



# The PRESQUE ISLE PROSPECTOR



Official Publication of the Gem City Rock and Mineral Society  
Monthly Meetings, First Friday at 7:30 PM

March 2006



## Last Month's Meeting:

Last month our program was a demonstration of a few gemological tools and properties that it would be handy to be familiar with for faceting. I brought in a dichroscope, which is a small tube which can show 2 colors in a gemstone side-by-side if the stone is dichroic (meaning "has two colors" in different crystallographic directions) or pleochroic ("many colors" – but generally not more than 3, since it's tough to have more than 3 crystallographic directions) – and a few stones to look at to show this effect. This is important to be able to orient a stone to get the best color out of it once it's faceted. These run ~\$65-\$90 for the professional models, and I haven't figured out how to make a cheap version yet.

I also brought in 4 small homemade polariscopes (made from film canisters), which help you get an orientation of crystallographic directions and optical character of crystalline rough – also very helpful in orienting rough for the best faceted appearance. If anybody wants one of these cute little guys, let me know – I don't need all four of them. The big, professional models go for ~\$70-\$250, but you can make your own serviceable one for very little cost, if these guys are too small for you. BTW, I found a great web site that explains how to use it with great photos of all those things I was telling you to look for at <http://www.yourgemologist.com/Polariscope/polariscope.html> -- found it too late for last month, of course, but check it out now and for future reference!

## This Month's Meeting:

This month our meeting will be Saturday, March 4<sup>th</sup>, at 9:30AM. Our program will again be on faceting – this time a demonstration of how to use the club's particular faceter. While most faceters have mostly the same basic parts, and are used in a similar manner, ours has a few quirks and things to be aware of. See the article later in the newsletter.

Also, now that we've entered a new Calendar Year, club Dues are due! If you joined at the show last July (2005), your dues are paid through the end of 2006; if not, it's time to pay up again for another year. Dues are still as follows:

\$5.00	Junior (under 18)
\$10.00	Individual
\$15.00	Couple (or parent and one child)
\$20.00	Family

Please try to remember to bring your dues along to the meeting, or mail a check to the club Treasurer, Val Engelleiter, at her address in the footer of the newsletter. We will give you a month or two to get your dues in, but those not current on their dues will stop getting the newsletter and not be eligible to participate in any club activities! So please help us keep you current by renewing promptly.

## Report of Board Meeting:

Last month we had a board meeting of our new set of officers (which was largely the same as our old set of officers, other than rotating Kirk in and Bob G. out for president – though Bob G. is still on the board as Past President). Mostly we went over the minutes of the last real board meeting from February 2004 (which was largely concerned with creating a budget), and created a budget for this year (which we didn't do last year – oops!), as follows:

Club Web Site address:	<a href="http://www.treebeard.net/gemcity/index.htm">http://www.treebeard.net/gemcity/index.htm</a>			
President	Kirk McFadden	P.O. Box 128	Waterford PA 16441-0128	(814) 602-5225
Vice-president	Sarah Boesch	1223 Lake St.	Lake City PA 16423-1808	(814) 774-4234
Secretary	Harriet Beckman	2239 South Shore Dr.	Erie PA 16505-2154	(814) 455-4851
Treasurer	Val Engelleiter	132 Moorehead St.	Erie PA 16508-1859	(814) 454-1771
Newsletter Editor	Harriet Beckman	email:	gemcity@treebeard.net	(814) 455-4851
Board Members:	Robert Gallivan		Robert Perry	Mary Thomson

	Budgeted 2004	Actual 2005	Budgeted 2006
Newsletter	\$280	\$251.36	\$400
Eastern Federation Dues	\$40		\$41.25 (actual)
Insurance	\$100		\$190 (actual)
Electric	\$140	\$154.80	\$150
Publications (Wire Artist, (2) Rock&Gem	\$88		\$98 (R&G 3-yr)
Books (Donations)	\$110	\$32.58	\$50
Meeting / Entertainment	\$50		\$50
Hospitality (Food & Supplies)	\$100	\$53.11 (food)	\$100
Equipment (Tools & Supplies)	\$275	\$386.82	\$350

As you can see, costs continue to go up. Our biggest expenses are Equipment (including consumable supplies, like sanding belts and solder), which is then available to all club members; and the Newsletter, which actually only gets printed and mailed to a bit over half our membership, the rest getting an email notice that it's up on the web site for them to view there. It was decided that the newsletter is worth funding at this level, even as printing and mailing costs rise.

To cover rising costs in all areas, we have finally decided it is time to raise our dues. While this would not take effect until 2007, we need to look at this now, since it will take a change in our Bylaws to do it; and since it's been a few years since we had a Bylaws Review, we will be setting up a general Bylaws Review Committee at the March meeting. The proposed new dues rates would be:

\$15.00	Individual
\$20.00	Couple (or parent and one child)
\$25.00	Family

Since our dues have not been raised since 1986, and would still be quite reasonable, it's hard to complain too much.

While on the topic of rising costs, you may recall the surprise we got last July when our usual Gem Show Security provider ceased to exist and in finding a new one our cost suddenly increased dramatically. It was decided then, in discussion with the dealers present, that the cost to dealers for table space would go up a bit. But we have also concluded that the show admission should go up, since that too has remained extremely low and hasn't risen for at least 10 years. New admission charges for the 2006 Gem Show will be \$2.50 for adults, \$1.50 for seniors, children under 12 still free with adult – which is still very reasonable, even for our relatively small show.

We also decided the club should investigate buying our own domain name for the club's web site, and renting the required web space – more news on this as it is researched. Don't worry – the Club's web site will not suddenly vanish, and if it moves, it will leave a forwarding address!

### **Federation News:**

The Eastern Federation Newsletter (online at <http://www.amfed.org/efmls/efmar06.pdf>) had notice of some new classes for this year's Wildacres sessions, and more info about the "expert in residence" for each session – they look to be really a lot of fun, so please do look them up – because I can't afford to go alone, so someone else has to decide to go too!

This month's Safety First article is on field trip safety, and since it's getting to be that time of year again and we hope to start arranging trips soon, I thought I'd re-print it here for all of us to remind ourselves of the things it's too easy to forget.

### **Safety First - Safety Rules For Field Trips by Bill Klose, EFMLS Safety Chair**

Field trip season will soon be upon us, so we need to pause and review appropriate safety rules. Field trip leaders need to review these rules before every field trip.

1. Never go on a field trip alone. Have someone along who can help or summon help if necessary. Make sure someone knows where you have gone and when you will return. Carry a cell phone with spare batteries to expedite communications. Call someone if you are going to change your routine or are going to be late. Should you leave a field trip early, inform the field trip leader.

2. Keep children in sight or within talking distance at all times. A child could not only become lost, but could encounter a snake, scorpion, etc., or have an accident.

3. Do not collect directly above or below another person or below unstable rock piles, cliff walls, or overhangs where there may be danger of falling rock.
4. Park so that all vehicles can get out. Do not block the roadway. Do not drive vehicles across fields to avoid property damage, setting grass fires with exhaust systems, or damage to your vehicle. Do not drive or walk on newly planted or cultivated fields without permission.
5. Have your vehicle in proper working order with appropriate emergency equipment and supplies.
6. Make sure all fires are completely out and wet down the ashes with water. Stir to make sure there are no buried embers and then smother completely with dirt. Adhere to local fire regulations and warnings.
7. Break all matches and shred all cigarettes before discarding, and be careful where they are disposed of. Take them with you rather than leaving them as litter.
8. Do not throw rocks or engage in "horse play" and do not allow children to do so.
9. Do not over exert or stay in the direct sunlight or heat too long. Take a rest in the shade from time to time and drink plenty of electrolyte replacing fluids such as sports drinks. Properly wear appropriate safety equipment, sunscreen, and clothing.
10. Avoid old mine tunnels. Never go into a mine alone. Carry a flashlight and a candle. Carbon dioxide or other gases, such as methane, may be present. There may even be a lack of Oxygen. Mines are also havens for snakes, scorpions, spiders, rodents and their feces which can carry disease. Mines may also have uncovered shafts and pits. Also be extremely cautious around abandoned buildings. You may stumble into old deep wells or cesspools not properly covered.
11. Respect property rights and signs. Obtain permission to enter property if owned by private individuals or corporations. Attend Company Safety Briefings required by MOSHA and sign releases. Pay attention to and practice Company safety policies. Adhere to government regulations and restrictions if collecting on Public Lands or Parks. Pay any collecting fees required and do not exceed collecting limits if they exist.
12. Inquire if there are any dangerous animals in the fields. Close all gates you open.
13. Refill any holes you dig so people or animals will not fall in. Do not dump dirt or other debris into streams.
14. Respect another's diggings. If a person has left for lunch or for any reason with the intent to return and has a pick, coat, or definite marker, find another place.
15. Leave any place in good condition. Don't leave papers, cans, etc., lying around to mar the beauty of the place, and to tell others you have been there. Take your litter with you, do not bury it.
16. Never eat wild berries or anything else unless you are absolutely sure they are safe. Carry bottled water and do not drink from streams or wells that have not been recently tested.
17. Be able to recognize Poison Ivy, Poison Oak, etc. Should there be any doubt, don't touch.
18. Always be alert for snakes, scorpions, ticks, spiders, rodent infestations, etc.. Be very cautious where you place your feet and hands.
19. Bring and properly use appropriate well-maintained and inspected tools. Don't expect others to provide tools for you.
20. Use proper lifting and carrying techniques to bring home your finds. Do not overload your vehicle.

Many of these safety rules are covered in greater detail in the AFMS Safety Manual and on the AFMS web site. Have a safe field trip season.

### **Library Window Display:**

Just a reminder to keep this in mind, so you'll look for any display-worthy (big & showy) minerals, fossils, or lapidary items. May gets closer all the time!

### **Guide to a Faceting Machine:**

Many of us saw the video last fall on how to facet a round brilliant stone, which described the various parts of the UltraTec faceting they were using. Our own machine, which I have concluded is a Graves Mark 0 (pre-dates the Mark I and Mark IV), is similar in that it is a mast-type machine, but you may not have gotten a good look at all the parts and how they work. In addition to knowing how all the parts are supposed to work, you also really need to know how to adjust the machine in the places where it is possible, and then all do our best to **keep** it in proper alignment.



There are several articles available online to help you adjust your faceter back to proper alignment, since if your machine is not properly aligned, it can't cut facets that are properly aligned either. The practical margin of error is bigger in some places than others. The article I used can be found at:

[http://www.campbell-gemstones.com/LJarticle/LJ-Alignment\\_files/](http://www.campbell-gemstones.com/LJarticle/LJ-Alignment_files/)

The most important adjustment is to keep the Mast as perfectly perpendicular to the Lap as possible – this is important not only to get your facets even, but to help the lap wear evenly – and since the laps each cost more than most of the stones you'd be cutting (until you get pretty good, anyway), preserving the life of the laps is pretty important. As you sweep the stone across the lap, which you must do continuously so as not to wear a groove in the lap, you don't want the lap to be “higher” on one end of your sweep than the other.



To make this adjustment, you must adjust one or more of the three set-screws in the mast base using a hex key or Allen wrench – **first loosening the wing-nut**. This is a really picky

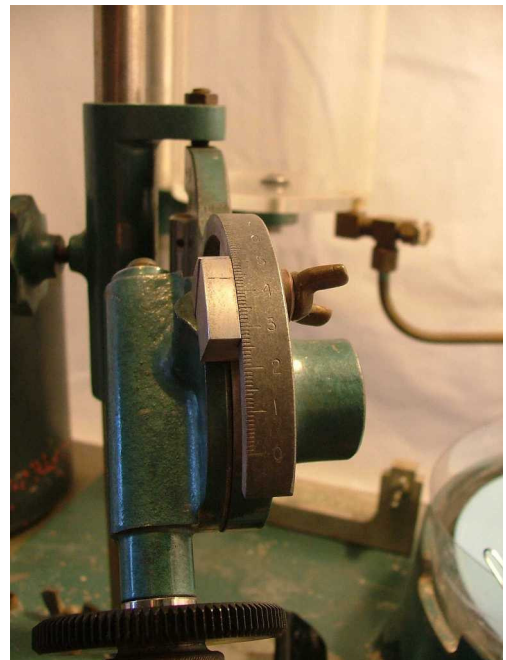
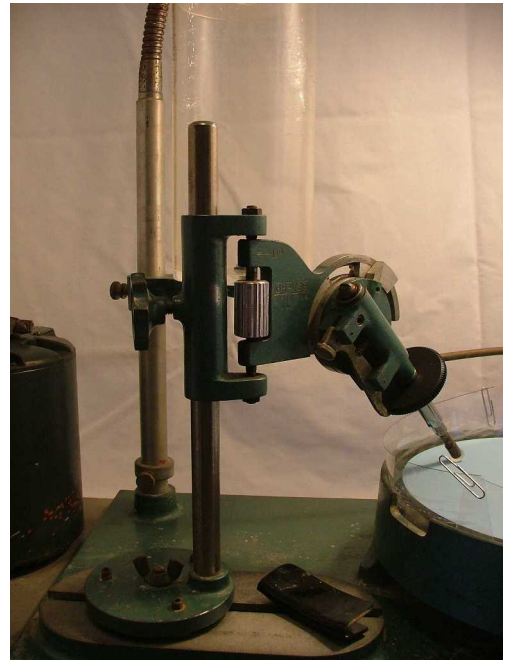
adjustment, usually way less than an eighth of a turn – maybe more like 1/32. And then, as you slide the mast back and forth in its slot, you have to re-adjust for the new spot, since not everyone *did* always loosen the wingnut first and the setscrews dug low spots into the aluminum slot casting.

Another place precision is important is in the protractor, where you set the angle of the facet; this cannot be adjusted to be more accurate on this machine, and unfortunately, our machine is a bit off, according to the fixed angles I checked it against, but it should be close if you add 1° – so if you want an angle of 43°, you need to set the protractor to 44°. Not difficult, but you need to remember to do it.

If there's a “cheater” adjustment on the Index Gear, I didn't find it – so when setting up a re-dopped stone (to cut the crown once the pavilion is done) it is really important to get the line-up just right, re-cutting a girdle facet just the tiniest bit to make sure the old cut and the new cut are parallel. Better to go nuts tweaking this now than cut your crown out of phase with the pavilion.

Any other adjustments either you shouldn't need to worry about, or they can't be adjusted on this machine so there's no point to worrying about them.

Okay, so now all you have to do is learn how to read a faceting diagram, and how to translate that to the various settings on the machine! No sweat! Especially if you have a book or two to help, and the club does have some help there too in the library.



**Rockhound TV This Month:**

**PBS: Crater Lake, The Mirror of Heaven.** Exploring the national park in southern Oregon's Cascade Mountains. The film recalls Crater Lake's geological and human histories, as well as the efforts of William Gladstone Steel to have it declared a national park around the turn of the 20th century. Mar. 3, 5:30AM.

**Discovery Channel: Amazing Earth.** From the heights of Mount Everest to the molten lava fields of Hawaii to the very core of the planet, the geologic forces that have changed the planet's face are revealed. It has taken 4.6 billion years for the earth to form, and the changes continue. Mar. 20, 11:00AM.

**TLC:** Nothing rock-related this month.

**Travel Channel: Grand Canyon: Nature's Great Escape.** Head beyond the mule rides and hiking trails to the Grand Canyon's hidden treasures. Meet the team specialized in rescuing "fallers", wander the ghost towns of nearby abandoned gold mines, and find the secret path that leads into a forest of Joshua Trees. Mar. 2, 3:00PM; Mar. 6, 10:00PM, 1:00AM; Mar. 12, 4:00PM. **RV Crazy!** Recreational vehicles reflect the unique spirit of adventure that causes otherwise ordinary people to pack up their life and go on the road. From the wacky to the way out, see the most amazing, most amusing RVs and meet the people who call them home. Mar. 2, 4:00PM; Mar. 28, 10:00PM, 1:00AM. **World's Best Lost Treasures.** Grab a shovel and a sense of adventure and head out to unearth the world's lost treasures! From shipwreck loot sunk into the sand to the greatest unsolved heists in history, join professional treasure hunters hot on the trail. Mar. 5, 7:00PM, 2:00AM. **America's Best Places to find Cash and Treasures.** In Arkansas, diamonds can be found on the eroded surface of a volcanic pipe. Sports cars and jewelry are on the block at the Department of the Treasury's auction in Los Angeles; and in Key West, a company combs the sea bottom for sunken treasure. Mar. 5, 8:00PM, 11:00PM. **America's Best Places to Find Cash & Treasures – 2.** Travel the country in search of hidden riches, from precious emerald digs in North Carolina to gold claims in California. In northern Wisconsin, join the search for John Dillinger's missing suitcase, filled with cash. Mar. 5, 9:00PM, 12:00Mid. **America's Best Places to Find Cash & Treasures – 3.** In Beverly Hills, explore exclusive pawnshops where visitors can buy diamonds, Rolls-Royces, and even an Emmy Award for rock bottom prices. Dig for rubies in North Carolina, and in Washington state, hunt for the missing loot of DB Cooper. Mar. 5, 10:00PM, 1:00AM. **The Colorado: River of Wonders.** The Colorado River offers whitewater adventure and ancient mysteries. From the towering peaks of the Rocky Mountains to the majestic Grand Canyon, six National Parks along its banks enchant visitors with their spectacular scenery and wildlife. Mar. 6, 9:00PM, 12:00Mid; Mar. 12, 3:00PM.

**History Channel: Modern Marvels: Grand Coulee Dam.** One of the world's largest concrete dams and largest concrete structures lies on the Columbia River in the State of Washington. Built in 1931, the Grand Coulee Dam is also one of the largest hydroelectric power plants. We'll explore this technological wonder. Mar. 1, 7:00AM. **Wild West Tech: Gold Rush Tech.** Discovery of gold at Sutter's Mill in 1848 changed the American West and the world. Thousands of dreamers descended upon California to stake claims, followed by rushes to Nevada, Alaska, Montana, and other territories with the uncovering of silver and copper deposits. We look at the technology developed to exploit Earth's riches--cables, elevators, pumps, ventilators, and drills--as mining went further underground and evolved from a one-man operation to a multi-billion-dollar industry. Mar. 4, 9:00AM. **Gold! The Gold Wars.** Throughout history, gold sparked man's imagination with dreams of riches and power; it built empires and destroyed civilizations. During the conquest of the Americas, the Spanish pillaged Native-American gold, and pirates plundered it from Spanish galleons. Custer's expedition into the Black Hills led to a discovery of gold that changed the way of life for the American Indian and led to his demise. In South Africa, greed and power drove two nations into conflict over gold--the Boer War. Mar. 8, 8:00AM, 2:00PM. **Gold! Gold Fever.** From the lone prospector panning in California's rich rivers to an army of miners tapping South African veins, we explore the greatest discoveries of gold. Throughout history, gold rushes created dreams of opportunity and riches for the common man. But when panning for gold proved elusive, big companies could dig deeper in search of that precious metal. Rushes for gold throughout the world eventually left the lone miner behind and became the domain of massive multinational corporations. Mar. 8, 9:00AM, 3:00PM. **Gold! The Stuff of Dreams.** Mankind has long been lured by the hypnotic power of gold, following maps, rumors, legends, and fantasies in search of treasure. We recount the quests for King Solomon's Gold and the Ark of the Covenant, the legendary Seven Cities of Gold and El Dorado, and the most magnificent golden discovery of all time--King Tut's tomb. Experience the temptations of the Lost Dutchman and his mine in Arizona's Superstition Mountains and the search for the sunken treasure of Spanish galleons off the Florida Keys. Mar. 8, 10:00AM, 4:00PM. **Gold! Cold Hard Cash.** The story of gold spans 6,000 years and five continents--from Venice's canals to California's gold fields, from the Asian trade routes to Wall Street's trading floors. Venture back in time to Constantinople and Venice to see how gold was used to control the known global economy. Hear about the millions in gold stolen by the Nazis to keep their war effort afloat, and how the sinking of the *SS Central America* nearly sank the US economy. If money makes the world go round, then gold is its axis! Mar. 8, 11:00AM, 5:00PM. **Modern Marvels: Coal Mines.** Coal--the fuel responsible for

more than half the electricity used daily. We unearth the amazing technological advances that have led to today's extremely efficient methods--from ancient techniques to the simplistic bell-pit method, from drift mining, surface mining, and strip mining to modern longwall mining, when a massive machine extracts an entire wall of coal in seconds. We go underground with miners in West Virginia, Pennsylvania, and Wyoming, and also address environmental concerns. Mar. 8, 12:00Noon, 6:00PM. **Niagara: A History of the Falls.** The colorful and dramatic story of the natural wonder that has attracted honeymooners, daredevils, and utopian dreamers for centuries. Formerly a Native-American meeting place, Niagara Falls is famous for its beauty and unlimited waterpower. Charles Dickens saw God there, while Harriet Beecher Stowe overcame a fear of death. Entrepreneurs made a fortune, and in 1969, the U.S. even stopped its flow! Join us for a 2-hour look back at the vivid history of this vital resource. Archival footage includes tightrope walkers who cooked omelettes and did their laundry on a high wire above the gorge, and adventurers who threw themselves over the brink in barrels. Mar. 21, 0:00AM, 2:00PM.

### **Upcoming Shows in the area:**

Of course, THE place to be from January 27 through February 12 is TUCSON, ARIZONA!! And, of course, most of *us* will NOT be there. And the show season around here – at least within easy day-trip range – is pretty slow until spring. But here are some things to think about if you like to plan ahead, or are desperate enough to drive further:

**Mar. 10-12, Columbus, OH - International Gem & Jewelry Show, Inc.** Veterans Memorial. 301-294-1640, fax 301-294-0034, [info@intergem.net](mailto:info@intergem.net), [www.intergem.com](http://www.intergem.com).

**Mar. 25-26, Sayre, PA - Che-Hanna Rock & Mineral Club.** 37th Annual Show. Athens Township Volunteer Fire Hall, 150 Herrick Ave. Sat. 9-5, Sun. 10-5; adults \$2, students \$1, kids under 8 free; cabochon making, geode cutting, and gemstone faceting demonstrations, fluorescent demonstration by UVBob, kids' mini mine, door prizes, exhibits, outstanding dealers, special exhibit and silent auction from Carnegie Mineral Museum; contact Hazel Remaley, 570-888-7544, [northridge@infoblvd.net](mailto:northridge@infoblvd.net).

**Apr. 1-2, Hamburg, NY - Show, "Fool's Gold — Not the Real Thing; Buffalo Geological Society;** Fairgrounds, Grange/Market Bldgs., S. Park Ave.; Sat. 10-6, Sun. 10-5; adults \$5, children 12 and under free; educational displays, mini-mine; contact Robert J. Hoffman, 65 Cheekwood Dr., Cheektowaga, NY 14227, (716) 656-8475.

**Apr. 7-9, Berea, OH - GEMSTREET USA.** Gem, Mineral, Jewelry, Fossil, and Bead Show. Cuyahoga County Fairgrounds, Bagley Rd. Entrance. 7th, 11-7; 8th, 10-6; 9th, 11-5. Strieter Productions, Inc., Jane Strieter-Smith, 216-521-GEMS, [spi@stratos.net](mailto:spi@stratos.net), [www.gemstreetusa.com](http://www.gemstreetusa.com).

**Apr. 14-16, Cleveland, OH - International Gem & Jewelry Show, Inc.** I-X Center. 301-294-1640, fax 301-294-0034, [info@intergem.net](mailto:info@intergem.net), [www.intergem.com](http://www.intergem.com).

**Apr. 21-23, Ft. Washington, PA - Jewelry Arts Expo.** Held in conjunction with the new Gem and Mineral Market. Ft. Washington Expo Center, 1100 Virginia Dr. 21st, 11-7; 22nd, 10-6; 23rd, 10-5. *Lapidary Journal* and *Step by Step Beads*, 610-232-5700, [lapidary.journal@primedia.com](mailto:lapidary.journal@primedia.com), [www.lapidaryjournal.com](http://www.lapidaryjournal.com).

**Apr. 22-23, Cleveland, OH - Intergalactic Bead & Jewelry Shows.** Cuyahoga Fairgrounds, Arts & Crafts Bldg., 19000 Bagley Rd. 10-5 daily. 888-729-6904, [ibs@beadshows.com](mailto:ibs@beadshows.com), [www.beadshows.com](http://www.beadshows.com).

**Apr. 22-23, Cuyahoga Falls, OH - Show and sale; Summit Lapidary Club,** Akron Mineral Society; Emidio & Sons Expo Center, 48 E. Bath Rd.; Sat. 10-7, Sun. 10-6; minerals, rocks, gems, jewelry; contact Warren Salchak, (330) 929-3798, or Carl Miller, (330) 633-4250; Web site: [www.LapidaryClubofOhio.org](http://www.LapidaryClubofOhio.org).

**Apr. 28-30, Pittsburgh, PA - International Gem & Jewelry Show, Inc.** Pittsburgh ExpoMart. 301-294-1640, fax 301-294-0034, [info@intergem.net](mailto:info@intergem.net), [www.intergem.com](http://www.intergem.com).

Of course, as always, if you're planning to travel, check out the complete online listings at the Rock and Gem Magazine Calendar (<http://www.rockngem.com/showdates/showdates.shtml>), and the Lapidary Journal Calendar (<http://www.lapidaryjournal.com/cal1.cfm>). While 90% or better of these listings are exactly the same, if you only check one, you could miss one in the 10% that *aren't* in both that's just the one you wanted!

We have been down in the club room many Saturday mornings (which sometimes extend to 2:00-3:00PM), but **check the club web site** at [www.treebeard.net/gemcity](http://www.treebeard.net/gemcity) or call and find out if you would like to join us for any *particular* Saturday. The web site is usually updated with a 'definite' status Friday night or early Saturday morning -- or call me (Harriet) at 455-4851 or Bob Gallivan at 454-6770 to make sure. You can also call to arrange another time for a work session if Saturdays aren't good for you, and someone will try to accommodate you.