MWF News

FEBRUARY 2009 - ISSUE NO. 479

WEB SITE - www.amfed.org/mwf

Official Publication of the Midwest Federation of Mineralogical and Geological Societies
Member of the American Federation of Mineralogical Societies

President
Rose Blue
16155 Shurmer Road
Strongsville, OH 44136
(440) 238-4412
jblue@n2net.net

1st Vice President
Judith Washburn
107 Deer Creek Road
Rochester, IL 62563
(217) 498-7713
jrwashburn1@msn.com

2nd Vice President
J.C. Moore
25235 North Illinois 97
Cuba, IL 61427
(309) 789-6501
damoores@winco.net

Secretary
Donna Moore
25235 North Illinois 97
Cuba, IL 61427
(309) 789-6501
damoores@winco.net

Treasurer
Norman Hanschu
6607 Sturbridge Lane
Canton, MI 48187
(734) 455-8596
nwhanschu@prodigy.net

Editor
Vacant

PRESIDENT'S MESSAGE

February is upon us, and it's time to think of the upcoming Spring Meeting on March 7, 2009. The meeting will be in Richmond, Indiana, in conjunction with the Eastern Indiana Gem & Geological Society Annual Show at the Wayne County Fairgrounds, 861 N Salisbury Rd, on March 6-8. The club has graciously offered the use of their clubhouse at 5199 National Rd. West (US 40) for our meetings.

Now is the time for all State Directors and Permanent Committee Chairs to make plans to attend so we will have a quorum to conduct the business of the Federation. The host club will appreciate it if you can bring a display for their show.

There are still several open chairs among the Permanent Committees.

- Continued on Pg. 3

WHAT'S INSIDE?

WHAT'S HAPPENING?

FEBRUARY

9: Lincoln NE. Lincoln Gem & Mineral Club, Inc. Geology Day. Pioneer Park Prairie Bldg, W Van Dorn & Coddington, Sun, 1:00 - 4:00 PM. CONTACT: Terry Anderson, 1113 County Rd. 2500, Wilber, NE 68465, (402) 826-1169

FEBRUARY - MARCH

28-1: Roseville, MN. Anoka County Gem & Mineral Club Show. Har Mar Mall, 2100 Snelling Ave.; Sat. 10-6, Sun. 11-5; free admission; gems, minerals, jewelry, fossils, agates, collectibles; CONTACT Martha Miss, 8445 Grange Blvd., Cottage Grove, MN 55016, (651) 459-0343; e-mail: rockbiz8@cs.com

MARCH

13-15: Jackson, MI: Michigan Gem & Mineral Society 47th Annual Show, "Mine in '09." Jackson County Fairgrounds Fair Event Center, 200 W. Ganson St.; Fri. 10-7, Sat. 10-7, Sun. 10-5; adults $3, seniors $2, students 50 cents, children free; vendors, demonstrators, beading mini classes; CONTACT James Bretes, 3022 Francis St., Jackson, MI 49203, (877) 872-8471; e-mail: crossroadspottery@sbcglobal.net ; Web site: www.geocities.com/michgemandmineralsociety/

14-15: Macomb, IL. Geodeland Earth Science Clubs, Inc. Annual Show. W.I.U. Student Union Ballroom, Murray St., Sat.10:00 AM - 6:00 PM, Sun. !0:00 AM - 5:00 PM. CONTACT: Dennis Bomke, dbomke@comcast.net

21-22: Cedar Rapids, IA. Cedar Valley Rocks & Minerals Society 46th Show. Teamsters Union Hall, 5000 J St. SW; Sat. 8:30-6, Sun. 9:30-5; adults $2, students (12-18) 50 cents, youth groups and children under 12 free (with adults); programs, demonstrations, Pebble Pit for kids, silent auctions, displays, 20 dealers, special exhibit theme "Crystals." CONTACT Leslie Blin, 505 5th Ave., Marion, IA 52302, (319) 377-3339; bblin@bser.com

28-29: Lincoln, NE. Lincoln Gem & Mineral Club Show, "Gembalaya." Pershing Center, 226 Centennial Mall S.; Sat. 9-6, Sun. 10-5; adults $5, children under 12 free with adult; rocks, gemstones, minerals, fossils, beads, jewelry, exhibits, displays, demonstrations, programs, youth activities, CONTACT Charles Wooldridge, Lincoln Gem & Mineral Club, P.O. Box 5342, Lincoln, NE 68505, (402) 416-3233; e-mail: mamamar@windstream.net ; Web site: www.lincolngemmineralclub.org

28-29: Monroe, WI. Badger Lapidary & Geological Society Show, "Driftless Treasures of the Badger State." Monroe High School, 1600 26th St.; Sat. 9-5, Sun. 9-5; dealers, minerals, fossils, gems, jewelry, speakers, educational exhibits, wandering "Rock Wizard," demonstrations, hourly door prizes, club sale table, kids' games and Fish Pond, specimens from around the world; CONTACT David Zimmerman, (608) 921-0206; e-mail: David@showchair.com ; Web site: www.MonroeRockClub.org

APRIL

4-5: Canton, OH. Stark County Gem & Mineral Club Show, "A 'Flintastic' Weekend." Stark County Fairgrounds, 305 Wertz Ave N.W.; Sat. 10-6, Sun. 10-6; collectors' displays, dealers, minerals, fossils, finished jewelry, lapidary arts, mineral identification, children's games, silent auction, door prizes; CONTACT Dave Behringer, 2930 Mason St. SW, Massillon, OH 44646, (330) 830-1578; e-mail: darojreg@att.net

4-5: Marion, IL. Southern Illinois Earth Science Club Show. Williamson County Pavilion, 1602 Sioux Dr.; Sat. 10-6, Sun. 10-5; free admission; rocks, gems, minerals, fossils, shells, lapidary, fluorescent displays, silent auctions, door prizes. CONTACT Mike Chontofalsky, (618) 532-0455; e-mail: mchontofalsky1019@charter.net

5: Waterloo, IA. Black Hawk County Gem & Mineral Society Annual Show. Waterloo Center for the Arts, 225 Commercial St.; Sun. 12-5; free admission; demonstrations, displays, fish pond, silent auction, jewelry, vendors; contact Dave Malm, (319) 266-6433

President's Message

Continued from Pg. 1 -

Please volunteer to serve or notify me of potential candidates. My thanks to 1st Vice President, Judith Washburn and Secretary, Donna Moore for editing the *MWF Newsletter* until a new editor is found.

Rose Blue

MINERALOGY NEWS ...

MWF Mineral News

by Kevin Ponzio, MWF Mineralogy Chair

Hello everyone. As of November 1, 2008, I began my term as the new Mineralogy Chairperson. I would like to begin by expressing my gratitude to all the members for allowing me this opportunity. I would also like to thank the Executive Committee for their warm welcome and support.

I am encouraging every member to participate in the study, collecting, and enjoyment of minerals. You can help by joining in the production of a "MWF Virtual Museum." Here is how it works. Each member can send mineral photos and a brief description, including their name or club, state, and quarry/mine, and date it was collected. Minerals that are purchased can be submitted too. As the data comes in, it will be organized by state and quarry/mine, and then put on compact disc. The discs will become part of the MWF Virtual Museum library for each club to use as needed. The photos have to be in a JPEG format so that all computers and DVD players will be able to view them. All sizes of minerals are acceptable. Even photos of specimens in situ that you are unable to collect can make a fine addition. If you don't have a digital camera, it is most likely that another club member has one and could help you photograph your specimens.

- Continued on Pg. 6

Olivine

by David F. Hess, MWF Mineralogy Assistant

Olivine, correctly known as the olivine group, is a widespread mineral in high-temperature igneous and metamorphic rocks, especially the dark colored igneous rocks, peridotite, dunite, basalt lavas, gabbro, and high temperature marbles poor in silica. The term olivine (and the older variant, olivene) comes from the olive-green color of most occurrences; another older equivalent term is chrysolite. Peridot is the name of gem olivine. Olivine is a magnesium-iron silicate, with complete substitution of magnesium for iron in the structure. The formula is $2(Mg,Fe)SiO_4$. Olivine, which contains over 50% magnesium, is termed forsterite, named for Johann R. Forster, a German naturalist who sailed with Captain James Cook. If it contains more than 50% ferrous iron, it is termed fayalite, named for an island in the Azores on which it occurs. Purer forsterite occurs mainly in marbles and meteorites, fayalite in rare granites and gabbros. Most olivine in igneous rocks is intermediate in composition. Manganese and minor amounts of nickel, tin, and titanium can substitute. Manganese olivine is called tephroite and is noted from Franklin, NJ, and Sweden. Olivine is commonly partly or completely altered to minerals of the serpentine or talc groups.

Olivine forms in the orthorhombic crystal system, but rarely in well-formed crystals except phenocrysts (larger, earlier-formed crystals) in basalt. Cleavage is fairly distinct on the 010 form,

- Continued on Pg. 4

Olivine

Continued from Pg. 3 -

but less so on 100 form. Olivine is brittle with conchoidal (curved) fractures, also visible under the microscope. Hardness on the Moh's scale is 6.5-7. Luster is generally glassy. Color ranges from pale or gray-green in forsterite through yellow-green and olive-green to brownish, yellow-brown, or grayish-red in the iron-rich end fayalite. Streak (powder) is colorless to white or yellowish. Olivine is generally transparent or translucent. Crystal habit may be flattened, equant, or rarely elongate. A granular, massive habit is most common. Olivine is usually identified by its color and occurrence – only some apatite (which is softer and in the hexagonal crystal system) and epidote (which is generally a metamorphic alteration) are similar. Green glass is dark under crossed prisms of the polarizing microscope.

The major uses of olivine are as refractory (high temperature) brick for furnaces and as the gem mineral peridot. It is also used for sandblasting.

Olivine commonly occurs in the ultramafic (super dark) peridotites and dunites and the mafic (dark) basalts and gabbros and only the most unusual or special occurrences can be described. Forsterite is widespread on the earth in marbles, so only a few well-known localities are listed. Fayalite is restricted to unusually "dry," potassium-rich granites, syenites, or gabbros, which have little magnesium, calcium, or sodium. North American locations will be listed first for olivine.

Olivine is a common mineral in basalts and peridotites in the eastern United States where it is generally replaced by serpentine or talc in part, but does not usually occur in spectacular specimens. At Thetford, Orange County, VT, it is conspicuous in basalt boulders. Although mostly serpentinized, some olivine was found at the Tilly Foster Mine, Brewster, NY, and Cedar Hill Quarry, Lancaster County, PA. Forsterite is located at Hunting Hill Quarry, Rockville, Montgomery County, MD. The dunites (pure olivine peridotites) of North Carolina are green, granular olivine rocks. The best-known locations are near Jackson, Webster County in NC, the Daybook Mine near Bakersville in Mitchell County, at Mars Hill, Madison County, and the Goldsmith Mine, Democrat, Buncomb County. Partly serpentinized olivines are found in kimberlites near Masontown, PA; western KY; Riley County, KS; and Crater of Diamonds and Pike County, AR. Forsterite grains are known in the marbles near Franklin and Sparta, NJ. Near Duluth, MN, olivine is seen in the olivine gabbro known as troctolite. Fayalite is found in granites and syenites near Essex, MA.

The western United States has several important occurrences. The troctolite of Kiowa County, OK, on Powwow Mountain, contains olivine up to 12% of the rock. The best olivine as gem peridot occurs near Holbrook, AZ, on anthills together with pyrope garnets, where the ants have "mined" the peridot crystals so that Navajo prospectors can readily collect these and the garnet crystals for jewelry. Similar crystals are also found on the reservations north of Window Rock, AZ; on the New Mexico-Arizona line, especially in McKinley County, NM; near Red Lake and Green Knobs; and in San Juan County. Peridot also occurs in southern New Mexico at Kilbourne Hole, Dona Ana County, where crystal grains to 2-3 carats are known. All these occurrences are volcanic, kimberlite pipes. Sub-angular aggregations of olivine are present in basalt of the San Carlos Indian Reservation, Gila and Apache Counties, AZ. Good examples of these were seen on sale at the Petrified Forest National Park shop in summer 2004. A similar occurrence is at Dish Hill, a breached volcanic cone near Ludlow, San Bernardino County, CA.

Forsterite is known in marbles from Riverside, CA (Crestmore Quarry); the northern Tobacco Root Mountains, MT (personally collected); marbles near Helena, Montana; Bisbee, AZ; and elsewhere. Forsterite also comes from the Ready Cash Mine, Cypress Island, Skagit County, WA, and the Mountain Pass Mine, San Bernardino County, CA. Fayalite granites are known from the Front Range in CO.

Small grains of olivine are abundant on Timothy Mountain near Lac La Hache, British Columbia, in western Canada. Olivine is also known from the Jericho kimberlite pipe in the Northwest Territories, Canada. Fayalite is found in microscopic crystals in obsidian from Obsidian Cliffs, Yellowstone Park and Coso Hot Springs,

- Continued on Pg. 5

Olivine

Continued from Pg. 4 -

Inyo County, CA. Of course, the island of Hawaii is world-famous for olivine crystals in basalt and some of this is of the quality of peridot – some Hawaiian peridot was in a tie clip I once owned. Olivine is almost the sole constituent of the famed "green beaches" near Hilo. Ordinarily, olivine is broken down quickly by weathering, but it is so abundant here, that it persists. Similar beaches of black lava granules are common as well.

Peridot in large crystals of gem quality was first known from St. John's Island in the Red Sea, Egypt, in Africa. Today, this location still yields fine, gemmy, yellow-green crystals. It is the chief source of gem peridots, with Burma and the Arizona-New Mexico and Hawaiian occurrences next. Olivine occurs as phenocrysts in basalts at various points in the African Rift Valley in western Central Africa. Palabora Mine, Limpopo, Palobora Province, South Africa, has produced some olivine.

Europe has numerous locations, too many to list all of them. On Vesuvius and Mount Somma, near Naples, Italy, forsterite is found in the lava and ejected blocks of metamorphosed limestone. Germany is well known for the olivine bombs from Dreiser Weiher near Daun in Rhineland; at Laacher See, Rothenberg Mountain; and elsewhere in the Eifel, Rhineland district within sanidine (high temperature potassium feldspar) bombs. In Baden near Sasbach, basalt contains an iron-rich olivine (hyalosiderite) with composition towards fayalite. Near Graz, Styria, Austria, olivine is present; this area is also famous for magnesite crystals and strontianite. Horni Bory, Moravia, Czech Republic, is another location. Large crystals of olivine, partly or completely altered to serpentine, are known from More and Snarum in Buskerud, Norway. Spain has olivine segregations in basalt at the Puig dela Banya de Boc Volcano, Llora, Girones, Girona, Catalona Province.

Asia has a few important locations for olivine. The best peridot, although the stones are rougher, comes from near Mogok, north of Mandalay in Myanmar (Burma). The crystals are up to 7-8 cm. across. This area, of course, is also known for its fine pigeon-blood rubies and gem spinels. There are a few occurrences in Iran and China in basalts, but not of great importance. Some olivine is known in basalts at Poonah, India, but is not usually conspicuous. The occurrence of olivine in dunite (type locality) at Dun Mountiain, New Zealand, is world-famous.

Olivine is found in some locations within Minas Gerais, Brazil, in South America, but precise localities are not specified. Iguassu Falls, Parana Province, Brazil, and Anitapolis, Santa Catarina Province, Brazil, have yielded some olivine in the basalt flows there. At the Soufriere Volcano, St. Vincent, in the Antilles, olivine is known in the lavas. Mexico does not have many important locations, though olivine is common in basalts and some obsidian contains fayalite crystals in lithophysae similar to the Yellowstone and California occurrences. Olivine is also found in Central America at the Izalco Volcano, San Salvador.

The Kerguelen Islands, Antarctica, has basalt flows containing olivine. A tough locale for the average collector!

An extraterrestrial location for olivine is in the basalts at Nili Fossae Region on the planet of Mars. This location would not be accessible to collectors! As mentioned, magnesian olivine is a common constituent of stony meteorites and of the nickel-iron pallasites.

Peridot is the monthly gemstone for August birthdays.

References Cited:

Chesterman, Charles W. 1978. *The Audubon Society Field Guide to North American Rocks and Minerals*. NY: Alfred A. Knopf, 850 p.

Ford, William E. 1957. *Dana's Textbook of Mineralogy*. NY: John Wiley and Sons, Inc. 851 p.

Gilmore, E. L. 1963. *Minerals of Oklahoma*. Tulsa, Oklahoma: E. L. Gilmoe Press, 77 p.

Pough, Frederick H. 1976. *Roger Tory Peterson Field Guide, Rocks and Minerals*. Norwalk, CT: The Easton Press, 317 p.

Voynick, Stephen M. 1997. *New Mexico Rockhounding*. Missoula, MT: Mountain Press Publishing Company, 309 p.

Web Sources

www.mindat.org/min-29264.html-13k

MWF Mineral News

Continued from Pg. 3 -

Together we can create the largest reference collection of mid-west minerals in the world! The benefits are numerous. It will serve as a reference to all the members and possibly state professionals.

Often I hear members say that, "I found this specimen, but it doesn't look like the one in the book." Or, they may not even know what it is. By looking in our museum-on-disc, they can narrow their search. Collections are donated to clubs with few specimens labeled. With the virtual museum, clubs will be able to sort through these old collections. It can be a valuable tool before going on field trips as well. By viewing in advance, club members can get an idea of what they would expect to find in the field. When new specimens are found that are not listed, it will serve as a record to credit individuals with a new find. As you read this, I am sure you can see the incredible potential of this project.

I ask all members to contact me with their ideas to help the MWF grow and serve its members. Together we can make this the most enjoyable and interesting hobby.

[Editorial Note: This article was submitted in November, right after Kevin stepped into his role as Mineralogy Chair, but did not get printed. We apologize for this.]

Notes from the Mineralogy Committee

by Kevin Ponzio, MWF Mineralogy Chair

It has been a long winter already, and I know everyone is just about ready to get out and collect again. This is a great time to go through all the minerals you have collected from the previous year. Make sure all the labels are correct, and finish any prep work you may have started. While going through all the pails and boxes, set aside the extra specimens that are not for your permanent collection. Bring the minerals to your study group and have other members observe them in case they see a mineral or crystal habit you may have missed.

You can distribute some of these extra specimens to club members who may not have been available to go on the field trip, use them as door prizes at the meetings or show, or contribute the minerals to the MWF Silent Auction, where they will benefit our Endowment Fund. You can donate to the MWF as an individual or as a club.

You can use this time of year for your mineral study groups to meet. Pool your resources. Each person can bring what they have to help with the study: books, microscopes, testing supplies, and a place to hold the meeting are all helpful. In the warmer months to come, most people will have less time for a study group and will want to spend more time in the field.

A study group, at this time of year, can also help with field trip and program planning for the year. Get together and enjoy the hobby!

♦ ♦ ♦ ♦ ♦ ♦ ♦

Merit Awards - Reminder

J.C. Moore, MWF Merit Awards Chair

Remember, the AFMS All American Club Awards Contest is for clubs who put together a notebook of the club's activities according to requirements set up by the AFMS All American Club Award Committee. Is your club ready?

Your participation in this contest is an excellent means of recording and documenting the activities of your club for the year.

Remember, that each section must have the documentation to show what was done by the club or members to warrant the points. Examples of letters, flyers, newspaper articles, or pictures are some things that make excellent documentation. Articles taken from your bulletin will work, too.

There were changes made this year from suggestions of participants, committee members, and judges. These changes are available on the AFMS Web site for clubs to download.

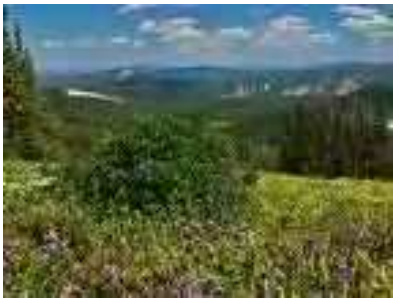
Clubs participating must have their notebooks/scrapbooks to me by **March 15, 2009**.

J.C. Moore, MWF Merit Awards Chair
25235 N IL 97
Cuba, IL 61427

GEOLOGY NEWS ...

Yellowstone's Super Caldera is Awake

by Judith Washburn, MWF Geology Chair



At the heart of Yellowstone's past, present, and future lies volcanism. Catastrophic eruptions occurred here about 2 million years ago, then 1.2 million years ago, and then 600,000 years ago. The latest eruption spewed out nearly 240 cubic miles of debris. What is now the park's central portion then collapsed, forming a 28 by 47 mile caldera (or basin). The magmatic heat powering those eruptions still powers the park's famous geysers, hot springs, fumaroles, and mud pots. The spectacular Grand Canyon of the Yellowstone River provides a glimpse of Earth's interior: its waterfalls highlight the boundaries of lava flows and thermal areas. Rugged mountains flank the park's volcanic plateau.

The Earth's crust beneath Yellowstone National Park is still restless. Precise surveys have detected an area in the center of the caldera that rose by as much as 86 centimeters between 1923 and 1984 and then subsided slightly between 1985 and 1989. Scientists do not know the cause of these ups and downs, but they hypothesize that they are related to the addition or withdrawal of magma beneath the caldera, or to the changing pressure of the hot groundwater system above Yellowstone's large magma reservoir. Also, Yellowstone National Park and the area immediately west of the Park are historically among the most seismically active areas in the Rocky Mountains. Small-magnitude earthquakes are common beneath the entire caldera, but most are located along the Hebgen Lake fault zone that extends into the northwest part of the caldera. A magnitude 7.5 earthquake occurred along this zone in 1959.

Yellowstone National Park was jostled by a host of small earthquakes for a third straight day on Monday, December 29th, and scientists watch closely to see whether the more than 250 tremors are a sign of something bigger to come. Swarms of small earthquakes happen frequently in Yellowstone, but it's very unusual for so many earthquakes to happen over several days, said Robert Smith, a professor of geophysics at the University of Utah.

"They're certainly not normal," Smith said. "We haven't had earthquakes in this energy or extent in many years."

Smith directs the Yellowstone Seismic Network, which operates seismic stations around the park. He said the quakes have ranged in strength from barely detectable to one of a magnitude 3.8 that happened Saturday. A magnitude 4 quake is capable of producing moderate damage, he indicated.

"This is an active volcanic and tectonic area, and these are the kinds of things we have to pay attention to," Smith said. "We might be seeing something precursory. Could it develop into a bigger fault or something related to hydrothermal activity? We don't know. That's what we're there to do, to monitor it for public safety."

The strongest of dozens of tremors Monday was a magnitude 3.3 quake shortly after noon. All the quakes were centered beneath the northwest end of Yellowstone Lake. A park ranger based at the north end of the lake reported feeling nine quakes over a 24-hour period over the weekend, according to park spokeswoman Stacy Vallie. No damage was reported.

"There doesn't seem to be anything to be alarmed about," Vallie said.

There is a great DVD available from the History Channel on the "Mega Disaster: Yellowstone Eruption." It presents the idea that one of America's best-loved parks may be the most geologically dangerous place in the nation. Mega Disasters explores the worst of what could happen. Stunning computer graphics and actual footage combine to create convincing pictures of the risks faced by U.S. cities. All of Yellowstone Park is the caldera of an ancient volcano that is likely to erupt again! Go to www.history.com to order.

- Continued on Pg. 8

Yellowstone

Continued from Pg. 7 -

Sources:
United States Geological Survey Web Site
http://www.usgs.gov/
Various newspaper accounts

♦ ♦ ♦ ♦ ♦ ♦ ♦

LAPIDARY NEWS ...

Introducing the New Chairman: Roger K. Pabian

One of Pam Hecht's last official duties as Midwest Federation President was to appoint me Lapidary Chairman for the Federation. I served as one of the late Bill White's assistants for several years and helped Bill submit an occasional item to the Newsletter. I have been doing lapidary work for almost 50 years. I polished my first agate in November of 1959, and I still have it. In that time frame, I have also taught a course on gemstones at the University of Nebraska for about 35 years and have taught lapidary through Lincoln Park and Recreation Department and Southeast Community College for about 20 years now. During my teaching lapidary, I have found several areas that vex many a beginning lapidary, and I will periodically submit to the Newsletter an item that will address problem areas for beginning, as well as, even some advanced lapidaries.

Dopping Methods

by Roger K. Pabian, MWF Lapidary Chair

Dopping is that first problem area. Why doesn't the stone stick to the stick?

THE STICK:

Hardwood sticks work best. They don't absorb water quickly. If you use a pine dowel, paint it to slow down water absorption. If the stone comes off of a stick, go to a new, dry stick, as the old one will still have some water in it, and it will pick up some water when the stone pops off. The stick needs not be any longer than the width of the palm of your hand. **Think of the stick as an extension of the stone.** Hold the stick up high such that your fingers come in contact with the stone. That minimizes vibrations and bouncing by the stone, and the stone will be less likely to fall off of the stick.

The dop stick doesn't have to be round. If you are shaping a stone that has a large length to width ratio (greater than about 2:1, such as in a marquis), cut a stick from a lath or rectangular slat of wood such that the stick extends almost to the tips of the stone. There will be no great pressure on the ends of the stone, and that will help prevent the stone from coming off of the stick.

THE WAX:

Most lapidary wax is now the 140 degree wax; that is, it melts at 140 degrees, and it is usually dark green. You have to get the wax hot enough that it readily flows, but not runs. Heat the stone, as well as the wax, and the stick. There are fancy dop pots that are available from lapidary supply houses, but I use an old slow cooker base that I picked up at a Goodwill store for $1.00. I heat the stone on the cooker base. I usually start the wax beforehand to give it time to melt. Heat the stone slowly, dip the end of the stick in the wax, apply the stick to the stone, lift off, and form the wax around the stick with moistened fingers to prevent the wax from sticking to you and burning you. If you use the 170 degree wax, you have to heat it up to 170 degrees otherwise it will not stick any better than the cooler 140 degree wax. Keep in mind that wax for dopping cabochons will not work for dopping stones that are to be faceted.

SUPER GLUE AND ROOFING NAILS:

If you are dopping small stones, an easier method than using wax, is to use super glue and roofing nails. Set the stone in a base of modeling clay, and get it level. Put a drop of super glue on the back of the stone and then attach a roofing nail to it. Hold the stone in a pin vise. To remove the stone, heat the nail with your alcohol lamp. It will drop off in a couple of minutes.

FOCUS ON JUNIORS ...

Kids Are Our Future...

by Kitty Starbuck

I see the same thing in several bulletins I pick up to read, "WE ARE LOSING MEMBERS, AND WE NEED TO DO SOMETHING ABOUT IT!" Apparently, we aren't doing a very good job recruiting new people, especially people with KIDS!

For years, Marve and I have been singing the tune, "KIDS ARE OUR FUTURE," and have many times gone to other shows and set up a table to hand out material for the teachers who bring their kids to the show. It is material that will help them in their teaching.

NOW, HELP IS AVAILABLE...

For a long time, we have been communicating with Jim Brace-Thompson, Chair of the AFMS Juniors Program. We have chatted with him in person and have ordered the badges for the AFMS Future Rockhounds of America program. It has been a rather hard sell, and sometimes we have felt like giving up. People complain about today's kids, but don't really want to get involved in doing things with them.

Just recently, we received a letter from Daryl Powell of Diamond Dan Publications, stating:

Dear Kitty and Marve,

Since the Kalamazoo Mineral Society is one of the few mineral societies today that is on the leading edge of bringing children into their programs, Jim Brace-Thompson, Chair of the AFMS Juniors Program, suggested I introduce myself and my publication, ***Mini Miners Monthly*** to you. (He wrote the following.)

Mini Miners Monthly, a newsletter-format publication for kids, has enjoyed a great beginning since March of 2007. The first month it hit the stands with 30 subscriptions and 8 pages. By September, it had grown to 12 pages. Today, we are reaching over 500 people a month with 35 mineral clubs using ***Mini Miners*** material in their own publications. Clubs that subscribe to ***Mini Miners*** also receive permission to reproduce up to 4 pages per month for use in their kids' club program, society newsletter, and on their society Web site. As circulation grows, it is our desire and plan to expand the size of the publication even further. The newsletters are both color and black and white. With each subscription, you will receive a mailed, printed issue, as well as a PDF file of each issue.

Here is a sample of the items found in the September, 2008, issue.

- "Mineral of the Month - Smithsonite," an article about James Smithson (the illegitimate child of Elizabeth Marcie and Hugh Smithson) telling how the Smithsonian Institution got its name.
- "What Are Minerals Made Of?"
- "A Mineral Scrabble"
- "Arrange These Minerals By Their Chemical Group"
- ""An Interview with Field Collector, Michael Walter"
- "Some Strange Minerals"
- "A Crossword Puzzle on How Well Did you Read This Issue?"
- "A Coloring Contest For Older Mini Miners"...winner will receive a hand-sized specimen of sparkling aragonite, and
- "A Recipe For Making Your Own Crystals"

THIS IS HOW IT WILL WORK...

Now, if you have ever worked with juniors month after month, you know how difficult it is to come up with something interesting and different, month after month, and this sounds like the answer!

The Board thought it was an excellent idea, and this is what is going to be done.

The newsletter costs $19.95 a year (12 issues). For clubs that have fewer than 10 junior members, the MWF will pay for **one half (1/2)** of the subscription price, and clubs that have 10 juniors or more, will receive the monthly newsletter **FREE!!!** The thinking being that this might entice clubs with a smaller number of juniors to try to increase their numbers, and when juniors see all

- Continued on Pg. 10

Kids Are Our Future

Continued from Pg. 9 -

the fun created, they will want to be involved. The clubs will be responsible for subscribing to the magazine, and will be reimbursed from the interest from the MWF Endowment Fund. The level of reimbursement will be determined by the number of juniors reported on the dues form for those clubs that have paid their **dues on time.**

Again, clubs that have fewer than 10 juniors, will be reimbursed for **one half (1/2)** the subscription cost. Clubs that have 10 or more juniors will be reimbursed for the **full** subscription cost.

The program will be coordinated by Kitty Starbuck and will be reviewed at the end of 2009. If you have any questions, please contact me at greenstone@iserv.net or by phone: cell phone 1-231-740-5512, regular phone 1-269-649-1991. You can drop me a line at: 7636 East V Avenue, Vicksburg, MI 49097-9307.

Marve and I feel that the price of gasoline is definitely helping the rock hobby people to be looking for fun-filled things to do closer to home. We have signed up several new members from people coming to our rock sales, and even the ones that stopped by to see what was going on! They thought they were stopping at a "Garage Sale!" Hardly a week goes by that someone doesn't call about the club, rocks, etc. Marve just repaired a large amethyst cathedral geode for a lady that had purchased it in Brazil, and it had gotten broken on its trip from Brazil to Michigan. This is an excellent opportunity to, as they say, "Seize the moment," and to try everything in our power to encourage juniors, as well as adults!

Subscribe to: Mini Minerals Monthly

Send payment ($19.95) to:
Diamond Dan Publications
P.O. Box 143
Manchester, NY 14504

Then send your information to Kitty Starbuck (address above) for reimbursement.

- Continued on Pg. 13

Have You Discovered?

Have you discovered this Web site yet?
http://puzzlemaker.discoveryeducation.com/

This is the Discovery Education Puzzle Maker site. It allows you to create original puzzles for your juniors to use at a juniors' meeting or to place in your club bulletins. This is where the above URL takes you:

Puzzlemaker Online
Create puzzles online.

Word Search
Criss-Cross
Double Puzzles
Fallen Phrases
Math Squares
Mazes
Letter Tiles
Cryptograms
Number Blocks
Hidden Message

← These are your choices of puzzle types that you can create. It's easy to do. They walk you through the directions, and it only takes minutes to create.

Here's a Word Search that was created to demonstrate what you can do on this site. It took less than 5 minutes!

C H E O L I R N I F P L E V X	challenge
E H V T P W O B J U W A Y I K	clues
L P A S F M G Z Z R Q N T R O	fossils
Z X X L G I C Z A E Q N J T Q	fun
Q S V B L N L N Y V I B J M W	geology
K S G T S E I M M I Q Z Z Z G	juniors
H M L E A R N I N G D A Q W G	learning
E U U I O A O G V E D B Z H O	minerals
Z L U C S L C I E O U D F H Q	puzzle
C T K G R S O J N N J G I N Q	rocks
H S Z O Q E O G U U Y F M Q U	
F F Q L H X Y F Y N J J D Y P	
A O S I D W J C W U Q O W P R	
B U V E I Y Y R P C R C W Z G	
R H O G X D R H Z Q D F J I X	

Try it, it's fun!

JUNIOR ACTIVITIES

Michele Yamanaka, MWF Junior Activities Chairman

A GREAT RESOURCE FOR YOUR JUNIOR PROGRAM!

Many of you have been asking for more materials for your Junior program. In my survey last year, I noted interest in "boxed" lessons. You have already been reading about the American Federation of Mineralogical Societies' "Future Rockhounds of America" badge program. It is a GREAT program. And now, I am happy to inform you of another resource - DIAMOND DAN PUBLICATIONS.

Diamond Dan Publications has 2 items of interest for junior clubs:

1) Earth Digger Club program - a "boxed" lesson series

"You have the very challenging task of leading your children's program. You are expected to create informative and fun-filled activities - month after month - and there are few resources available. Don't worry! We have developed a series of 1-hour activities about minerals and mineral collecting for your group's younger members. You can lead your kids through these activities. At the end of the meeting, each child can be presented a patch as a reward for completing the activity."

These lessons are called "kits" and are available for $2 / kit. A kit includes a patch and all the pages needed for the activity. Here are some of the kits offered:

For these kits, "young collectors look at real specimens, study their crystal shapes, make paper crystals of each mineral species, and learn about the minerals' physical properties and uses."

- **Quartz**
- **Fluorite**
- **Calcite**
- **Gypsum**
- **Pyrite**
- **Making Crystals I -** make paper models of crystals and compare them to real specimens.
- **Making Crystals II** - learn how to make salt and alum crystals.
- **Mineral Fun** - Discover interesting properties of minerals, such as magnetism, fiber optic properties, fluorescence, double refraction, etc.
- **Hardness** - Learn Moh's Hardness Scale and practice testing the hardness of known and unknown minerals.
- **Building a Mineral Collection I** - Learn the importance of safely, storing, numbering, and labeling specimens. [$2.50 / kit]
- **Building a Mineral Collection II** - Practice trading specimens and buying specimens using "Mineral Money". [$2.50 / kit]
- **Minerals Across America -** [for more advanced collectors] - Gather a collection of minerals, 2 from each of 10 different states.
- **Mineral Color** - Learn why minerals have different colors. Experience the beauty of the rainbow of colors found in the mineral kingdom.

*Check with Diamond Dan Publications for availability.

- Continued on Pg. 12

Junior Activities

Continued from Pg. 11 -

2) MINI MINERS MONTHLY - A MONTHLY PUBLICATION FOR YOUNG MINERAL COLLECTORS.

This publication is available by subscription ($19.95 for 1 year, $36.95 for 2 years). Not only does it provide a wealth of fun information and activities for juniors, "Diamond Dan Publications will grant you written permission to republish up to one full page of any of the information and drawings found in Mini Miners Monthly in each of your monthly publications. All we ask is that you include credit to Mini Miners Monthly (with our address). Diamond Dan Publications sends out an email version AND a hard copy."

Here is a sampling of contents of a recent issue:

- Mineral of the Month information on Azurite
- Carbonate Minerals
- Can Light Damage My Collections?
- Mineral Fakes
- Rockhound Holiday Cards to Color and Send
- Minerals in Your Flat Screen, Plasma TV
- Do You Have a Mineral Mentor?

The issues are full of great, colorful, mineral drawings or black and white (for coloring).

To subscribe, fill out the form below and mail it to Diamond Dan Publications, P.O. Box 143, Manchester, NY 14504. For more information, please call 585-289-4936 or email to diamonddan@rochester.rr.com. Checks are payable to Diamond Dan Publications. The kits can be ordered from the same mailing address with checks included.

MINI MINERS MONTHLY

_____ One year ($19.95) _____Two years ($36.95)

NAME:_____

Mailing Address:_____

_____

City_____ State_____ Zip_____

Email address: _____

●Most of the above information has been taken directly from Diamond Dan Publications advertising.
●Even if you don't use the information directly, it will provide you with great ideas for programs. But it is very user-friendly.

- Continued on Pg. 13

Kids Are Our Future

Continued from Pg. 10 -

Check out the Diamond Dan Web site at:
www.diamonddanpublications,com

Then check back with the article on Page 9 to see how your club can receive the Diamond Dan publication, **Mini Mineral Monthly, free** for your club's junior group.

The other items mentioned in Michele Yamanaka'a article, **Junior Activities**, while being great resources, are **not** covered by this offer. You will have to order those items separately with your club funds.

♦ ♦ ♦ ♦ ♦ ♦ ♦

HINTS AND TIPS FOR CLUBS ...

Help for New Officers

by Anne Cook, MWF Parliamentarian

Many clubs elect new officers at the end of the calendar year, and they are now taking office. If you are one of these, remember, you are not alone. Midwest Federation officers and chairmen are ready to help.

If you are concerned about how to run a meeting, contact the parliamentarian, Anne Cook, at abcook6@juno.com or go back to an article in the newsletter over a year ago by John Washburn on running a meeting (*MWF Newsletter*, June 2007, Issue 463, p. 15 "You Asked For It."), or an article by Anne Cook on motions, printed last year (*MWF Newsletter*, December 2007, Issue 467, p. 9, "Tips for the New President.").

If you need help as a program chairman, look in the directory at the great list of programs available from the Program Library and other suggestions.

If you have questions about a secretary's or treasurer's duties, ask those officers. Remember, it is a sign of intelligence to ask a question when you are not sure what to do. Don't just sit and stew.

A Show Note

by Donna Nolte

Something that has worked successfully for gaining new membership in our club organization happened by the suggestion of our new President, Dan Hughes. He suggested we have a drawing for free memberships—placing slips and a box at our show. (Like a door prize!)

It was a **gold mine** of names, and we went the extra mile extending more free memberships than planned. Based on the theory that we didn't have the membership money to start, but sure will in the future, we now have regained the fresh energy, ideas, and interest in our hobby.

Positions for officers and chairs were easily filled, our lapidary shop is busy like a beehive, and new friendships have been made. We are also following the role of the Green Bay, WI, club by publishing our club programs as an annual leaflet for better attendance.

Web Site Contest Reminder

by Cindy Root, MWF Webmaster

December brought the announcement that there would be a Web site contest sponsored by the American Federation. I hope all of the clubs in the Midwest Federation who have Web sites will participate. I have discovered, going through the clubs, that there are those who have let their Web sites lapse or who have not updated the site in over a year. For those Web sites that have lapsed, I will remove the links. For those who have not updated in over a year, remember that your site reflects on your club AND you're spending money to host an outdated site.

By now, I have contacted the clubs with Web sites and provided them with the forms for the contest. In those cases where I could not find the Webmaster, I forwarded the documentation to the president. If your club has a Web site and you have not received the forms, please contact me at d-root@sbcglobal.net and I will get them to you immediately.

Remember, you can't win unless you participate.

PLEASE CONSIDER . . .

a donation to support the Earth Sciences and/or to honor or memorialize a friend or club member.

Donations can be sent to either the **Midwest Federation Endowment Fund** or the **American Federation Scholarship Foundation.**

The MWF Endowment Fund was established in 1989 to insure that monies would be available in addition to dues income. Only the interest generated by the Fund is used, and any expenditure must be approved at an Executive Committee meeting. A list of special projects and other information is in the MWF Directory.

The AFMS Scholarship Foundation was established in 1964 to finance scholarships from a perpetual fund. Participating Regional Federations currently award two grants of $2,000 each for two years. Our MWF Honoree chooses two students working on advanced degrees in the Earth Sciences at a college or university in our Region. More detailed information is published in the Green Pages of the *MWF Directory*.

Both Funds have non-profit 501(c)(3) status, and contributions are tax-exempt. As a donor, you receive an acknowledgment, and in the case of a memorial, next of kin are notified of your donation. Send the form below, or a letter, to the Fund of your choice.

Donor(s) name: _____ Donation: $ _____

Adress:_____
(Street) (Apartment #)

_____
(City) (State) (Zip Code)

Donation is Memorial to: _____ Next of Kin: _____
(If applicable) (Name)

(Relationship) _____

Address: _____
(Street) (Apartment #)

_____
(City) (State) (Zip Code)

Send MWF Endowment Fund donations to:

Alan Hukill, Treasurer
15785 Park Lake Rd.
East Lansing, MI 48823

Send AFMS Scholarship to

Marge Collins, MWF Chairman
3017 Niles-Buchanan Rd.
Buchanan, MI 49107

Attention:

Make a copy of the above form and keep it on hand. You will also be able to access it on the Web site at:

www.amfed.org/mwf

SIGN UP TO DO "LIVE" PROGRAMS FOR ROCK CLUBS AND SHOWS

We are looking for people who enjoy sharing their experiences or knowledge with others. If you, or other members of your club, or someone you know in your area, would be willing and available to put on a program at a nearby club or a demonstration for a club or show, then we want you!

Rock clubs are alive and well throughout the United States, and members travel many miles within our borders and even abroad to collect rare or prized specimens to craft into fine jewelry, to add to their personal collections, or donate to museums. If you are someone who has a story to tell of your travels, a craft to teach others, or a collection to show and share, then we need you!

Complete this form to add your name to a list with others who also have a passion for our hobby. Feel free to make copies of the form to give to others.

What could you or another member of your club, or someone from your area, be able to do?

1) PUT ON A PROGRAM?

Name:_____
Address:_____
City:_____ State:_____ Zip:_____
Phone:_____ Email:_____
Type and Name of Program: a)_____
b)_____
c)_____
d)_____
(Speak, demonstrate a craft, travel tale–list if more than one)
Distance willing to travel_____ miles Fee_____

2) DEMONSTRATE AT A SHOW?
Type and Name of Demonstration_____
Distance willing to travel_____ miles

3) DISPLAY AT A SHOW?
Type and Name of Display_____
Distance willing to travel_____ miles

4) WORK WITH JUNIORS?
Ideas, information, or suggestions for juniors_____

Return form by e-mail or standard mail to:

Your State Director
or
J.C. Moore, MWF 2nd Vice President
5235 North Illinois 97
Cuba, IL 61427
damoores@winco.net

● Submitted by: Allison Conrad, MWF Wisconsin State Director

Submission of News and Articles

Please note that all input for a given issue of the Newsletter is due to the **Secretary** no later than the first day of the previous month. This means that the due date for the **MARCH Issue** will be February 1st. Material submitted after February 1st may be delayed until the April Issue.

Material may be e-mailed to Donna Moore at damoores@winco.net or submitted via the U. S. Mail. Acceptable e-mail formats include MS Word (.DOC), Adobe (.PDF), rich text format (.RTF), or plain text (.TXT). If e-mailing an article, it may be included within the body of the e-mail message or sent as an attachment.

Address Changes or Corrections

Please submit any address changes or corrections to the **MWF Secretary, Donna Moore**. See page 1 for her contact information.

Wanted: An Editor

The Midwest Federation is **still** looking for a newsletter editor. We can promise to fill up your empty, spare hours with the creative task of putting together a newsletter that will reach hundreds of members across the Midwest.

Qualifications include: a sense of dedication, a desire to help the Federation, modest computer skills, and a willingness to be a team player. Knowing a little bit about putting together a newsletter would be helpful.

If you think you might be interested, please contact:

Rose Blue, MWF President
16155 Shurmer Road
Strongsville, OH 44136
(440) 238-4412
jblue@n2net.net

Midwest Federation of Mineralogical and Geological Societies
25235 North Illinois 97
Cuba, IL 61427

Non Profit Org
U. S. Postage
PAID
Fiatt, IL
Permit No. 1