfur and other elements and water. This arrangement turns copper, which is required by the body but toxic in excess quantities, into an extremely bioavailable crystal. In another words, the copper becomes water soluble, and may be assimilated in great quantities by any plant or animal, rapidly weakening it and then killing it by shutting down body processes. Chalcanthite should never be taste tested by amateur scientists for salt content, or an extremely serious overdose of copper could result. Just releasing crystals of the blue mineral has killed entire ponds of algae, and posed great environmental threats. Because of the incredible beauty and rarity of chalcanthite, an enterprise dedicated to growing artificial crystals and passing them off as genuine specimens for sale has developed within the geological community.

8 Hutchinsonite: Thallium is the dark twin of lead. This thick, greasy metal is similar in atomic mass but even more deadly. Thallium is a rare metal that appears in highly toxic compounds consisting of rather strange combinations of elements. The effects of thallium exposure are even more peculiar, and include loss of hair, serious illness through skin contact and in many cases, death. Hutchinsonite is a hazardous but dramatic mixture of thallium, lead and arsenic. The three poisonous metals form a lethal mineral cocktail that should be handled only with great caution. Hutchinsonite was named after John Hutchinson, a prominent mineralogist from Cambridge University. The mineral is found in mountainous regions of Europe, most frequently in ore deposits.

7 Galena: Galena is the principle ore of lead, and forms glistening silver cubes with almost unnaturally perfect shapes. Although lead is normally extremely flexible, the sulfur content of galena makes it extraordinarily brittle and reactive to chemical treatment. Galena is capable of taking an equally heavy toll on workers and amateur researchers who are exposed to it. Contact with specimens may lead to lead dust

exposure, while workers in mines face a high risk of poisoning from contact with the mineral and the deadly dusts released through production. Once extracted, the lead content from this mineral poses environmental and health threats during treatment and extraction. Galena has a cubic fracture, and if hit with a hammer, the crystal will shatter into multiple smaller replicas of its original shape.

6 Asbestos: Chrysotile and Amphibolite Asbestos is not a man-made product, but one of most terrifying minerals on the planet. Where other minerals act as toxins through their chemistry and sicken victims of accidental poisoning, Asbestos conducts full scale mechanical sabotage on the human lung. Asbestos is a fully natural category of minerals composed of silica the most abundant of Earth's hard elements, iron, sodium and oxygen. Asbestos deposits consist of aggregates of thousands of tiny, fibrous crystals that can become airborne and lodged in the human lung. Carcinogenic effects occur through persistent irritation of the lung tissues, leading to scarring. Asbestos formations can also be uncovered among any set of silica rocks, warranting caution when exploring. Strangely, natural weathering leads to natural distribution of asbestos in Earth's atmosphere. As a result, many humans carry some asbestos fibers in their lungs.

5 Arsenopyrite: Arsenopyrite is fool's gold, but with a difference. One would not just be a fool to mistake it for gold. Equally foolish would be a decision to pick up this mineral on a hike at a quarry, and proceed to use your hands to put trail mix in your mouth. Arsenopyrite is arsenic iron sulfide, which is the same type of mineral as pyrite (fool's gold, iron sulfide), but with a heavy addition of arsenic. If one attempts to heat or in any way alter the mineral, a strong garlic odor of arsenic will be produced as lethally toxic, corrosive and carcinogenic vapors are released. Just handling the mineral brings one into contact with unstable sulfuric arsenic salts. Interestingly, arsenopyrite may be identified by striking a specimen with a hammer. The powerful garlic odor of arsenic can be briefly detected as the sparks fly.

4 Torbernite: Torbernite is the mineral from hell. The prism shaped green crystals form as secondary deposits in granitic rocks, and are composed of uranium. Formed through a complex reaction between phosphorous, copper, water and uranium, the stunning crystal displays have seduced many mineral collectors into taking a sample for a shelf collection. If the uranium decay from a pocket sized Chernobyl were not enough, lethal radon gas capable of causing lung cancer slowly releases from these hot rocks. This is one crystal to leave alone. Torbernite can occur in granite, so your stone countertop just might contain traces of torbernite. The bright green crystal blooms were used by prospectors as indicators of uranium deposits.

3 Stibnite: Stibnite is antimony sulfide, but it looks like silver. For that reason, the huge, shining metallic crystals of this unstable compound were once fashioned into magnificent eating utensils. But the sword shaped crystals bore the powers of death to those who used them. Stibnite's antimony laced crystals killed a number of people before it became known that use of the mineral was causing food poisoning of the worst kind. Even in collections, stibnite samples should be handled with great caution to avoid poisoning. Hand washing is advisable after any contact. Mines near Oksaku in Japan have produced the best stibnite crystals in the world, measuring up to a foot in length. Many stibnite samples have the appearance of a miniature steeple.

2 Orpiment: The only thing worse than arsenic itself could be a rock made from arsenic and sulfur. The lethal and chemically reactive orpiment crystals are found growing below the surface in mineral formations, often near hydrothermal vents. The colors are seductive, but holding the crystals in your hands may release carcinogenic, neurotoxic arsenic powder. Like cinnabar, the Chinese made extensive use of this mineral, but to far more terrifying ends. Arrows would be rubbed on crushed samples of these stones and then launched to poison the enemy in a rather fancy way to throw a rock. Orpiment is known to give off a strong garlic smell due to its arsenic content, and may crumble into dangerous powder when exposed to light. The mineral was used as a primary component of ochre paint, and likely poisoned many of the artists who used it.

1 Cinnabar: Cinnabar (mercury sulfide) is the single most toxic mineral to handle on Earth. The name of the crystal means dragons blood, and it is the main ore of mercury. Forming near volcanos and sulfur deposits, the bright red crystals signal danger of the worst kind. Cinnabar may release pure mercury if disturbed or heated, causing tremors, loss of sensation and death. In the Middle Ages and late 1700s, being sent to work in Spanish mines containing cinnabar formations was widely considered a death sentence. Cinnabar was widely used in Chinese history for ornamental food dishes, and intricate carvings were created from chunks of it, sometimes at the expense of the artisans. Even more incredibly, some ancient medical practitioners believed cinnabar held healing powers, and prescribed it for certain conditions. From:

<http://listverse.com/2013/03/07/10-most-deadly-rocks-and-minerals/> via Rock Trails, May 2016

June

2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Gemcraft 6:30PM	2 Gemcraft 12 noon	3	4
5	6	7 Extreme beaders 9AM	8 Gemcraft 6:30PM	9 Gemcraft 12 noon Metalcraft 6:30	10	11 Introduction to Faceting
12 Introduction to Faceting	13	14 Extreme beaders 9AM	15 Club meeting Collectable Carbonates	16 Gemcraft 12 noon	17	18 Gemcrafter Class
19	20 Monthly beaders 6PM	21 Extreme beaders 9AM	22 Gemcraft	23 Gemcraft 12 noon Metalcraft 6:30	23	25
26 Juniors 1PM	27 Board 4PM	28 Extreme beaders 9AM	29 Gemcraft 6:30PM	30 Gemcraft 12 noon	29	30