

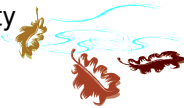


The PRESQUE ISLE PROSPECTOR



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

November 2005



Last Month's Meeting:

Last month we saw a videotape of "RockHounds: The Movie", which is a good introduction to the hobby. There are segments on collecting quartz crystals during the "World Championship Quartz Crystal Dig" at Mt. Ida, Arkansas, and on fossil collecting in Texas and collecting Selenite Roses in Oklahoma. We will probably be trying to set up a more public showing in the spring, so be thinking of good venues where we can show it to the general public.

This Month's Meeting:

This month our meeting will be Saturday, November 5th, at 9:30AM – moving to Saturday mornings for the winter. The program will be another video, this one on Faceting.

As most of you know, the club has a faceting machine that was donated to us many years ago. A few club members have worked with it a bit, but for many years, we have not had a member who knows how to facet to show the rest of us how to *do* it – but now we do! Ed has done faceting in years past, and recently acquired a machine similar to the club's -- so he went over the club's machine, decided what things were needed to get the machine in good shape for cutting stones, and the club is currently acquiring a few new laps and a 96-index gear that most modern faceting patterns call for. So while we wouldn't normally like to have a video program two months in a row, now is when we are getting excited about learning faceting, and the video gives a great introduction and demonstration of how faceting is done – much better than trying to figure it out from a book!

Major Fall Project:

This year's major project for the fall has been a beginning wire-wrapping project, the Woven-Bail Cab Pendant from the December 2004 / January 2005 issue of Wire Artist Magazine. So far, we have had 2 work sessions, and many pendants have been made – but I know there are other club members who wanted to make pendants who didn't make it to either of the scheduled work sessions. If you still want to make a pendant, email me at gemcity@treebeard.net or call me at 455-4851 and we'll try to schedule another session. There is more wire available, and I have several cabs you can buy if you don't already have one of your own to wrap. If you want to do the project in Sterling Silver, the cost for the wire is about \$3 per pendant; if you want to do it in Gold-Filled wire, the cost is about \$6. Cabs run \$4-\$12, depending on material.



Field Trip:

The Carnegie Museum of Natural History in Pittsburgh is hosting the Carnegie Gem & Mineral Show (<http://www.carnegiemnh.org/minerals/gemshow/home.htm>), Nov. 18-20 (the weekend before Thanksgiving), this year's "Silver Spectacular" show also celebrating the 25th Anniversary of the Hillman Hall of Gems & Minerals. The club will try to facilitate carpooling for those who want to go down to the show, so check your calendars for what days over the weekend you can go and we'll try to set things up at the meeting. If you can't make the meeting, call me at 455-4851.

Federation News:

I forgot to put this column back in last month, so I'll have to play catch-up this month and give you a couple of month's worth of condensed news. As always, you can go to the Eastern Federation

Club Web Site address: <http://www.treebeard.net/gemcity/index.htm>

President	Robert Gallivan	427 Colleen Dr.	Erie PA 16505-2101	(814) 454-6770
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 Perry	Dale Pysher	Mary Thomson	

website at <http://www.amfed.org/efmls/newsletters.htm> and view any of their newsletters in their entirety, and view the American Federation newsletters at <http://www.amfed.org/news/news2005.htm>.

In American Federation news, as of the Convention in St. Louis we have a new set of officers, and the new President is Jim Robinson.

The Eastern Federation also has new officers, headed by President Wayne Sukow.

The monthly *Safety First* article, which appears in both the AFMS and EFMLS newsletters, was on *Pliers and Files* in September – I should have had you all read that *before* our wire-wrapping sessions, but better late than never – and in October was on *Lifting Safety*, something of concern to every Rockhound, since what we come home with tends to be as heavy as – well – rocks! The November article is on Lapidary & Faceting Safety, and is also pretty timely for us, so I have re-printed it here in our own newsletter. Please read it, even if you have plenty of experience, since we can all use reminding of what we already know we *should* do, and there may be one or two things even the most experienced of us could learn!

There are continuing articles on land use policies, including but not limited to the Paleontological Resources Act, which is still in the House of Representatives but has not yet been given a House Bill number. The November EFMLS newsletter has a nice article on how much fun we all missed by not going to Wildacres, which just reinforces my determination that I WILL get there someday (anyone up for a carpool to North Carolina next June or September?). All in all, the federation newsletters are worth the time to look up.

Safety First - Lapidary & Faceting Safety by Bill Klose, EFMLS Safety Chair

1. PROTECTIVE GLASSES should be worn when breaking, chipping or grinding rocks. GOGGLES and SAFETY SHIELDS should be worn in addition to the protective glasses when using caustic liquids, dressing grinding wheels, or creating large flying chunks of rocks.

2. GRINDING WHEELS should not be run faster than the speeds recommended by the manufacture. If you are unsure, run the wheel no faster than 2,500 surface feet per minute (SFPM). POLISHING and BUFFING wheels are operated at a speed of 3,000 to 7,000 SFPM with 4,000 SFPM a good speed for most purposes. Stand to the side of the grinding machine when starting up and allow at least one minute of warm up time before starting to work. Do not let wheels become waterlogged. Start the water flow or drip after the wheel is up to speed, keep the flow adequate to keep the wheel and work cool and clear the removed material, and keep it running after the water is secured until the wheel is completely dry, otherwise it could have a heavy spot and be out of balance. An out of balance wheel could disintegrate upon restarting.

FACETING LAPS should be removed after spin drying, completely cleaned with a good dishwashing liquid to remove all residue, hand dried with a towel, and then placed back onto the spindle and spun at high speed until completely dry. This will keep the wheel from rusting and developing surface pits which can scratch, chip, or cause the work to separate from the dop, creating a "missile hazard".

Keep grinding wheels true. They will wear longer and there will be less chance of the wheel parting while in use. Grinding should be started near the center plane of the wheel and then moved back and forth across the face of the wheel so as to produce even wear. Do not force the work and take too heavy of a cut. The same process should be practiced with laps, using the full surface of the lap to produce even wear and avoid grooves to occur with time. Wear appropriate eye, hand, and body protection when using dressing tools. Follow the manufacturer's instructions for the dressing tool being used. Only the periphery or circumference of standard grinding wheels are designed for grinding. Never grind on the sides of a grinding wheel. Insure the work rest and peripheral guard are properly installed and only adjusted when the equipment is unplugged and not running.

3. BELTS and PULLEYS should be covered by guards to protect fingers and keep clothing from getting caught.

4. DOP STICKS or JIGS and FIXTURES should be used with small stones to protect the fingers and keep the stone from "flying off" if dropped or thrown by the wheel.

5. DUST MASKS or a SUCTION BLOWER should be used when dry sanding to avoid the inhalation of fine dust which can obtain silica or harmful compounds from the material being sanded. Silica can lead to SILICOSIS, a serious lung condition which can not be cured. It may well be prudent

to wear a chemical mask when WET GRINDING or SANDING if the water is being recirculated and could have dangerous compounds in it from the materials being worked or previously worked.

6. ALCOHOL LAMPS burn clear and can burn skin and set combustibles on fire if not secured when not in use. Do not overheat dop wax or the dops which can burn the skin and possibly damage the work. Overheated or old dop wax can be weakened and cause the stone to fly off the dop. Select the correct dop wax for the temperature required for the type of stone being worked.

7. CONTAINERS should be properly labeled. Putting polishing powders in baking powder cans, for instant, without a proper identifying label, can be dangerous. Tin Oxide can cause illness if used in place of baking powder.

8. OXALIC ACID greatly facilitates the polishing of agates, but is caustic to the skin as well as a poison if inhaled or ingested. Oxalic acid can also burn the cornea of the eyes, resulting in impaired eyesight. SULFURIC and NITRIC ACID are sometimes mixed with polishing compounds when faceting sapphire and may be used on lead laps. Use the following safety precautions when using caustic chemicals:

- A. Wear protective glasses with drip proof or mist proof goggles over them.
- B. Apply the polish to the wheel with a brush.
- C. Wear protective gloves and a rubber apron to protect the skin and clothing.
- D. Wash any contact of the compound with the skin immediately with soap and water. The application of a baking soda pack is advisable, or sponging with a solution of baking soda in water. If any gets in the eyes, thoroughly irrigate with water. Medical attention is also advisable.

9. POLISHING COMPOUNDS used today are relatively non-toxic to most individuals. The use of detergents added to the polishing compounds may cause a dermatitis in some individuals and can be avoided by using masks, goggles, gloves, and rubber aprons.

10. EPOXY RESINS are very irritating to the skin and may cause severe dermatitis if contact is not avoided. Acetone will remove resin from the skin.

11. Modern CUTTING OILS are a primary skin irritant and can be a potential fire hazard. Avoid using older cutting oils, as some contain dangerous chemicals that can lead to serious illness if inhaled, ingested or absorbed through the skin.

12. Do not overload ELECTRICAL OUTLETS or place them in areas where they will get wet. If in doubt, have the circuits checked by an electrician. AN ELECTRICIAN'S FEE IS A SMALL PRICE FOR ONE'S OWN SAFETY! Install switches and motors in a dry place, where water from grinding and sanding will not splash on them. The shut off switch or plug should be within reach of the operator. Have all motors and outlets grounded. In case of faulty wiring or a short circuit, the ground will absorb the shock, not the operator. Standing on a rubber mat will provide some protection, but the mat will be wet and still transmit electrical current, which could be fatal. Ground fault (GFI) circuit breakers and outlets are recommended over plug fuses and standard outlets. If a person suffers an electrical shock, it is important to remove them from the source with a stick or other non-conductive item before beginning resuscitation. Shutting off the power source, if known, will also decrease the hazard to others in the area. Get medical attention as some effects of electrical shock can be delayed.

13. Use proper lifting techniques while moving items in the shop.

Library Display Window:

The club has had a display themed "**Lapidary – How Do You Cut Rocks, and What Do You Do With Them?**" on display in two branches of the Erie County Public Library, and it has been very well received. Now we have been asked if we'd like to do a larger display using the whole of the large display window outside the Children's section of the main Downtown branch, for the month of May. This is a large space, and could perhaps hold areas of display for various aspects of the hobby, such as mineral collecting, fossil collecting, and jewelry making as well as lapidary. We will be talking more about what to put in the display over the winter, but start thinking about what you'd like to see and what you might have to contribute now, since it won't all fall together in a week or two.

We have also been asked if we would lead a craft project for the children on at least one Saturday during that month, and there are several ideas we've mentioned and probably more we'll think of, but we need to start discussing it to determine what materials we'd need and how much manpower it will take – and who's available. So you can also be thinking about that.

Rockhound TV This Month:

PBS: Nova: Volcano Under the City. (<http://www.pbs.org/wgbh/nova/volcanocity/>) Follow scientists as they seek "the holy grail of vulcanology": lava samples from the pit of Congo's very active Mount Nyiragongo, which endangers some two million people living in its shadow. Nov. 1, 8:00PM, 3:00AM; Nov. 5, 4:00PM, 2:00AM; Nov. 29, 9:00PM. **Beads, Baubles, and Jewels: Twists and Turns.** Saturday, November 5, 12:00Noon. Also listed as being on other Saturdays in November, unless it's "Lap Quilting" instead.

Discovery Channel: Walking with Dinosaurs: Dawn of the Dinosaurs. The plant-eaters of the Triassic fade into extinction as the age of dinosaurs brings predators like coelophysid to the food chain. But giant sauropods, cynodonts and reptilian predators alike are threatened when lightning sparks a wildfire. Nov. 2, 11:00AM; Nov. 5, 2:00PM. **Walking with Dinosaurs: Sea and Sky Creatures.** Follow the lives of dinosaurs living in the shallow sea surrounding Europe in 160 million BC and living on South American soil in 125 million BC. The birth of a baby dino tempts underwater predators, and flying reptiles vie for prey with 40-ft. wingspans. Nov. 2, 12:00Noon; Nov. 5, 3:00PM. **Walking with Dinosaurs: Deep Impact.** Below the Antarctic Circle, spring brings lush vegetation, as well as migrating predators. A carnosaur decimates a clan of leaellynasaura just as one mother tends to her nest of hatchlings. A state of hibernation called torpor sustains them during winter. Nov. 2, 1:00PM; Nov. 5, 4:00PM. **Walking with Cavemen.** Real cavemen's lives were nasty, brutish and short. Yet somehow, they managed to shape-shift into the most successful species ever known - Homo Sapiens. Alec Baldwin hosts this look at 3.5 million years of human evolution. Nov. 5, 9:00AM. **Walking with Prehistoric Beasts: The New Dawn.** Follow 24 hours in the life of a female Leptictidium, a small hopping insectivore, as she endeavors to keep her offspring safe from the dangers of the forest. The Leptictidium mother protects her young from giant birds and walking whales waiting in ambush. Nov. 5, 11:00AM. **Walking with Prehistoric Beasts: Land of the Giants.** The giant forests have started to open up and the wide-open spaces have allowed mammals to evolve into much larger forms. But size isn't everything. Follow the early years of a young Indricotherium as it encounters predators. Nov. 5, 12:00Noon. **Walking with Prehistoric Beasts: Mammoth Journey.** When South America eventually joins up with its northern neighbor, clashes between the two ecosystems are bound to occur. The native giant ground sloths and giant terror birds are joined by the incoming Smilodon, the largest of all the sabre-toothed cats. Nov. 5, 1:00PM. **Dinosaur Face-Off: Tyrannosaurus Rex vs. Triceratops.** Two hours, two battles, two winners. Which dinosaur was the baddest? Mechanical dinosaurs are built from fossil evidence, then the resulting robots fight to illuminate the nature and physiology of each species featured. TRex vs. Triceratops. Nov. 5, 5:00PM; Nov. 13, 10:00AM. **Dinosaur Face-Off: Velociraptor vs. Ankylosaur.** Two hours, two battles, two winners. Which dinosaur was the baddest? Mechanical dinosaurs are built from fossil evidence, then the resulting robots fight to illuminate the nature and physiology of each species featured. Velociraptor vs. Ankylosaur. Nov. 5, 6:00PM; Nov. 13, 11:00AM. **Before the Dinosaurs.** Welcome to Earth -- before the dinosaurs. The creatures may look strange, but they mark the beginning of life as we know it. Learn how some of the characteristics that helped them survive millions of years ago make humans what they are today. Nov. 5, 7:00PM, 11:00PM; Nov. 13, 3:00PM. **The Rise of Man.** From Homo Erectus, the first species to demonstrate signs of humanization, to Homo Sapien, follow the path of our direct ancestors as they migrate across the planet. Through socialization and technological advances, the Homo Sapien thrives. Nov. 5, 9:00PM, 1:00AM. **Pompeii of the East.** Almost 200 years ago, Mount Tambora in Eastern Indonesia unleashed a deadly volcanic eruption wiping out an entire ethnic group. Find out if this blast could have triggered an extraordinary and cataclysmic event□worldwide climate change. Nov. 6, 12:00Noon. **Extreme Engineering: Excavators.** At the world's largest open pit iron mine, a \$10 million new, custom-built super shovel is commissioned to meet a sudden worldwide surge in the demand for iron. Will miners find success with the fastest, most technologically advanced excavator ever made? Nov. 9, 11:00AM. **Diamonds in the Rough.** In Canada's North, ice coats the landscape for nine months of the year and the mercury sinks below minus 40 degrees. Here, two small time prospectors defy the odds and outwit a formidable rival to make one of the world's greatest diamond finds. Nov. 10, 11:00AM. **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. Nov. 17, 11:00AM. **Journey to the Center of the Earth - Part One.** Jules Verne's classic adventure book was an inventive story, but the Victorian explorers discovered more than they realized. Compare the fascinating revelations of modern earth science with Verne's astounding insight. Nov. 17, 12:00Noon. **Journey to the Center of the Earth - Part Two.** Jules Verne's fantastic story foresees many of the current scientific theories of paleontology and earth formation. Journey to the heart of a volcano into a world of floating continents and upside down mountains to learn how the earth works. Nov. 17, 1:00PM.

TLC: Nothing rock-related this month.

Travel Channel: 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. Nov. 6, 8:00PM, 11:00PM, 2:00AM. **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. Nov. 6, 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. Nov. 6, 10:00PM, 1:00AM. **Secrets of the Southwest.** Journey through a land of dramatic highlands and badlands and ancient panoramas. Explore the grandeur of Monument Valley, unravel the mysteries of a tropical oasis in the Grand Canyon, and follow dinosaur tracks in the Painted Desert. Nov. 8, 3:00PM. **Top Ten Wonders of the West.** Each year, visitors flock to the deserts, coasts and mountains to climb on, hike over and kayak across the wonders that abound in the West. From Yellowstone National Park to Yosemite and beyond, capture the region's most awe-inspiring features. Nov. 8, 7:00PM, 2:00AM. **Earth's Natural Wonders – 2.** Explore the powerful Niagara Falls and Australia's Great Barrier Reef. Visit the Grand Canyon, the world's finest example of water erosion, and then climb the highest mountain peak, Mt. Everest, which grows higher each year. Nov. 11, 12:00Noon. **Earth's Natural Wonders – 1.** Explore the world's most awe-inspiring natural wonders. Second in length to the Nile, the Amazon River is 60 times greater in volume of water. The ocean of sand known as the Sahara is the largest desert, and Angel Falls is the tallest waterfall. Nov. 11, 1:00PM. **Secrets of Glacier National Park.** Glacier National Park is a spectacular snow-capped chorus of peaks. Icebergs float in aquamarine pools and rivers wind through dense forests into pristine lakes and waterfalls. Experience a white-knuckle ride of alpine twists that cuts through the clouds. Nov. 11, 2:00PM; Nov. 16, 3:00PM. **Secrets of Zion & Bryce.** In Southwestern Utah, two of America's National Parks are spectacularly different yet equally awe-inspiring. Experience the mysterious labyrinths of twisted rock and the highest sheer cliff walls in North America. Nov. 11, 3:00PM; Nov. 21, 4:00PM. **Hidden Yellowstone.** Journey to the untouched heart of Yellowstone National Park, the nation's largest and oldest. Learn how this pristine land and its native inhabitants endure against nature's most ferocious elements -- ice, wind and fire. Nov. 11, 4:00PM. **Gold Struck.** With the right tools and a little luck, the average Joe can still strike it rich. Trek through the Australian outback, the wild hills of South Africa, and the urban markets of Istanbul and New York in search of the world's most precious metal. Nov. 14, 3:00PM. **Secrets of Gold.** The glitter of gold defines prized works of art, ornaments of royalty and coinage, as well as tools and devices essential to modern life. Explore fascinating stories and remarkable properties that make gold the most coveted of precious metals. Nov. 14, 4:00PM. **Stranded - with Cash Peters: Coober Pedy.** Visit Coober Pedy in the Australian Outback, where the climate is so harsh that half the town resides underground. After visiting the city's oldest church, meeting Crocodile Harry, and golfing on a grassless course, Cash will see what's really down under. Nov. 14, 9:00PM, 12:00Mid; Nov. 20, 4:00PM. **Secrets of Alaska's National Parks.** Alaska is one of the few remaining frontiers. Take a scenic expedition from ocean to mountains to tundra to ice, revealing the unparalleled beauty and unforgettable wildlife of this great land. Nov. 16, 4:00PM. **Alaska Wide Open.** Alaska is the largest state in the union, and the most extreme. For centuries, people have braved the elements in search of beauty, isolation and riches. From finding gold to traversing the land via dog sled, Alaska's treasures are revealed. Nov. 16, 7:00PM, 2:00AM. **Hidden Yosemite.** To discover the true beauty of Yosemite, trek by llama and mule to remote locations not mentioned in the guidebooks. Discover the secrets to ice climbing, snow camping and snow shoeing, and make reservations for a traditional Christmas dinner. Nov. 21, 3:00PM. **Natural Wonders of Hawaii.** From lush tropical jungles to fiery volcanic peaks, no place else on earth offers a more diverse array of natural treasures than the Hawaiian Islands. Experience these spectacular sights up close and uncover the fascinating stories behind them. Nov. 21, 5:00PM. **Secrets of Niagara Falls.** Discover the geographical facts on what makes Niagara Falls so unique. Find out how the raging waters are transformed into limitless, electrical power for cities and states throughout the region. Nov. 21, 6:00PM. **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. Nov. 21, 7:00PM, 2:00AM. **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. Nov. 24, 9:00PM, 12:00Mid, Nov. 27, 1:00PM. **Stranded - with Cash Peters: Quartzsite.** Some fly. Some drive. Some RV. Quartzsite, Arizona is home to few - until fall. From November to February this desert town explodes into the fourth largest city in the state. Cash drops in to discover why Quartzsite is more than a rock-hounder's paradise. Nov. 28, 9:00PM, 12:00Mid.

History Channel: Yellowstone National Park. Our first and foremost national park, Yellowstone was established in 1872 by Congress. Today, it encompasses 2.2-million acres and draws over 3-million visitors yearly. But it's under constant threat from pollution, urban encroachment, and the same tourists that have made it so valuable. We join ecologists, as well as the National Parks Service, in their search for ways to preserve this

vitaly important ecosystem, while keeping it available to visitors for years to come. Nov. 4, 6:00AM. **Save Our History: Gold Rush Ghost Towns.** Join us as we travel back in time to ghost towns in Montana and northern California and bring to life the gold-rush era of the mid to late 19th century and explore how gold was mined, what challenges prospectors faced, and what technology they used to hit pay dirt. Combining archival material, original footage, and demo scenes with host Steve Thomas, we meet gold-rush historians and aficionados, set off an explosion in a gold mine, and walk the streets of lawless towns that boomed fast and went bust even faster--where fortunes were made and killings and robberies were almost daily events. It's a fascinating journey back in time that brings gold-rush ghost town history to life. Nov. 4, 7:00AM. **The Wrath of God: Mount Vesuvius: The Fury Within.** Rising 4,000 feet above Italy's Campania region, Mount Vesuvius is one of the world's most active volcanoes, unleashing its lethal fire time and again. We examine the 79 AD eruption that destroyed the city of Pompeii, sealing the volcano's place in history; a 1631 eruption, at the height of the Black Plague, when the fiery mountain killed around 18,000; and a 1944 eruption that killed 26 as WWII raged across Southern Italy. Is Vesuvius in a resting period or gearing up for another explosion? Nov. 4, 8:00AM, 2:00PM. **Modern Marvels: Salt Mines.** It's in our blood, sweat, and tears. Join us as we dig up salt mining's history--from the "white gold" on the table to the oceanic and underground deposits whence it came. Though today we take salt for granted, most life depends on it. Roman soldiers were sometimes paid in it--hence the word salary. And many slaves died procuring it. Nov. 17, 9:00AM, 3:00PM. **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. Nov. 17, 10:00AM, 4:00PM. **Modern Marvels: Silver Mines.** It was called the "mother lode", a deposit of silver so massive that it would produce \$300-million in its first 25 years of operation, establish Nevada as a state, and bankroll the Union Army in the Civil War. Named after an early investor, we'll see how the Comstock Lode, discovered near Virginia City, proved to be a scientific laboratory from which vast improvements in mining technology and safety were pioneered, including innovations in drilling, ventilation, drainage, and ore processing. Nov. 17, 11:00AM, 5:00PM. **Modern Marvels: Diamond Mines.** Half a mile below the earth's surface, men mine for rough diamonds--a pure carbon substance. Brilliant when cut and polished, they are marketed as the most precious gem in the world. From the earliest mines of the 4th century BC to today's technological wonders in South Africa, we explore the history and technology of the diamond mine. Nov. 17, 12:00Noon, 6:00PM.

Upcoming Shows in the area:

We are heading into the show-slowdown season, with only these few more shows left before Christmas within daytrip distance – then after the holidays, everything looks toward Tucson, or at least warmer climates, until spring. So get in your show shopping this month, or you'll have to wait!

Nov. 11-13, Washington, PA - Fair & Balanced Promotions. Annual Jewelry, Mineral, and Fossil Show. Washington County Fairgrounds, Bldg. 4. 11th & 12th, 10-6; 13th, 10-5; gems, minerals, jewelry. F.M. Zambrotto, 304-825-6845, frankowrap@juno.com.

Nov. 12-13, Pittsburgh, PA - Bead Mercantile Shows. Allegheny Valley Holiday Inn, 180 Gamma Dr. 423-639-7919, fax 423-638-5676, dawn@beadmercantile.com, www.beadmercantile.com.

Nov. 18-20, Pittsburgh, PA - Carnegie Museum of Natural History. Gem and Mineral Show: Silver Spectacular. 412-622-3131, www.carnegiemuseums.org/cmnh/minerals/gemshow. ****NOTE**** *The club will be facilitating carpooling to this show, so check your calendar for when you can go, and let us know if you can drive / how many riders you can comfortably take with you.*

Nov. 25-27, Hamburg, NY - GEMSTREET USA. Gem, Mineral, Jewelry, Fossil, and Bead Show. Erie County Fairgrounds, 5600 McKinley Pkwy. 25th, 11-7; 26th, 10-6; 27th, 11-5. Jane Strieter Smith, 216-521-GEMS, spi@stratos.net, www.gemstreetusa.com.

These are only the shows within day-trip distance, so if you are traveling outside our area (and many of us will be), check the Rock and Gem Magazine Calendar (<http://www.rockngem.com/showdates/showdates.shtml>), and the Lapidary Journal Calendar (<http://www.lapidaryjournal.com/cal1.cfm>).

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 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.