THE ROCKFINDER

Michiana Gem & Mineral Society
Tom Noe, Editor
305 Napoleon Blvd.
South Bend, IN 46617

MICHIANA GEM & MINERAL SOCIETY, INC.

AFMS

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THE ROCKFINDER

JANUARY, 2001

MICHIANA GEM & MINERAL SOCIETY

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The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques.

General meetings are held the fourth Sunday of each month, 2:00 PM, EST, at Our Redeemer Lutheran Church, 805 S. 29th St., South Bend, IN. Regular exceptions include May (third Sunday), July (no meeting), August (club picnic) and the November/December meeting and Christmas party. Board meetings are held before the general meetings. The annual club show is Labor Day weekend.

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Yearly Membership Dues (Payable by January 1)
_____Individual $10.00 per year
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Please indicate areas of special interest.
General Geology____ Beads ____
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The Michiana Gem & Mineral Society, a not-for-profit organization, is affiliated with the Midwest Federation of Mineralogical Societies and with the American Federation of Mineralogical Societies.

The Rockfinder is published monthly except July and August. Editor, Tom Noe, 305 Napoleon Blvd., South Bend, IN 46617 (ph. 289-2028). Co-editor, Herb Luckert, 221 Marquette Ave., South Bend, IN 46617 (ph. 282-1354). Reporters, Bob Heinek, Herb Luckert, club members.

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Signed_____Date _____

THE ROCKFINDER

Newsletter of the Michiana Gem & Mineral Society

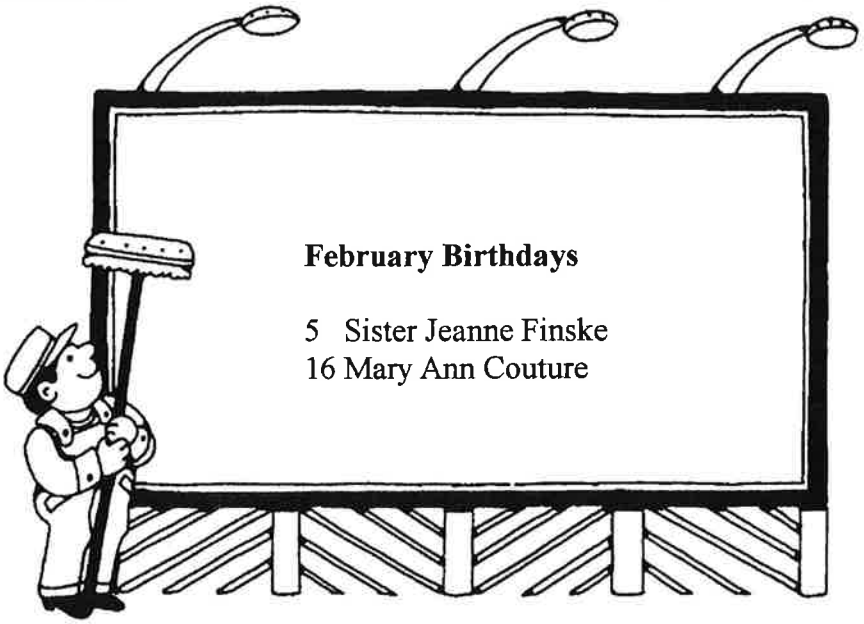
Volume 41, Number 1 **January, 2001**

Meeting: Sunday, January 28
Doors open 1:30 p.m.
Meeting at 2:00 p.m
Guests are always welcome.

Place: Our Redeemer Lutheran Church
805 S. 29th St. (29th & Wall)
South Bend, IN

Program: We will be making drawstring rock bags for use at the club's Labor Day show. Members bring cloth remnants and scissors; everything else will be provided.

Hosts: David and Sally Peltz



February Birthdays

5 Sister Jeanne Finske
16 Mary Ann Couture

UP AND COMING

Mar. 3-4: Geodeland show, University of Western Illinois, Macomb, IL.
Mar. 9-11: Rockford, IL, show.
Mar. 17-18: Stark County Gem & Mineral Club show, Canton Civic Center, Canton, OH.
Mar. 17-18: Cedar Valley Rocks & Minerals Society show, Cedar Rapids, IA.
Mar. 24: Metro Rock Swap, 23400 Wick Rd., Taylor, MI.
Mar. 24-25: Badger Lapidary & Geological Soc. show, Monroe, WI.
Mar. 31- Apr. 1: Columbus Club and Licking County Club combined show, Newark, OH.
Mar. 30-Apr. 1: MAPS Expo, Macomb, IL, fossils only.
April 6-8: South Bend Gem Show, Century Center, South Bend.
May 4-6: Kalamazoo Geological & Mineral Society show, Fairgrounds, Kalamazoo, MI.
May 5-6: Greater Cincinnati Gem, Mineral & Fossil show, Cincinnati Convention Center, 5th & Elm.
June 8-10: Rocky Mountain Federation show, New Mexico.
June 11-17: AFMS/South Central Federation show, Texas.
June 16-17: Michigan Geology & Gemcraft Society Rockhound Seminar, Carter Middle School, Clio, MI.
June 22-24: California Federation show, California.
Jul. 13-15: Eastern Federation show, New York.
Aug. 20-Sep. 1: Northwest Federation show, Washington.
Aug. 31- Sep. 2: Michiana Gem & Mineral Society show, Century Center, South Bend.
Sep. 7 - 9: Midwest Federation show, Wisconsin.
Nov. 2-4: Southeast Federation show, Mississippi.

DON'S COLUMN

From Don's Fractured Rocks. Hi, y'all. By the time you receive this in the newsletter we will be on our way to the land of rockshows and rockhounds. We promise to take pictures of our side and rearview mirrors and anything else that moves or doesn't!

As this is my first editorial as president, I wish to thank you for nominating me and I hope I can live up to your expectations. I hope I can be just half as good as Margaret and Bob have been, (thank you, Margaret, for all the hard work you have done for the club). You and Bob have held the club together for so long. I hope with everyone's help we can continue to grow even larger and better.

As for the January meeting, there are some changes. I have been told that we are going to have a sewing "gemboree" for grab bags. Diane says she needs various sizes of material of different designs, at least 8x10 inches. She says she has the cord for the bags, but she says she needs some scissors to cut the material. We were going to have a book auction but there are about 40 books still checked out and we can't finish the inventory until everyone returns them. Please return the books and you may check them out again if you want. We will not be selling all the books. We will be selling the duplicates and some of the older books that haven't been used in a long time and some outdated books. By the way, if you have some books that you would wish to donate for the silent auction or sale, please get ahold of me or Diane. Thanks, Don.

DUES ARE PAST DUE!

Please renew immediately, using the instructions on the inside cover of the *Rockfinder*. You will not receive the *Rockfinder* after this month unless you are still a club member.

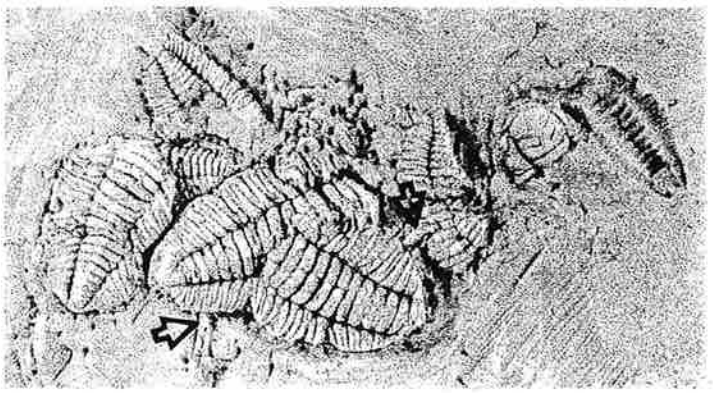
BRING BOOKS BACK TO THE LIBRARY!

Librarian Diane Gram can't proceed with her update of the library until all the books are accounted for. Please check your shelves to see whether you have any club books at your home. Bring them in, or call Diane with the information. About 40 are checked out, according to the records.

LAPIDARY SEMINAR: USE OF MACHINES TO SHAPE ROCKS

An invitation from Tom Noe

Several of the new members mentioned to me at the silent auction that they would like to get information about the use of polishing and grinding machines: tumblers, saws, machines for making cabochons, etc. For anyone interested, I'll host an open house starting at noon on February 3. I have a bunch of different machines and can describe what it takes to do the various lapidary activities (carving, grinding, slabbing, sawing, polishing, etc.). If you are interested, call first so I know about how many wi. be coming (289-2028). I live at 305 Napoleon, in the area just south of the old ND golf course. I remember when I started out that I had no idea what all these machines were for, so I'd be happy to pass along any information if I can.



GARNET, THE BIRTHSTONE OF JANUARY

By Don Church

The garnet is a silicate with a hardness of 6.5 to 7.5 and is a very durable stone. It is a secondary gemstone and has a wide variety of colors, from white to black, colorless, pale yellow, green, brown, cinnamon brown, rose and many more shades of red.

Garnets may be found almost anywhere, in granite, mica schists, limestone and dolomite. Garnet is usually found in rounded grains in streams and make up most of the black and red sand of the lakes and seashore. Garnets are of different varieties and their names are pyrope, almandine, spessartine, uvarovite, grossular and andradite. Garnets are a fairly inexpensive gemstone and have a wide variety of colors and clarity. Garnets in recent years have become a more popular gemstone due to recent finds and varied beautiful colors, and so the price naturally also rises. The most prized of the garnets is the tsavorite. It is considered rare and, of course, expensive as the size of the stone and clarity increases.

Garnets had their heyday in the Victorian era. They were used as medicine according to their color; red for blood disorders or anger during battle. They would confer invulnerability in battle. In the 1890s British army surgeons were surprised to find garnet crystals imbedded in their patients. It was believed that the hunzas loaded their ancient flintlocks with garnet bullets for their special powers.

Garnets, because of their lack of cleavage, make them highly suitable as an abrasive material. Most of your better sandpaper and tumbling grit is garnet.

The most important garnet deposits are at the Gore Mountains in the New York Adirondacks but there are many more fine places to dig and hunt for garnets.

CHRYSOCOLLA

By Mae Winiams

The Greeks called chrysocolla "chryskolla,"from "chrysos" for gold and "kolla" for glue. This indicates that the ancients smelted the ore to make a copper alloy of gold much as we do today.

The popularity of chrysocolla as a gem material was not widespread until a long time later. Professional mineralogists thought of chrysocolla as a pretty blue copper ore. They identified it as a somewhat brittle, hydrous silicate of copper or a secondary mineral formed by the action of air and water on primary sulphide ores. Malachite, a green carbonate of copper, also frequently occurs with chrysocolla, as do small amounts of azurite, another copper carbonate.

To rockhounds today, chyrsocolla is that beautiful blue agate-like material best suited for turning into gems and jewelry. Actually, gem-grade chrysocolla is a copper-stained chalcedony and was probably formed by percolating waters that picked up silica and copper and later deposited it in seams and fissures.

In Arizona, gem-grade "silica" has been valued as a gemstone for many years. The Old Dominican Mine at Globe had started as a large silver producer, but later turned out to be a very rich copper mine, and produced some of the finest gem chrysocolla. Tiffanys of New York bought a large quantity of this blue material to cut into gemstones. This was at the turn of the century.

Another large producer of gem chrysocolla was the Live Oak Shaft of the Inspiration Consolidated Copper Co. Many large chunks of gem quality chrysocolla were found after each blast. After World War II, they decided to open-pit the area near the Live Oak Shaft, and thousands of pounds of chrysocolla were found. Most of this went to the crushers and on to the leaching plant for recovery of the copper content.

Many rockhounds and miners soon found that they could sell the "Blue Rock" for money, and the operators of the mine had to place guards about the area. Anyone caught picking up chrysocolla was fired on the spot. Nevertheless, a lot did find its way to the market. 1954 was the last time any good chrysocolla was produced at that mine. Perhaps someday another huge deposit of the blue rock will be located. It is prized today as a gemstone, a title it truly deserves.

The Petrified Digest (Sept., 1995)

IGNEOUS ROCK LIST

by Jane Huelsmeyer

Igneous rocks form from cooling magma. If magma erupts from a volcano and cools on the surface, extrusive rocks form. If the magma is trapped in the crust and cools there, intrusive rocks form.

INTRUSIVE ROCKS

(cool slowly, underground, crystals are visible)

PERIDOTITE - olive green crystals.

GABBRO- all or mostly black crystals.

DIORITE - mixture of black and white crystals.

GRANITE - three types of minerals (quartz, white or pink feldspar, and other minerals like mica and hornblendes).

EXTRUSIVE ROCKS

(cool fast on the surface, microscopic crystals)

BASALT - dull black or reddish brown, heavy rock, some may have bubble holes.

ANDESITE - dull gray, heavy rock, may be light or dark gray.

RHYOLITE - dull light-colored rock (any color but dark gray or black), heavy rock. Water solutions may form bands of color or color patterns.

OBSIDIAN- shiny, glassy rock with smooth surfaces and sharp edges. Used by Indians out west for arrow-heads.

PUMICE - white to light gray rock, light weight, so full of holes it may float.

SCORIA - black to reddish brown, light weight, so full of holes it may float.

ASH - sand to flour-size particles, usually light gray. Ash cemented together is called TUFF.

From *Gem City Rock News*, via *News Nuggets* (Nov., 1998)

HOW MANY MINERALS DOES IT TAKE TO MAKE A LIGHT BULB?

BULB - Soft glass is usually used, made from silica, trona (soda ash), lime, coal and salt. Hard glass, made from the same minerals, is used for some lamps to withstand higher temperatures and for protection against breakage.

FILAMENT - Usually made of tungsten. The filament may be a straight wire, a coil or a coiled coil.

LEAD-IN WIRES - Made of copper and nickel to carry the current to and from the filament.

TIE WIRES - Molybdenum wires support lead-in wires.

STEM PRESS - The wires in the glass are made of a combination of a nickel-iron alloy core and a copper sleeve.

FUSE - Protects the lamp and circuit if the filament arcs. Made of nickel, manganese, copper and/or silicon alloys.

GAS - Usually a mixture of nitrogen and argon to retard evaporation of the filament.

SUPPORT WIRES - Molybdenum wires support the filament.

BUTTON AND BUTTON RODS - Glass, made from the same materials listed for the bulb (plus lead), used to support and to hold the tie wires placed on it.

HEAT DEFLECTOR - Used in higher wattage bulb to reduce the circulation of hot gases into the neck of the bulb. It's made of aluminum.

BASE - Made of brass (copper and zinc) or aluminum. One lead-in wire is soldered to the center contact and the other soldered to the base.

From *The Lithophile* (July-Aug., 1998)

Q: How many programmers does it take to change a light bulb?

A: Can't be done. It's a hardware problem.

STABILIZING POROUS STONES

If you would like to try your luck at stabilizing a porous stone such as turquoise so it can be cut and polished, then Silvery Colorado River Club offers these instructions: Take a jar with a lid; add 1 pint of acetone (do this outdoors!), add the contents of both the resin and the hardener tubes of epoxy glue. mixing well (suggest 330 water-clear epoxy). Ac well-dried stones; cover and let stand at least 4 days. Remove stones; allow a week to dry. They should now be stabilized and ready for working.

Hellgate Breezes (Jan., 1999)

MINERAL FACTS

Did you know, that if you can't grow it, it has to be mined or recycled?

Did you know that, in Pre-Columbian times, indigenous people in North America mined turquoise, jet, opal, copper, silver, coal, obsidian and other igneous rocks, asbestos, salt and sodium sulfate, as well as other minerals? Turquoise, jet, opal, copper and silver were mined mostly for decorative use. Coal was mined for fuel. Obsidian and other igneous rocks were mined to make projectile points, mortars and pestles, grinding stones, stone axes and other tools. Clay and asbestos were mined to make pottery, salt was used as a preservative and for flavoring, and sodium sulfate was used as a purgative.

Did you know that many of the clear juices, such as apple juice, and the wines that you may drink are filtered through skeletons? The skeletons of diatoms, microscopic single-celled plants that live in fresh or sea water, are extremely intricate and are made of silica. When large numbers of these skeletons are gathered, cleaned and packed together to form a filter, their intricate geometry will trap the very small particles that make juices or wines look cloudy.

Of the 193,000 metric tons of gold discovered to date, 62% is found in just four countries on earth. All the gold discovered thus far would fit in a cube 55 meters on a side.

Over 50% of all the zinc and lead discovered to date has been found in just four countries on earth.

In the average 3,000-pound car there are 139 pounds of aluminum, 28 pounds of copper and 20 pounds of zinc. Catalytic converters for cars used 660,000 troy ounces of platinum in 1986. Platinum is also used in the synthesis of MTBE, a gasoline additive used to replace lead and reduce carbon monoxide emissions.

The mineral barite is used to add weight to oil-well drilling mud to keep oil in the drill hole and prevent oil from gushing out of the hole.

Diatoms, microscopic single-celled plants that live in fresh or seawater, have extremely intricate shells made of silica. When large numbers of these shells are deposited, diatomite is formed. When diatomite is cleaned and packed to form a filter, the intricate geometry of the shells will remove impurities as small as 0.1 micron from the water without the use of chemicals. Diatomite can also be used as a non-chemical insecticide, the sharp silica shells cut and shred the insects.

Author unknown, *OreCutts* (Apr., 2000)

Q. What is the biggest jewel in the world?
A. A baseball diamond.

GLOSSARY OF ROCKHOUND TERMS

By Jim Toney, Westville, IN

BOULE - A dish that holds fruit on the table.
CABOCHON - A small French taxi.
CRUSTACEAN PERIOD - The time it takes to form a scab on your pea soup.
FIELD TRIP - When you fall down outside.
FLINTKNAPPING - A sleepy stone.
FORTIFICATION - A large gulp of good whiskey.
GARNET - Something you catch a long fish in.
GEODE - A poem to G.
GRINDING WHEEL - A bearing going out in your old truck.
LAPIDARY - What the cat does at milking time.
MAGMA - Mag's mother.
MALACHITE - One of the tribes of Israel.
MEXICAN LACE - Fiesta clothing.
POTSHERD - A marijuana cigarette butt.
PSEUDOMORPH - Anything pretending to be a morph.
RHODOCHROSITE - Highway where crows can be seen.
ROCK HAMMER - The drummer in a modern band.
SEMI-PRECIOUS - Daddy's little girl.
SLAB SAW - A machine that slices ham.
THE SWISS CUT - A way of glorifying hamburger.

SAFETY TIP:
MINERAL CLEANING—OXALIC ACID
By John Betts, jhbnyc@aol.com

Anything that has the word "acid" sounds ominous. But oxalic acid is easy to find, use and is the safest for the home. In fact, it is found in many vegetables, including spinach. It dissolves iron oxide (brown) stain on all minerals. Specimens collected at Phoenixville, Ellenville, Case Quarry, NH smoky quartz and many others clean up beautifully with oxalic acid. Zeolites do not respond as well, so you should test beforehand on small specimens to see how they react. To make this as simple as possible, I will give a step-by-step guide to its use. Do not take shortcuts or make substitutions. Purchase a one-pound box of oxalic acid (OA) powder at your local hardware store in the paint department or at a paint store. It is used as wood bleach and will be labeled as such. The most common brand is Rainbow.

Fill a plastic container 3/4 full with hot tap water. Pour in the OA crystals and stir for five minutes. Be careful not to inhale any powder when adding the crystals. Once the OA is dissolved, top off the container to a full gallon. Label the container and put it out of reach of children or pets.

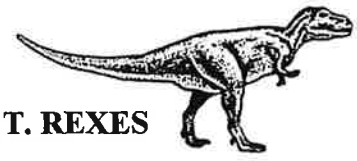
When you are ready to use it, place your specimens in a plastic container and add enough OA solution to cover them. Set side for several days. After the iron color has disappeared, then you can remove the specimens (with gloves on) and wash under running water for three hours. Then soak in clean water for a day, changing the water as often as possible.

Heat speeds up the reaction, as does agitation. If you have a hot plate and can set up outdoors or in an area with good ventilation, repeat step 4, heating the solution to bath water hot (110 degrees). Never boil. You will find that an hour in hot solution will usually do the trick. Best of all is an ultrasonic cleaner with a built-in heater. Sometimes only 30 minutes is necessary. But you should not put the OA directly into the stainless steel basin. Make a double boiler type of arrangement by partially filling the ultrasonic cleaner basin with water. Then place your specimens and the OA solution in a plastic container or heavy-duty plastic bag that is suspended in the water.

You can reuse the solution over and over. As it dissolves more and more iron, it will get darker, often taking on a green color. After it gets really dark I would discard it and mix a new batch. Safety is important. OA solution is highly toxic. It can be absorbed through the skin and builds up in your organs cumulatively. Same goes for the fumes, which is why you never boil the solution and always have proper ventilation when using the heated solution. Be careful not to spill the solution on porcelain and keep away from food preparation areas.

In spite of the fuss, this is the best all-around method of cleaning minerals. I keep a five-gallon bucket with a tight-fitting lid ready. I drop in the specimens as I collect them. It always works and the large volume does not exhaust quickly. Mastering this technique will provide an important tool in your mineral-cleaning and preparation arsenal.

Earth Science News (No date)



HORNER'S FIVE T. REXES

The big news from Jack Horner is his discovery of no less than 5 *T. rexes* this summer in Montana. At first, I thought that they were all from one bone bed, but it turns out that they are from 5 different sites that are dated over a 1.5-million-year period. The largest is called C rex (after his wife Celeste who found the bones) and is said to be 10% bigger than Sue. They have partially articulated hips, some ribs and teeth with part of a jaw. B rex was found in a 30-foot cliff and they dug out some foot bones and parts of a vertebra and rib. L rex consists of a dozen disarticulated vertebrae. G rex consists of a femur, tibia, pubis, dentary, a tooth and ribs. J rex has some disarticulated skull bones. The bad news is that all of these beasts won't be removed from th rock until the season next summer. So it will be a while before the impact of these finds can be assessed.

"Karen's Comments,"
Earth Science News (Dec., 2000)

MINERALS FROM KIDNEY STONES

By Dr. Bill Cordua

Rockhounds are often told that they have rocks in their heads. It turns out that the human body does make lots of minerals. Bones and teeth are two obvious examples. We may argue that these aren't minerals by strict definition, because they are made by living organisms, not inorganically, but they are otherwise the same as minerals found in rocks. When I was a graduate student at Indiana University, my office mates were helping with a research project on minerals in kidney stones (which are concretions technically called urinary calculi). They received daily packages of rather disgusting samples from many hospitals which they saw fit to open and analyze in my presence. One of my old office mates, Dick Gibson, wrote up a summary of the minerals they found.

The most common minerals were, not surprisingly, phosphates. These include apatite, brushite and whitlockite. Apatite is the most common mineral in many kidney stones, forming crumbly to solid white, yellow or brownish masses. Various forms of apatite were interlayered, like the layers in hailstones. Brushite occurs as tabular to bladed yellow to white crystals typical of kidney stones formed under more acidic conditions. Whitlockite forms amber to brown coatings on some stones, and is particularly common in prostatic stones.

Two calcium oxalates, whewellite and weddellite, are abundant in kidney stones. Outside the body, these minerals are rare, found most often on the deep sea floor, in coal seams and in sedimentary nodules. In kidney stones the whewellite forms globular to radiating masses of crystals, while weddellite forms sharp dipyramidal crystals up to 5 mm. long (ouch).

Magnesium phosphates, such as struvite and newberryite, are rare minerals generally found outside the human body only in bat guano. They are apparently deposited in kidney stones by particular bacterial infections. Struvite forms colorless crystals lining cracks in the stones formed under alkaline conditions. Newberryite forms pale green to white spherules on the surface of some stones.

Some minerals found in kidney stones are more familiar to rockhounds. Calcite and aragonite are rare, as granular material intergrown with the phosphates in kidney stones. Stones from the human pancreas are often calcite. Halite was found a few times and could be a contaminant from salty fluids in which the stones are stored during shipping. Gypsum was found three times as white crystals encrusting the oxalates.

Why study the minerals in kidney stones? Their composition gives doctors important clues to their treatment and prevention. For example, certain people consistently produce stones of a certain mineralogy. Sometimes these stones can be dissolved or even prevented by certain treatments. Anyone who has ever suffered from these knows that an ounce of prevention is worth a ton of cure!

Reference: Gibson, Dick, 1974, "Descriptive Human Pathological Mineralogy," *American Mineralogist*, Co. 59, pp. 1177-1182.

The Lithnics (Oct., 2000)

WHY WEAR HARD HATS?

By Mel Gries

The average safety hard hat weighs about 14 ounces. The average man's head weighs 14 pounds. So there's an ounce of safety for every pound of head—provided the head protection is worn properly and maintained.

The skull, under normal circumstances, protects the brain. But when a possibility of injury from falling or flying objects exists, additional protection is required.

The force of a falling object can be calculated approximately by multiplying the weight of the object by the distance of its fall. A 3.5 ounce washer, for example, falling 32 feet will generate a force of 7 foot lbs. of impact. Should the washer strike an uncovered head, the force of the blow would be equivalent to 560 lbs; when a hard hat is worn, the force transmitted to the neck and spine is reduced to 127 pounds.

A test in a temperature of 110 degrees showed that the inside temperature of a cloth cap and a felt hat was two degrees cooler than the prevailing outside temperature. The same test revealed the inside temperature of a hard hat varied from 5 to 12 degrees cooler.

ARCH-FACTS
By John R. Washburn

Havana-Hopewell/Ohio Hopewell
"The Obsidian Mystery"

It has been a while since I have submitted an article to the *MWF Newsletter*, but some of you may remember that I have been involved in several geo-archaeological investigations to track down the source of lithic materials. Although my interest in sourcing materials continues, this article is at a different level, for the source of the obsidian is known, but the difference in use by the two groups mentioned above remains a mystery.

The name Havana-Hopewell is the term used in Illinois to describe a particular set of traits manifested by a group of prehistoric native Americans that arose around 500 BC and then vanished by 500 AD. The term Ohio Hopewell is used to describe a similar if not the acme of these traits at a similar time in Ohio. These two separated centers shared such traits as the use of burial mounds and log tombs in which to inter the dead. Other funeral practices that are mirror reflections are the inclusion of exquisite artifacts and exotic materials placed with the dead. Lithic artifacts of a similar style and material also transcended the spatial distance. Pottery vessels of similar material, form, and decoration are shared. However, for a least one item there is an extreme difference: the use of obsidian.

The Ohio Hopewell, based on extensive investigations, had a large supply of obsidian in excess of 500 pounds and manufactured bifaces, or points (arrowheads) from it. The Illinois Havana-Hopewell, based on investigations to date, had little obsidian and manufactured only scrapers and uniface blades from it. However, as the research by Dr. Michael Wiant of the Illinois State Museum progresses, some amateurs have provided a few points made of obsidian and found in Illinois. The difference again being that most, if not all, obsidian artifacts found in Ohio are found in association with burials and none have been found with this association in Illinois. Stranger still is the hypothesis, based on scientific facts, that all the obsidian was secured at one time from a single source.

Based on chemical analysis, the source of all the obsidian found to date was the same locality in Yellowstone Park, the Obsidian Cliffs. Chemical analysis also indicates that it was all gathered at the same time. This would mean that a large canoe or canoes were employed to bring it down the Missouri River to the Mississippi and then up the Ohio River. The mystery continues as to why the first procurement was made and why none followed. And then the question remains, why the difference in use between the two groups that otherwise shared so much in common?

Maybe one of you will find the answer. In the meantime, remember that, if you have a Midwest obsidian point that is not made from the Obsidian Cliffs material, then you probably have a new point!

MWF Newsletter (Oct., 2000)

THE STONE AGE
by Michael J. Papay

It's a strange thing that when we think about cavemen we think about their dependence on rocks but when we think about modern man the notion o. rocks never comes to mind. Cars, jets, television and computers--they come to mind but not rocks.

The funny thing is that today, and each and every day, we modern humans dig up more rocks than all the cavemen ever did in ancient history, yet nobody thinks of this as the stone age. In all our history we've never made more use of rocks than we do right now. Never.

It's a shame more folks don't realize it. The car they're driving came out of the ground. So did the road they're riding on. So did the building they work in. So did the glass, aluminum, steel and copper in their house.

This is the stone age. We'd like to hide that fact from ourselves — unless of course, you're a rock-hound. Then, perhaps, you won't. Perhaps, just as me, you'll see that the earth at our feet is a thing of wonder, a thing to ponder, a place to explore. And by looking down your mind may soar.

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