

St. Croix Rockhounds  
Doug Olson, Editor  
211 Interlachen Way  
Stillwater, MN 55082



**First Class**

**November, 2007**

Please send exchange bulletins to:

Doug Olson, Editor  
211 Interlachen Way  
Stillwater, MN 55082

November 13th – !!! CHANGE !!!  
THIS IS THE SECOND TUESDAY OF THE MONTH



St. Croix Rockhound's

**LEAVERITE NEWS**

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Member of:



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## ST.CROIX ROCKHOUNDS

**MEETINGS:** Club meetings are held the third TUESDAY of each month, at Stonebridge Elementary School on W. Elm. St. in Stillwater, MN at 7:15 P.M.. Everyone is welcome.

**MEMBERSHIP:** Full membership for a single person over 16 is \$7.50 per year. Family membership is \$10.50 per year.

### OFFICERS:

President	Pete Rodewald	(715) 425-5561
Vice President	Brad Bonse	(651) 439-6832
Secretary	Doug Olson	(651) 430-9035
Treasurer	Lin Rawlings	(651) 735-4691
Program Committee	Mark Rasmussen	(651) 275-0607
	Bill Cordua	(715) 425-9544
	Victor Martinsen	(715) 247-3700
Show Committee	Bill Cordua	(715) 425-9544
Refreshments	Freya Kask	(651) 777-6371
Librarian	June Young	(651) 429-3887
Historian	John Parsons	(651) 257-2724
Sunshine Committee	Marie Newlander MN	(651) 439-7809
Tour Director	Susan Dustin	(651) 430-3933
Liaison Officer	Freya Kask	(651) 777-6371
Newsletter Editor	Doug Olson	(651) 430-9035

The purpose of our organization is to bring together rock and mineral enthusiasts on a regular basis through membership and through pooling of individual knowledge, talents and skills, to improve the lapidary skills of participating members. Affiliation: American Federation of Mineralogical Societies and Midwest Federation of Mineralogical and Geological Societies.

**COMING UP! - November 13<sup>th</sup>:** St. Croix Rockhounds club meeting will be at Stonebridge Elementary School on W. Elm. St. in Stillwater, MN in the cafeteria. Meeting time will be 7:15 pm.

**Yippee! We have a chance to find our wonderful Lake Superior agates and more! Pete Rodewald has made arrangements for us to hunt in a gravel pit in WI somewhere near Hudson. We'll be meeting on Sat. Nov. 3 at 9:00 at the Fleet Farm in Hudson. Park near the Fleet Farm gas pump area, and we'll follow Pete to the gravel pit. Bring a lunch and drinks for yourself also. Keep your fingers crossed for a sunny day so the agates show up really well! Please call me if you have ?. I hope to see you all that day. Susan A. Dustin**

### COMING ATTRACTIONS

**November 3<sup>rd</sup>:** St. Croix Rockhounds field trip near River Falls, WI. Meet at Fleet Farm in Hudson, WI near the gas station at 9 am.

**November 13<sup>th</sup>:** St. Croix Rockhounds meeting at Stonebridge Elementary School in Stillwater, Minnesota.

**December 4<sup>th</sup>:** St. Croix Rockhounds x-mas party held at the Old Country Buffet near the Maplewood Mall, starting at 6 pm.

**November 17-18<sup>th</sup>** Dinosaur Daze, 1-4pm, free family dinosaur activities at Kenosha's Public Museum and Dinosaur Discovery Museum in Kenosha, WI.

**December 8-9<sup>th</sup>:** Glacial Drifters 3<sup>rd</sup> annual show in Sheboygan Falls Municipal bldg in Sheboygan Falls, WI. Contact Kevin Ponzio at 920-980-6413 for info.

**December 15-16<sup>th</sup>:** Anoka county Gem & Mineral Club show in Faribo West Mall, Faribault, MN

**May 17-18<sup>th</sup>:** Wisconsin Geological Society Gem, Mineral and Rock Show at the Muellner Bldg In Hart Park in Wauwatosa, WI.

**June 20-22, 2008:** MWF convention in Lincoln, NE.

# Minutes of the St Croix Rockhounds October 16<sup>th</sup>, 2007

**Meeting was called to order** by president, Pete Rodewald at 7:25 pm.

**Treasurer's Report**-Lin Rawlings treasurer's report was approved as read.

**Minutes corrections:** Brad Bonse was not ill from ag chemicals, it was Pete Rodewald. Minutes were approved as corrected.

**Program Committee:** no report

**Show Committee:** no report.

**Sunshine-** Phyllis White is out of the nursing home and back into her apartment.

**Refreshments-** Helen Betlach and Sue Dustin have volunteered brought goodies tonight. November snacks are pot luck.

**Field Trips-**Susan Dustin has planned a trip November 3<sup>rd</sup> to a gravel pit near Pete Rodewald's house in River Falls. Meet that morning at the Hudson WI Fleet Farm near the gas station at 9 am.

**Old Business** - none

**New Business** – The November meeting has been rescheduled to the second Tuesday of the month to avoid conflicting with Thanksgiving and the club x-mas meeting. The idea of scheduling all meetings on the second Tuesdays was floated but it was noted that our advertising with business cards stated the meetings are the third Tuesday.

Club X-mas party is scheduled for December 4<sup>th</sup> at the Old Country Buffet near the Maplewood Mall starting a 6 pm.

**Door prizes** were won by: Joe Moore, Brad Bonse, Cheryl Kopp, Brian Alshouse, Kerry Rasmussen, Carol Jensen and Floyd Kimball.

DUES ARE NOW DUE – need to be sent in to the Federation in mid January.

**The meeting was adjourned** at 7:28 pm for the program "Looking for agates at a secret location on the Lake Superior shore"

**Submitted** by Doug Olson, secretary.

## November's birthstone is Topaz.

The Topaz symbolizes good fortune and longevity. According to legend, this golden stone possesses the power to cure many diseases.

**No one has admitted to me that they have a November birthday or anniversary – ed.**

## Announcements

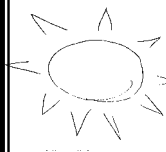
November meeting is the  
**SECOND Tuesday!!!**

November refreshments are  
Pot Luck – bring your  
favorites.

**Field Trip** – November  
3<sup>rd</sup> to a gravel pit for agates  
in Wisconsin. Meet at  
Hudson Fleet Farm parking  
lot near the gas station at 9  
am.

*If paying dues by mail,  
send to treasurer:*

**Lin Rawlings**  
**850 Woodduck Rd**  
**Woodbury, MN 55125**



-if you have news -  
good or bad please  
call Marie at (651)  
439-7809.



# Primitive Casting

A low-tech casting method that would amaze you with its simplicity and the sophistication of its results is method used in West Africa for casting gold, bronze, etc. The models are often just beeswax, collected directly from the bees. Rolled into very thin wires and tiny balls, these things are coiled into the most delicate and beautiful forms.

After the models are made and sprued, they get “invested” in a mix of plain old clay and organic matter like dried grass, etc. (*The initial coat over the model is fine clay, no straw.*) Then it is coated with successive layers to form a mold and the end of the sprue is built up with additional beeswax into a crucible shape as well. After the clay has thoroughly dried, this thing is placed into a fire (*charcoal*) and the wax is burned out. Next, the thing is cooled slowly. Casting metal is placed in the open crucible shape, and more clay is built up over it to close the cavity. You end up with a dumbbell shape, one end of which is a hollow cavity with the casting metal enclosed in it, the other end containing the model cavity, with the two being connected by a sprue. Sounds complicated, but do keep in mind that so far, all the casting materials are either dug out of a beehive or out of the ground, except perhaps for the metal and that was, too, I guess.

Anyway, now this thing, after again drying the clay, is placed back in the fire, but this time with the metal containing end down. The straw/organic content of the clay makes the mold porous enough to allow fumes to exit, as well as providing a nice reducing atmosphere for the melting metal. When metal is melted, judged by the color of the fumes and flames surrounding the mold, the whole dumbbell is simply inverted. The molten metal runs down into the mold area by gravity alone. A look though any text showing the historical Ashante cast gold and bronze will demonstrate just how well this technique works. The reducing nature of the mold keeps metal cleaner than our normal investing procedures, and the high metal and mold temperatures allow a complete fill, even fine sprues and very delicate filigree models. *by Peter Rowe on Ganokin Online - [www.ganoksin.com](http://www.ganoksin.com) via Stoney Statements 10/06*

## Window on the Origin of Ichthyosaurs By George Rothdrake

The ichthyosaurs were among the most distinctive reptiles from the time of the dinosaurs. Totally adapted to life in the sea, they developed a streamlined body with dorsal fin, converted their legs to flippers, and even gave birth to live young instead of laying eggs. In doing so they adopted a shape assumed at other times by dolphins, billfish and certain sharks, but unlike these other groups, the ichthyosaurs have eluded efforts to pin down their ancestry.

Some help on this front arrived amidst some new observations of a large ichthyosaur skull collected in Spitzbergen in 1969. From the Lower Triassic nearly 250 million years ago, the fossil belongs to an early member of the group, and is special because the lower back portion of the cheek is well preserved.

The remains hint that two “windows” may have perforated the skull, one above and one below a connected pair of bones in the cheek. This contrasts with previous studies that cast doubt on the prior existence of a lower window. Reinterpretation of the related early ichthyosaurs *Utatsusaurus* and *Grippia* similarly suggests the presence of a lower window that disappeared in later forms. If this is so, the ichthyosaurs may have descended from the diapsids, a group that includes lizards and snakes, crocodilians, dinosaurs, and indeed the majority of all reptiles, living or extinct.

The fossil record, however, has yet to provide a particular species that would make a convincing forerunner for the whole group, and the authors caution us “The search for ichthyosaur ancestors is therefore far from over.” Let the search continue.

References: Maisch, Michael W. and Andreas T. Matzke. 2002. The skull of a large Lower Triassic ichthyosaur from Spitzbergen and its implications for the origin of the Ichthyosauria.

*from The Trilobite* Sept. 2002 via Stoney Statements 1/2007

## **Are Carbonado Diamonds Out of This World? -Dr. Bill Cordua, U. Wisconsin- River Falls**

Carbonado diamonds are shiny, gray to black, rounded, relatively porous masses of fine-grained diamond, mixed with graphite and other rare minerals. They were first found in 1843 in placer deposits in Bahia, Brazil. Amazingly, these aggregates of interlocking grains are slightly harder than coarser diamond crystals. So, although not at all gemmy, they became prized for their use as an abrasive. Although most are from Brazil, carbonado finds have also been made in widely scattered localities such as Venezuela, Borneo, the Central African Republic and Russia. The carbonados from these locations also have a lot of chemical similarities, such as their carbon and nitrogen isotopes, suggesting a common origin. They are also quite different from ordinary coarse dark diamonds, generally referred to as "bort". Carbonado has never been found in kimberlites and lamproites, which are the usual host rocks for diamonds. It is only found in sediments or sedimentary rocks that are made of fragments brought in from elsewhere and reworked and re-deposited by rivers and other surface processes. What could be the source of this strange material?

One clue to carbonado's origin is the presence in these rocks of very odd minerals such as silicon carbide, pure titanium metal, pure silicon metal and iron-chromium alloy. Such materials form only under extremely reducing conditions. Such conditions may occur very deep in the earth but carbonado has never been found in the rocks that originate at those depths. A second way to get such environments on earth is around certain very acidic volcanic vents. But carbonados have never been found in regions with such environments either. The other possible source for carbonado involves meteors. Impact of such large asteroid-size impactors can produce the pressure necessary to convert terrestrial carbon to diamond. This has occurred in several places, including the famous Popigai crater in Russia. Here an enormous impact about 35 million years ago produced jillions of microscopic diamonds scattered in the rock. Impact diamonds are very tiny, but carbonado fragments can weigh more than a pound. In addition, some high-pressure features expected in impact rocks are missing in carbonado.

Recent research suggests that the carbonado samples may not be formed by a meteorite impact - they may BE fragments of a meteorite. This work, done by a scientific team lead by Jozsef Garai of Florida International University, was a thorough infrared analysis of carbonado. They found distinct geochemical features widespread in carbonado that do not resemble natural earth materials at all, even those formed deep in the earth's mantle. The findings pointed to formation in a very hot region dominated by abundant hydrogen. They propose such a place is an "interstellar environment" - a star or planet outside our solar system. Carbonado most resembled pre-solar diamonds found in meteorites as well as synthetic diamonds produced on earth by carbon vapor transport. Some of the hydrocarbon impurities in carbonado resemble those seen in spectral studies of stars and nebula. An intriguing possibility is that diamonds could be formed as part of the last stage of common star's life, when the star has used up most of its hydrogen and helium and is cool enough for some of the components to condense and crystallize. This would be a natural analog for industrial diamond growth by carbon vapor transport. These are part of the so-called "crystalline white dwarf stars" that astronomers are just beginning to study. Were these to break up, fragments would disperse and some could wind up on earth. Being so refractory, they would survive coming through our atmosphere, and if the fragments were small, their impact on the surface would not involve the high-pressure stresses experienced by larger objects.

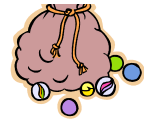
While the origin of carbonado is still not proven, it's neat to think that fragments of a cooled star could survive, find their way across billions of miles to earth and be preserved for us to find. These would truly be "falling stars."

### References:

- Garai, J.; Haggerty, S.; Rekhi, S. and Chance, M., 2006, "Infrared absorption investigations confirm the extraterrestrial origin of carbonado-diamonds" *The Astrophysical Journal Letters*, 653, L153, 7 p.
- Heaney, Peter; Vicenzi, E. and Subarnarekha, De, 2005, "Strange diamonds: the Mysterious Origins of Carbonado and Framesite", *Elements*, vol. 1, p. 85-89.
- Kawaler, Steve and Dahlstrom, M., 2000, "White Dwarf Stars", *American Scientist*, vol. 88 #6, p. 498-508.

# Marbles

by Jud Milburn



Marbles are, without doubt, among the oldest – if not the oldest – play-thing in human culture. Clay and stone marbles are found in Indian graves all over America. The ancient Chinese worked agate and jade into marbles. Glass and clay marbles have been found in Egyptian tombs.

The Romans introduced them into England. In modern times the production of marbles centered during the 19th century in the Austrian Alps and southern Germany; stone, agate, alabaster, onyx and glass were the common material used. Imitations in the U.S. and elsewhere followed. Hand methods of making marbles tended to disappear when marble machines were invented about 1900.

Chalk marbles were used by poor boys of the 18th and 19th centuries because they were cheap, being rough molded and dried. They are general gray-white or yellow-white, made of compacted calcium carbonate with varying amounts of silica, feldspar, and/or other material impurities. The basic calcium carbonate is derived chiefly from fossil seashells. Blackboard chalk is made of refined calcium carbonate.

Clay marbles were very inexpensive and common in the 19th century. They are found in great numbers on civil war battlegrounds, lost by soldiers who whiled away spare time playing games with them. They were rough shaped from wet clay, mostly hydrated silica of aluminum, and fired in kilns; some were left in natural colors, and others were dyed solid, mottled, spotted or marked with lines. Ohio was one center of their production.

Stone marbles were made in great numbers in the German provinces of Saxony and Thyringen in the 19th century. They were rounded mechanically by being rubbed between larger heavy plates of stone and wood. The common stone material was quarried out of local deposits of calcareous limestone. Most of them show the layers of sedimentary deposits. Agates are among the most beautiful of marbles, showing solid or banded colors of red, brown, white, and green chalcedony. This semi-precious material is fine grained and takes a high polish. Some agates, depending on the luck of the cut, show white or yellow spots at one or both ends. These were called “bull’s eye”. They were made mostly in Germany.

Like all “earth marbles, pottery marbles or Benningtons were crude and irregular. They are distinguished by small “eyes” over their surfaces caused by bubbles forming on the colored glaze of brown, blue, green, or mottled. The marble’s base is clay, mostly hydrated silicate of aluminum. They were thought to be made by the Bennington Pottery Co., but most of them were made in Germany in the 19th century. They are being reproduced today. They were known as “Bennies”. China marbles are made of mostly porcelain or pure white clay, the material of which fine dishes, cups and saucers were made, hence, the name “china”. China marbles are found in several forms; unglazed marked, glazed plain, and glazed marked. The various marks were hand painted – series of lines or parallel bands in colors of black, blue, red, or green, bull’s eyes, and floral designs. They were often called “chinas” and were made in the last century.

Swirls, among the most beautiful marbles, were hand-blown glass and have a pontil at both ends. The large ones were not for boy’s games, but for decoration. Most of them were made in Germany. The glass consists of silicon dioxide, boric oxide, aluminum oxide, etc.. Each marble was originally a segment of glass cane which had been built up of colored rods embedded in clear or colored glass. One end of the cane was heated, one segment twisted in a spherical shape, then broken off. The pontils were ground down when the marble had cooled.

Sulphides are unusual marbles made in Germany between 1860 and 1920. They are clear glass with a center figure made of china, clay, gypsum, kaolin, or similar material. The white figure is surrounded by air, which gives it a silvery appearance.

The first glass marble made by machines competed with the attractive agates and were called “imitation agates” or acro agates. The colors were dark red, brown, green, blue, and purple mixed with small streaks of white. There were also plain white mixed with clear glass. These first appeared in the 1890’s. Milk glass was a popular substance for Victorian bowls, water glasses, kerosene lamps, etc., so it is not surprising that it was used for marbles. Milk glass is an opaque or translucent white glass made from silicon dioxide or boric dioxide mixed with stannic oxide. They are still manufactured but the ones shown on exhibit (at Stillwater, OK, Public Library in 1982 – ed.) are 50-100 years old. Opalescent glass marbles are a refinement of milk glass. These marbles are trans-opals. They come in various colors, mostly varying intensities of white. In the exhibit you will notice the red glow in the shadow of each marble under light. *from The Shawmish Roktawk 11/96 via Show-me Rockhounds 8/05 via Pick & Shovel 10/05 via Achates 12/05*

## Interesting Tidbits –Geology by Greg McGill

Maybe you have wondered where geologists get the names of formations and geologic ages. It's not very puzzling at all; it was done to honor some now-forgotten pioneer in the early days of geology. Here is a brief rundown.

**Cambrian** comes from the name of an ancient Welsh tribe and was named by Adam Sedgwick & Patrick Murchison in 1835.

**Silurian** comes from another Welsh tribe and was named by Sedgwick and Murchison in 1835.

**Ordovician** comes from yet another Welsh tribe but was named by Charles Lapworth in 1879 to cover the interval between Cambrian and Silurian.

**Devonian** comes from Devonshire where the distinctive fauna were first studied. This was jointly named by Murchison and Sedgwick in 1840.

**Carboniferous** means “coal-bearing” and was named for the strata in north-central England that contained coal. The name was given in 1822 by William Coneybeare and William Phillips.

**Mississippian** and **Pennsylvanian** – refer to the lower and upper Carboniferous respectively. These names are not used outside America and have only been recognized by the USGS since 1954

**Permian** is named after the province of Perm in Russia. Murchison suggested the name in 1841.

**Triassic** refers to the three-fold division seen in rocks of similar age. Fredrich von Alberti, an official in the German salt industry, suggested the name in 1834.

**Jurassic** was named after the Jura mountains in northern Switzerland by Alexander von Humbolt in 1795. Lepold von Buch, in 1839, redefined the strata and kept the name.

**Cretaceous** comes from the Latin for “chalk” and refers to the strata encircling the Paris Basin. Not all strata of this age contain chalk but Omalius d’Haloy did not know this in 1822.

**Tertiary** is a bit confusing. In 1760 Giovanni Arduino classified rocks into three main categories. His Tertiary category included “weakly consolidated stratified rocks usually containing numerous shells of marine origin” and volcanic rocks. The current constituent series - Paleocene, Eocene, Oligocene, Miocene and Pliocene - have their type sections in France, so the Italian-given name is kept to honor Giovanni. *from the Rockpile 5/04 via Glacial Drifter 3/00 via Quarry Quips 1/04 via Stoney Statements 8/05*

## A LITTLE IRON GOES A LONG WAY

People are always searching for ways to counteract the effects of the rusting of iron and of iron rust stains. However, it was not always that way. Ancient peoples often used iron rust, or ocher, in their decorations.

Iron rust is very common in nature and the iron oxide (of which rusts consists) or sometimes iron atoms themselves, are often responsible for the coloration of some of our most important gemstones. Some minerals that are used for jewelry have iron as a principle constituent. Hematite is 70% iron, and pyrite (marcasite) is 40% iron. Most of the agate and jasper that contains yellow, brown, and red colored zones are colored by the iron that is included in them.

In some gemstones, however, very small traces of iron within the crystal structure of the mineral can produce dramatic changes in color. A few tenths of a percent of iron within the crystal can turn an ordinary looking mineral into a beautiful gem that has both esthetic and monetary value.

A few tenths of a percent of iron in the lattice structure of quartz produces both the citrine and amethyst. If citrine is irradiated, it becomes amethyst, and if amethyst is heated it is altered to citrine. This process is reversible.

Beryl is another gemstone in which traces of iron can influence the color. In aquamarine, a few percent of iron causes both the green and the blue color that can be found in the gemstone, depending upon where the iron atoms are located within the crystal lattice. The green color can be removed by heat, leaving only the blue color. This is more pleasing by present day standards. The green color can be replaced by irradiation if desired.

The color of golden beryl also is caused by a small percentage of iron atoms, in fact, the same atoms that sometimes make aquamarine look green. It can be bleached to a colorless beryl (goshenite) by heat and then returned to its golden hue by irradiation.

When one tenth to three tenths of a percent of the mineral corundum is iron atoms, it produces a yellow gemstone known as yellow sapphire. If a like amount of the metal titanium is also present, we have the more desirable and better known blue sapphire.

There are many other gemstones and minerals that owe their color to traces of iron, sometimes by itself and sometimes in combinations with other elements. *from THE ROADRUNNER AUGUST 2006, Richard Knox in Tumble Rumble, others via Glacial Drifter 3/96 via the Rockpile 1/04 From Rockbuster News via The Shawmish Roktawk 6/03 via Stoney Statements 10/06*

# Stolen Gems *St Croix Rockhounds Leaverite News*

**OXIDIZING** Silver has a natural characteristic of oxidizing with time. However, in order to hasten this process, we can bring it about artificially by crushing a piece of Potassium Sulphide about the size of a ¼ inch cube and stirring it into 1 ½ cupfuls of water. Heat this solution gently but do not allow it to boil. Place our silver item in the solution and allow it to remain until the silver is dark grey. Remove with tweezers and rinse off with cold water.

Now take wet pumice and remove the oxidization from the edges of the silver. The resulting contrast between the natural colour and oxidized silver is very pleasing. The decorative structure is emphasized and can look very attractive. *from Fossil Trails - December 1986 via Calgary Lapidary Journal 12/06*

**Fiberglass Eraser** - A good gadget to clean and polish silver can be purchased at your local office supply store. Ask a clerk for a fiberglass eraser. It is sort of a brush and gets down into the smallest cracks, doing a beautiful cleaning job. This is especially fine for intricate silver jewelry that you have hand cast. *from Pegmatite - Oct. 1999 via Calgary Lapidary Journal 12/06*

**CAUTION** Use a cloth or paper towel to wipe off your piece of silver. **Do Not use your finger.** If you get the small fiberglass particles on your finger and then rub your eye - you can be in serious trouble. Believe me, I know --- Been there, Done that and will never do it again. *By TM from Calgary Lapidary Journal 12/06*

**Hand lotion cleans grease!** One day a lapidary using his slab saw accidentally squeezed his wife's hand lotion instead of the soap dispenser and found that the oil washed off in one application and his hands smelled like lotion instead of cleaner! The person in question used Jergens extra dry lotion and rinsed in plain water. *from Skagit Gems jan/feb 2002 via the Opal 4/07 via the Rockcollector 5/07*

**If a crystal** is broken and the break is irregular, it is said to have a fracture.

If the break occurs along a plane and parallel to a crystal face, it has cleavage.

Cleavage is caused by the internal structure and varying strength of bonds between planes of different atoms, e.g. the cleavage of mica into thin sheets is called perfect cleavage. *from Cabber Grabber via Dust & Grit 01 / 87 via Calgary Lapidary Journal 5/07*

**Installing a new diamond wheel:** When installing a new diamond wheel, turn the motor on to run the arbor, and using a pencil, just touch the rotating wheel.

Shut the motor off and check to see if the pencil mark completes the entire circumference of the wheel. If not, loosen the wheel and rotate it. Check again and find a spot that the wheel is running true to the arbor. If the wheel is not true, it will cause the subject material to "bounce" and wear the wheel unevenly. Wheels are very expensive. *-by Bill Horton, from MWF Newsletter 11/94, via SCFMS Newsletter 1-2/95*

## Pete Rodewald's Copper Agate



**TO CLEAN OBSIDIAN NEEDLES,** wash them in Castile soap. Use a toothbrush to get the clay off. Never put obsidian in detergent as it will leave a white film, which is very hard to remove on the stone. To remove iron stains, soak in oxalic acid, wash well afterwards. *from Jaspers Jargon 2/88, via Rock Rattler 10/89*

*Life is sexually transmitted*

*How is it one careless match can start a forest fire, but it takes a whole box to start a campfire.*

*Whenever I feel blue, I start breathing again.*

*from Mahtowa Area Times via Hidden Treasures 6-8/06*