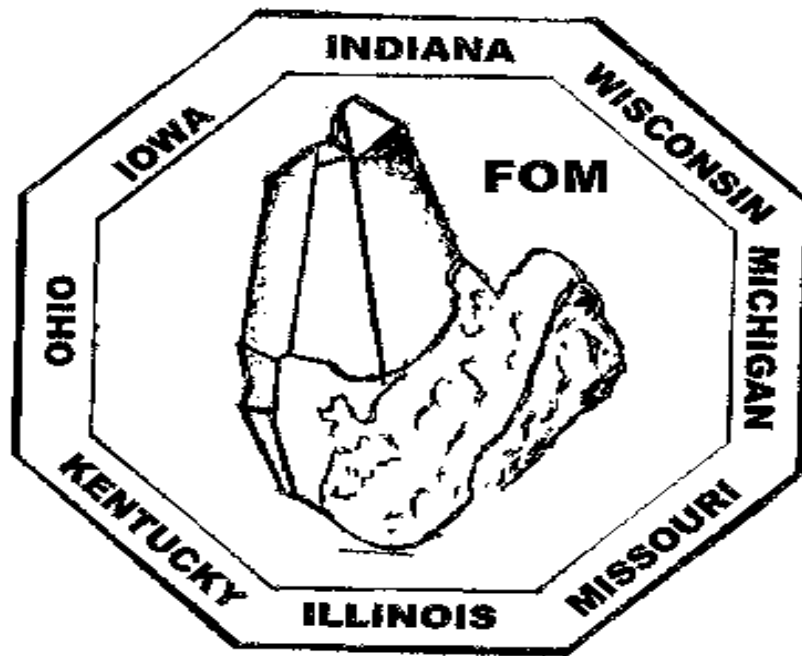


Friends of Mineralogy

Midwest Chapter Newsletter for

May – June 2013



Affiliations:

THE MINERALOGICAL RECORD

THE MINERALOGICAL SOCIETY OF AMERICA

AMERICAN GEOLOGICAL INSTITUTE

ROCKS & MINERALS MAGAZINE

Our purpose is to organize and promote interest in and knowledge of mineralogy; to advance mineralogical education; to protect and preserve mineral specimens and promote conservation of mineral localities; to further cooperation between amateur and professional and encourage collection of minerals for educational value; and to support publications about mineralogy and about the programs of kindred organizations.

Newsletter published bi-monthly in January, March, May, July, September and November. Please submit all information for publication in the newsletter by the 15th of the previous month.



*The "Weardale Giant" 2013
Tucson mineral show*

***In this issue, Barriers to
collecting part II.***

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**The next meeting will be on
Sunday, May 5th, at noon, on
the 2nd floor of the Cincinnati
Gardens (2250 E. Seymour
Ave., Cincinnati) during the
48th annual Cincinnati Show
Geofair 2013. See you there.**

2013 Officers

President - Clyde Spencer, 1858 Robin Hood Dr., Fairborn, Ohio 45324
(937)878-9988 c_spencer123@att.net

Vice President Programs – Vacant

Liaison Officer – Vacant

Vice President Field Trips - Reggie Rose, 4287 Parkmead Dr., Grove City, Ohio 43123 (614)875-2675 captaino@core.com

Secretary - John Davis, 58300, Pear Rd., South Bend, Indiana 46619
(574)232-8823 Sumu95@hotmail.com

Treasurer - Jeff Spencer, 4948 Beachwood Dr., Cincinnati, Ohio 45244
(513)248-0533 jspencer@jsite.com

Fund Raising (Committee Chair) Paul Schwinn, 38 W. Washburn St., New London, Ohio 44851
(419)929-9074 Rocknut2@aol.com

Newsletter (Committee Chair) Tom Bolka, 2275 Capestrano Dr., Xenia, Ohio 45385
(937)760-6864 tbolka@att.net

A note from our new treasurer

I'm Jeff Spencer, from Cincinnati, and I volunteered to take over as Treasurer after our January meeting. I've been an amateur collector for over 30 years. I love geology and related sciences and, aside from going on our great field trips, want to stimulate young people to take similar interests.

I've had a few different careers over the years, I began with photography, video and media production and moved on to Information Technology while at Cincinnati Bell. Most recently I was an Enterprise and Application Architect at Munich Re Insurance for 13 years. I'm now doing independent consulting.

Minutes for the FoM meeting, March 16th, 2012

Miami University, Oxford Ohio

Officers present: Clyde Spencer, Reggie Rose, Jeff Spencer, and John Davis. Also, Tom Bolka, our new newsletter Editor.

There were 8 Midwest Chapter members and 2 National members for a total of 10 FoM members present.

After a tour of the university mineral museum and enjoyable presentations by John Rakovan on collecting in Poland, Terry Huizing on collecting in Morocco, and Tom Bolka giving a Tucson 2013 recap, the meeting was called to order.

Clyde Spencer, president, expressed concern about our ability to hold formal meetings and if we met the full quorum requirements because we are missing two officers and we don't actually know the number of members in the chapter. The meeting was dominated by an update on the efforts of Clyde Spencer and Jeff Spencer to establish an Incorporated and non-profit status for the Midwest Chapter of FoM. It appears that the original FoM Indiana chapter was dissolved in 1996 and any corporate or non-profit status was dissolved with it. The only existing documentation uncovered related to the Midwest Chapter is a 2001 constitution and a 2009 Employee Identification Number.

Jeff Spencer, treasurer, is still unsure of our financial status, because of his inability to get records from the credit union that our chapter has been using. It appears that we may not have as much money in our account as thought. He has to get Bob Harman and Nelson Shaffer to sign off on that account and to authorize he and Clyde as the new representatives in order to access records and open a new account. This is not proving to be an easy task. Also, it appears that there are many checks written this year for membership dues that were not deposited. After Jeff gets things straightened out, there may be a need to have some membership checks rewritten. Jeff states he's not even sure if we have paid our National dues for 2012. Jeff also shared that the check book shows that the last deposit made was Dec. 30th 2012; however, the checkbook was last balanced two years ago.

Clyde has spoken with our insurance company. For anyone who wants to collect somewhere that requires liability insurance while on personal or corporate property, we are insured for that. If anyone needs proof of this insurance, Clyde can get this proof within 24 to 48 hours notice on a case by case basis. The next premium, about \$600, is due in April.

Reggie asked John Davis to research a possible Western Kentucky fluorite field trip. Also, he is researching a possible auto call system for future field trip notification. This would solve many problems with notifying members regarding upcoming trips. Reggie is currently checking on collecting opportunities in New York, and Clyde is looking into possibly returning to Indianapolis for the great pyrites.

The January minutes stated that a vote was taken on "per diems" for Clyde Spencer and Nelson Schaffer while at the Tucson show. This was a misstatement. It should have been called a partial reimbursement of expenses associated with going as our representatives. Also, Clyde Spencer has stated that if the records show we don't have as much money as previously thought, he will not be requesting the reimbursement.

Respectfully submitted,

John Davis - <http://www.flickr.com/photos/57016498@N04/> Secretary



Fluorite, Gabrina I Quarry



Halite, Wieliczka Mine

Photo's from John Rakovan's Presentation – "Collecting in Poland"

A note from the editor

Hello my name is Tom Bolka and I am now the newsletter editor. I live in Xenia, Ohio and have been an amateur collector for many years. My family and I very much enjoy the hobby. I try to involve my 2 boys in collecting whenever possible. My focus is collecting fluorite, so if there is dig which features this mineral, you'll likely see me there. By trade, I am an electrical engineer working at Ametek in Troy for almost 30 years. If anyone has articles for possible submission into the newsletter please email them to me at tbolka@att.net.

President's Message

There have been a lot of changes in the last few months. Nelson Shaffer resigned as treasurer at the January business meeting, and Jeff Spencer (no relation that we are aware of) stepped up and has been doing an excellent job getting us back on our feet. We have been operating for the last several years without being incorporated and without a nonprofit tax status. Jeff filed the articles of incorporation with the state of Ohio, and opened a new checking account close to his home with USBank, which has a branch near where I live. He is now going over the financial records from the Indianapolis credit union, which the chapter has used for several years, and is trying to sort things out. About 15 of you have complained that your membership checks have not been cashed. We are trying to get to the bottom of this also. I apologize, but we may have to ask that some of you re-submit a check for membership.

Also, John Blue resigned as newsletter editor. I asked Tom Bolka if he would serve as editor and he graciously agreed to do so. He previously produced the newsletter for the Miami Valley Gem and Mineral Society. This is his first newsletter for Friends of Mineralogy.

There are a couple of short bio's for Jeff and Tom in the newsletter.

Jeff's wife typed out the Constitution and Bylaws from one of the very few hard copies in existence. Thanks to her effort, you can now all have electronic copies and the Chapter will be in compliance with the governing documents, which says that all members are to be provided with copies.

If you missed the mini-symposium at Miami University in March, you missed three very interesting presentations with some great pictures. Also, the university has a great small museum that was open for browsing.

The Chapter has liability insurance and I'm happy to report that we were able to make the premium payment on time.

I have been coordinating with Reggie Rose to try to put together a field trip program for this field season. I have been corresponding with the president of the Mississippi Valley Chapter of FM to try to arrange some joint trips. We are trying to get some trips together for other than the usual Ohio and Indiana trips. Reggie's report has more details on this.

At this point we still need to fill the position of First Vice-President (Program Committee Chair), and Liaison Officer. This chapter can only be as good as the people who are willing to support it. Please consider donating your effort to improve the chapter.

Lastly, I want to let everyone know that there will be a short business meeting on Sunday, May 5th, at noon, on the 2nd floor of the Cincinnati Gardens (2250 E. Seymour Ave., Cincinnati) during the 48th Annual Cincinnati Show Geofair 2013. See you there.

Treasurer's Report

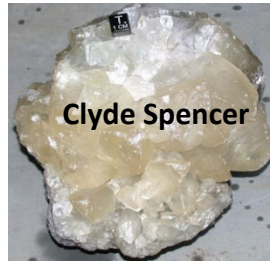
I now have access to the Indiana Members Credit Union account. We have opened a new account with USBank and will close the old account. We also have registered the organization as an Ohio Non-profit Corporation.

There are currently 68 active members for 2013. This generated \$975.00 in revenues. I am still in the process of reconciling the bank account with the membership roster. Some checks have been misplaced and I believe most of you have been contacted. If you want to know your status or believe your check was not deposited and that I am unaware please contact me at jspencer@jsite.com. Based upon the records I now have, we actually started the year with \$1582.00 and currently have \$2178.00 in our combined checking accounts.

We still owe the National Chapter around \$470.00 for last year's (2012) dues and will need to pay 2013 dues also. We also have our upcoming insurance premium due.

Jeff Spencer

Barriers to Collecting – Part II



The professional archaeology and vertebrate paleontology communities have been quite successful in getting legislation passed that effectively prohibits amateur collecting on 'public' lands. Also, commercial activities can be suspended temporarily if excavations expose significant fossils or artifacts. The mineralogy community could learn from these successful actions. Unfortunately, the existing legislation is heavy-handed and short-sighted. Fossils (as do many minerals) have a limited life-span once exposed to the elements by erosion. What isn't collected will become weathered and won't be preserved. With a small number of adequately-funded paleontologists, it is problematic as to the number of fossils that will be found and collected before they become so degraded as to be useless, or re-buried at lower elevations with the subsequent loss of stratigraphic information.

Another issue is that with commercial operations, there is an economic incentive to ignore or 'over look' any regulated discoveries. Probably a better approach would be to provide commercial operations with a tax incentive to cooperate with academic institutions and museums.

Vertebrate fossils and minerals have enhanced research and commercial value if they have accurate and detailed provenance and stratigraphic information. Thus, commercial collectors have a financial incentive to document their activities. To address the concerns of researchers about the loss of scientific knowledge, professional institutions could be given grants to purchase specimens on the open market. Other solutions might include the right of first refusal before being put up for auction to collectors without research interests. Alternatively, qualified researchers could be granted an opportunity to study the specimens before title was passed to a collector.

If a mineral (or fossil) specimen is never collected, then there will never be any scientific knowledge obtained from it, nor will anyone be able to appreciate whatever aesthetic qualities it may have. Today, most of the new, fresh mineral specimens available for research are coming from countries where mining is active, such as China, South America, and South Africa. Some specimens are coming from abandoned mines in the US, but the policies of the Forest Service and Bureau of Land Management are hindering that, and the problem is getting worse.

In my judgment, hiring paleontologists, or training employees already on staff to properly collect, catalog, and prepare fossils would be a better use of tax dollars than hiring law enforcement personnel to keep the public from collecting. It seems that the vision (if there truly is one!) of preservationists is to turn the great outdoors into something like a zoo or an arboretum where the public can wander on approved trails and admire something different from the cities they live in, but not touch or collect anything. The former public land policy of multiple uses is being supplanted by the Sierra Club mantra of "Take nothing by pictures and leave nothing but footprints." That admonition is more appropriate for heavily-used parks than for National Forests or former mining areas administered by the BLM. I suspect that at the heart of the different views of the appropriate use of public lands is the dichotomy between urbanites who have grown up in cities, vicariously living by watching TV and movies, versus those who earn their livings through the bounty of the land they live on. The urbanites typically have little appreciation for where the resources come from that provide them with TVs, computers, smart phones, computerized automobiles, and the energy to sustain their consumptive lifestyle. They don't appreciate how importing those raw materials negatively impacts our international balance of payments and our economy.

The larger the number of field collectors, the greater the probability that something unique and scientifically valuable will be discovered. The current policies of federal and state agencies focus on preservation, particularly scenery and biological diversity, and impede the expansion of knowledge about things below the surface of the ground. Particularly, the requirements of mine reclamation favor environmental demands over vocational and avocational mineral interests.

The question should be asked, “Are fossils and artifacts any more valuable than minerals in expanding our scientific knowledge?” I would submit that they are equal. Therefore, any policies that would expand the number of collectors, provide access to favorable localities, and make specimens available to researchers should be encouraged. To that end, most mining reclamation projects are short-sighted. If there are problems with acid mine-drainage, there are potential alternatives to burying the site. Burial precludes opportunities for collecting. Also, there are numerous examples of mine dumps being reworked as changing technology has transformed worthless gangue into a valuable resource. Burying and unburying a mine may cause reworking dumps to be uneconomical because of the energy expended in the process.

While those who have mineral collections are commonly most interested in the aesthetic qualities of their specimens, they provide valuable financial incentives for the production and preservation of new minerals. These collections can serve as databases of localities and typical properties of minerals from different localities. Eventually these collections get recycled during estate sales. Thus, collectors potentially provide valuable research material for professional mineralogists both now and in the future. Indeed, even waste trimmings from new material may be valuable for research. Not only professional mineralogists, but advanced-amateur micromounters are responsible for discovering new species of minerals and documenting unusual habits. Field collecting should be encouraged and facilitated to expand the knowledge about minerals and rocks.

There are numerous examples of fossils that have been in museums for decades and, when finally studied in detail, have provided valuable scientific information. Similarly, a quasicrystal specimen (icosahedrite) collected in Russia in 1979, was in a museum in a collection, acquired from a private collector, and not studied in detail and

reported on until 2011 (Bindi, *et al.*, 2012). Khatyrkite was reported in an initial analysis in 1985. (<http://www.pnas.org/content/early/2012/01/03/111115109.full.pdf+html>) The important thing is that it was collected and curated; had it never been collected, the scientific community would not have the information provided by the specimen. Left in the field, it will eventually weather away, taking with it any new knowledge it might hold.

Additionally, documented collections have archival value for historians.

Can the Bureau of Land Management (BLM) and US Forest Service (USFS) enforce their restriction on bartering or selling mineral specimens, collected on public lands, to commercial dealers? It would seem to violate the principal of private property, where one is free to use or dispose of their property as they see fit. Absent that, then the item isn't really their property. If a collector sells or trades specimen to another private collector, is the recipient under the same legal restraint? How can federal agencies enforce the restriction? Who would be liable for prosecution – the original, untraceable collector, the person who ultimately sells it to a commercial dealer even though they may not be aware of the origin or date of collection, or the commercial dealer who receives the material? If the latter, it provides an incentive for the dealer to improperly identify the locality, which seriously reduces the scientific value. Lastly, how could the federal agency establish when the material was collected if it is from a classic locality? *Ex Post Facto* laws are unenforceable.

I can understand and appreciate the concern for conserving a particular material that might be limited in quantity. As an example, the classic locality for lawsonite in Tiburon (CA) seems to be restricted to a few boulders. However, long before collectors exhausted the deposit, homes built there made the site inaccessible. There is a finite amount of everything and one might reasonably ask whether it really matters whether a deposit is exhausted quickly or slowly. We might well be conserving minerals for future generations that have no interest in such things!

A related issue is whether the federal agencies restrictions on the quantity that can be collected daily are reasonable? One might drive several hours to a collecting site, and then be restricted to “25 pounds plus one specimen.” That means you could easily hold in two hands what you can legally keep

after a long drive. The policy encourages people to lie about how many days they have been in the field. I don't condone lying, but I am sympathetic to their response to an ill-conceived policy, albeit with good intentions.

Further, it is often necessary to collect something larger than 25 pounds to be able to trim it carefully, with appropriate tools, to a cabinet-size piece for display, or to section it to expose additional material. Being forced to remove matrix in the field to reduce its weight may also reduce its scientific value if reaction rims or cross-cutting relationships are lost. Thus the weight limit is counterproductive in that it encourages small pieces. Lapidarists, who might want to make book ends or large polished spheres, are just out of luck. I suppose one might apply for a special collecting permit, but there is no guarantee that it would be issued to all who could put it to good use. Additionally, one might serendipitously come across something for which they did not request a permit for. There is no guarantee that even if they were to go to the expense and trouble to come back with a permit, that they could again find the same specimen or that someone else might not have taken it.

It would seem to me that the federal collecting policies are virtually unenforceable unless guards are posted at all collecting sites and personally monitor collecting activities. Anything less and the policies will be applied unevenly and possibly unconstitutionally.

It seems to me that a fundamental structural problem is that bureaucrats have to justify their jobs and continued employment by demonstrating that they are doing something. I'm reminded of the adage, "Don't confuse activity with results." In many cases, it seems that the bureaucrats are inventing restrictions, policies, permitting processes, etc. that are surrogates for actually accomplishing something important or necessary. Once those job-justifying policies and procedures are in place, it is difficult to get them removed. The situation is compounded by the consequences of Jerry Pournelle's Iron Law of Bureaucracy, which states "*In any bureaucracy, the people devoted to the benefit of the bureaucracy itself always get in control and those dedicated to the goals the bureaucracy is supposed to accomplish have less and less influence, and sometimes are eliminated entirely.*"

If we don't pay attention to the political changes impacting our ability to field collect, and attempt to reverse them, we may find that our only opportunity will be to use a 'Silver Pick' to obtain Chinese specimens! It is evident that the bureaucrats who have made the collecting policies have little to no appreciation for collecting procedures or scientific documentation requirements.

The picture at the right is from the 2012 Mindat conference. From Terry Huizing's Morocco presentation.

"The dunes at Erg Chebbi"



Important Field Trip Information

Signing up for field trips - AN IMPORTANT STEP TO COLLECTING FUN

When an FoM field trip is announced either by hard copy or electronic newsletter or email, you are eligible to sign up for the trip. You must be a paid member to register for a trip. Usually there will be a deadline, so sign up as early as possible.

If you sign up and then find you cannot attend the trip, please cancel before the Friday of the week of the trip. On trips not on Saturday (and none currently come to mind) adjust the days accordingly.

It is important that you let me know if you are canceling, because if you cancel without notification: (a) we will be looking for you on the day of the trip, and (b) if you cancel without notification on a trip with a limit, then you have taken a spot of someone who is on a waiting list. That would be unfair to those on the list. Concerning guests, if you have a friend (who is MSHA trained) who may want to join FM, that person is allowed one guest trip. Paid members will be served first where trips have limits. Showing up on the day of the trip unannounced or bringing a surprise guest un-announced is a NO NO. Finally, if you are on your way to a trip and you are running late, have the cell phone number of a friend who you know is going on the trip. Give them a call and let them know that you are running late, so we and the quarry host know that you are on your way.

For example, you are running late for a trip and do not notify anyone, the group may already have been led to the quarry. At this point, you must wait at the quarry office. If you drive into the quarry on your own, you will have driven by the quarry office without filling out an on-site training form and this is also a NO NO. This can get us all thrown out of a quarry for future trips.

Lastly, check your email before leaving on the trip, in the event of a cancellation email notices will be sent as soon as possible.

All this being said, I hope that you all have a wonderful collecting season.

FM TO GO EAST & WEST BEFORE RETURNING TO OHIO QUARRY TRAVEL GUIDES: (Spring 2013)

SATURDAY MAY 04, 2013: PENFIELD, NY

COLLECTING LOCALITY: Dolomite Products Inc., Penfield, NY

ADDRESS: 746 Whalen Road, Penfield, NY 14526

COUNTY: Monroe

CLUB(S): Friends of Mineralogy Midwest; we will attend an open house with other clubs

DATE OF TRIP: Saturday May 04, 2013

TIME OF TRIP: 7 am - 12 pm; be there early for check-in since there will be a large group

TRAVEL TIME from DESIGNATED POINT: Varies dependent on where you live;

From Grove City, OH: via toll roads: 6:09; without toll roads: 6:55

TRAVEL DISTANCE: From Grove City, OH: via toll roads: 411 mi; without toll roads: 459 miles

AGE OF ROCK: Lower Devonian; the rock here is 410 million years old; (Devonian: 425-355 mya)

ROCK UNIT(S) EXPOSED: Lockport Dolomite

MINERALS PRESENT: fluorite, dolomite, calcite, sphalerite and selenite

TRAINING REQUIRED: On-site

SPECIAL CONSIDERATIONS: FM is one of several clubs at this open house; be there early to get checked in; any power equipment including saws, is allowed (just no explosives); there is no defined limit on the number on the trip, but sign up anyway if interested

QUARRY LOCATION: Penfield is about 12 minutes east of Rochester, NY; the road the quarry is on is Whalen Road, which is route 13.

SATURDAY MAY 18, 2013: MARION, KY (DAYTIME) Fluorite Dig

COLLECTING LOCALITY: Ben Clements Mineral Museum and Mine

ADDRESS: P.O. Box 391, 205 N. Walker Street, Marion, KY 42064

COUNTY: Crittenden

CLUBS: Host Club: Michiana Gem and Mineral Society; FM is invited as their guest

GROUP LEADER: John Davis, current FM Midwest Secretary

DATE OF TRIP: Saturday May 18, 2013

TIME OF TRIP: 8:00 am - 3:00 pm; meet at the Ben Clements Museum and be there early for check in;

TRAVEL TIME FROM DESIGNATED POINT: Varies dependent on where you live;

From Grove City, OH: 6:34

TRAVEL DISTANCE FROM DESIGNATED POINT: Varies dependent on where you live;

From Grove City, OH: 389 miles

MINERALS PRESENT: mostly fluorite; some of its associates may be present including: some calcite, quartz, sphalerite and galena

TRAINING REQUIRED: MSHA, On-site or both; answer: none

SPECIAL CONSIDERATIONS: This site offers the opportunity to collect in several ways:

(a) on dumps where it will be muddy; for dump collecting bring a rake and shovel

(b) in a pit where you can work on excavating a fluorite vein;

here it will be muddy and wet; this will be the hard work area where you will need sledges, hammers, chisels and pry bars (power tools are forbidden on all parts of this Marion trip).

You will get muddy on this dig, so bring an extra change of clothes just for this day; since this is a multi day excursion, bring at least three changes of clothes; for work at the fluorite dig, you will need a pair of calf height boots, or a pair of old shoes that you can hose off after the trip.

QUARRY LOCATION: We will be led to the digging area from the museum.

SATURDAY MAY 18, 2013: MARION, KY (NIGHT TIME) Calcite Dig

CALCITE DIG: For those interested in fluorescents, we will be led to an area that has fluorescent calcite for a night time hunt.

QUARRY LOCATION: We will be led to the digging area from the museum.

FEES: DAYTIME FLUORITE DIG:

Fee to visit the museum: \$5.00

Fee to dig fluorite: \$25 initially - this covers your first bucket; additional buckets are \$15; bring your own 5 gallon buckets

Fee to dig fluorescents: \$30

SUNDAY MAY 19, 2013: DESOTO (JEFFERSON COUNTY), MO: STINCHCOMB MINE BARITE DIG

Following an overnight stay, FM President Clyde Spencer has worked out a third collecting opportunity to a private barite quarry near De Soto (MO), south of Saint Louis. The locality has barite with druzy quartz and minor amounts of typical MVT mineralization, along with some fossils. The link following has a general locality map: <http://www.mindat.org/loc-44035.html>

The plan is to drive from Marion (KY) on Sunday morning (May 19th) and meet mine owner Bruce Stinchcomb at 10:00 AM at a public parking area just off I55 at the Richardson Road exit (Exit 190), near Washington State Park. Bruce will then escort us to his mine, with a couple of roadside outcrops to examine on the way.

According to GPS calculations, it is about 224 miles to Desoto, with a travel time of approximately 3:23 from Marion, KY.

As of press time, these arrangements involving the Sunday leg of the trip, are tentative and subject to modification if the need arises. Please contact Reggie Rose, Clyde Spencer or John Davis if you plan to attend so that if there are any last minute changes you can be notified.

SATURDAY JUNE 01, 2013: JUNCTION, OH

Quarry Travel Guide: STONECO AUGLAIZE – JUNCTION, OH

FIELD TRIP LOCALITY: Shelly - Stoneco Auglaize Quarry - Junction, OH

ADDRESS: 13762 Road 179, Oakwood (Junction), OH 45873

COUNTY: Paulding

DATE OF TRIP: Saturday May 12, 2012

TIME OF FIELD TRIP: 7:00 am – 11:30 am (Be there a little early for check-in)

TRAVEL TIME FROM DESIGNATE POINT:

Varies dependent on where you live; From Grove City, OH: 2:33

TRAVEL DISTANCE: Varies dependent on where you live; From Grove City, OH:
136 miles

AGE OF ROCK: Middle Devonian

ROCK UNITS: The Detroit River Group

SPECIMENS PRESENT: Auglaize Quarry is best known for its crystals of iridescent brown fluorite, along with sphalerite, calcite, pyrite, quartz, and hydrocarbons. The minerals are found in pockets and fractures of quarry dolostones.

TRAINING REQUIRED: MSHA

QUARRY LOCATION:

FROM THE NORTHEAST: Take route 111 SW from Defiance about 8 miles to Ohio State Route 637 just east of Junction. Go east a short distance across the Auglaize River, and turn south on Paulding County Road 179 to the Quarry office on the east (left) side of the road.

FROM THE SOUTH: Take I 75 N to exit 130 (Bluelick Road). Take Bluelick Road 3.5 miles west to route 65; Take route 65 N/R for 1.6 miles where you will bear left onto route 115 N – take this route 7 miles into Kalida and continue in 115 N for 19.5 miles till its jct with route 15 – go W/L on route 15 for 0.5 miles to route 613 – go W/L on Route 613 for 9 miles passing through Continental, Hartsburg & Oakwood. At the Jct of 613W and route 66 west of Oakwood, take Route 66 N/R; 5 miles later, take route 166 L/W; 2.6 miles down the road turn right (N) onto County Rd 179 – take 179 N for 1.3 miles to the quarry entrance on your right.

Membership Renewal

Friends of Mineralogy, Midwest Chapter

Membership Application Form

Dues are for calendar year January 1st through December 31st

Dues should be paid by January 15th

Dues must be current to participate on FoM activities

Annual dues currently are \$15 for an individual member & \$10 for each additional family member

Name _____

Additional family member names _____

Address _____

Telephone _____ E-mail _____

Commercial mineral dealer? Yes _____ No _____ Company Name _____

Club newsletter via e-mail? Yes _____ No _____

Total Memberships _____ Total Remittance \$ _____

Signature _____

Submit form with remittance to Jeff Spencer, FoM Treasurer, 4948 Beachwood Dr., Cincinnati, Ohio 45244