

NEWSLETTER
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MIDWEST CHAPTER, FRIENDS OF MINERALOGY
MEETING
SATURDAY 4:00 PM MAY 2, 1998

UPCOMING FM MEETINGS, PROGRAMS & FIELD TRIPS

Saturday May 2, 1998. Cincinnati 1998 Gem-Mineral-Fossil-Jewelry-Lapidary Arts Show. Cincinnati Gardens, 2250 Seymour Avenue. Midwest FM meeting at 4:00PM. Saturday speakers: 1:00PM, Carl Francis "Quartz and Other Silicates"; and 3:00PM, Michael Wise "New Smithsonian Gem & Mineral Hall". Sunday speakers: 1:00PM, Jeffrey Scovil "Mineral Photography - A Month in France"; and 3:00PM, Rodney Feldmann "The Search for Fossil Crabs".

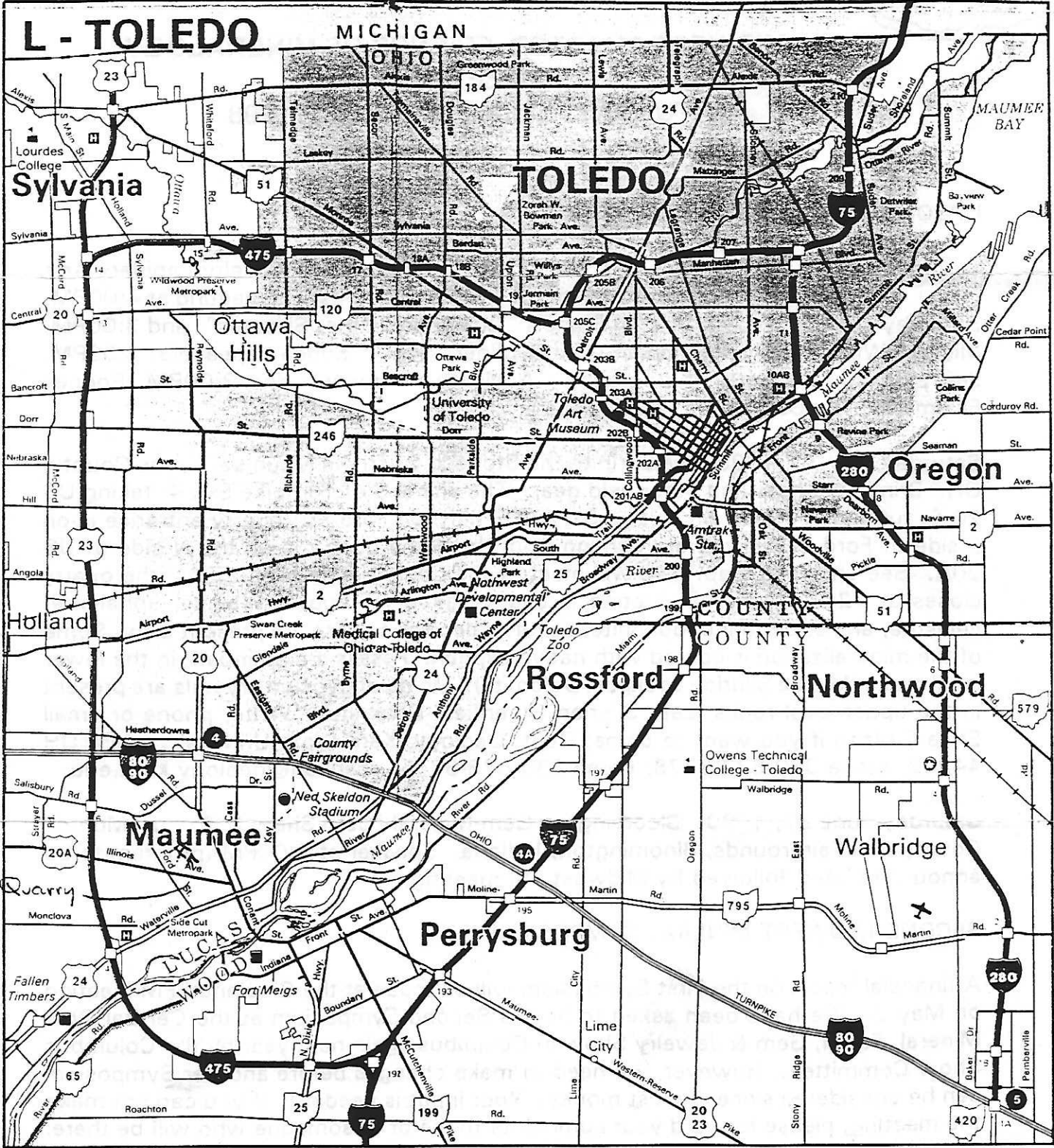
Saturday May 30, 1998. Field trip to the Stoneco Quarry in Maumee, Lucas County, OH. Bring hard hats and other field gear. The site is S of Turnpike Exit 4, taking US 20 S, turning W (right) on Dussel St. and S (left) on Ford St.; quarry entrance is on E side of Ford St. If you are coming from the S the quarry is on the N side of US 20A. See enclosed map. We will meet at the Scale House at 8:00AM; the quarry closes at 12:00 noon. Collecting is usually good for fluorite, calcite, sphalerite, celestite, and strontianite; dolomite, sulfur, galena and pyrite are present also. Some of the mineralization is coated with native asphalt. Fossils are abundant in the lower level rocks (Middle Silurian Lockport Dolomite). Molds of gypsum crystals are present in the upper level rocks (Late Silurian Greenfield Dolomite). Write, phone or email Ernie Carlson if you want to come: Dept. Geology, Kent State University, Kent OH 44242; office 330-672-3778; home 330-678-8875; ecarlson@geology.kent.edu

Saturday June 27, 1998. Bloomington Gem-Mineral-Fossil Show & Swap. Monroe County 4-H Fairgrounds, Bloomington, Indiana. Speaker at 4:00PM (program to be announced later) followed by Midwest FM meeting.

SECOND MIDWEST MINERAL SYMPOSIUM ??

A financial report on the First Symposium will be made at the Cincinnati FM meeting on May 2. We have been asked to host a Second Symposium at the Central Ohio Mineral, Fossil, Gem & Jewelry Show in Columbus again next year by the Columbus Show Committee. However, we need to make changes before another Symposium can be considered since we lost money. Your input is needed!! If you can not make the meeting, please forward your comments to me or to someone who will be there.

Ernie Carlson



MINUTES OF THE MARCH 14, 1998 MEETING
MIDWEST CHAPTER - FRIENDS OF MINERALOGY

Our meeting was held at the Eastern Indiana Gem & Geological Society Inc.'s, annual Gem and Mineral Show at Richmond. About 30 people heard Midwest Chapter member, Ernest Carlson talk on Mississippi Valley-type ore deposits. So named for their location, these deposits form as replacement mineralization in Paleozoic carbonates. The principal deposits are located in the tri-state area of Oklahoma-Missouri-Kansas, central and southern Missouri, Illinois-Kentucky fluorite district, fracture filling in association with the 38th parallel fault zone in Kentucky, and the eastern Kentucky deposits. Similar, although smaller in size are deposits in Tennessee, and Rensselaer, Indiana.

A Paleozoic age of mineralization has been determined based on strontium/rubidium ratios. This age indicates mineralization was contemporaneous with the Appalachian uplift, and in fact the deposits are all located on the continental flank of the Appalachian/Ouachita Mountains. Mineralization includes galena, sphalerite, fluorite, and barite, with pyrite, chalcopyrite, dolomite, quartz, and calcite also present. All of these deposits have a similar paragenesis of mineral deposition.

Disappearance of air bubbles in fluid filled inclusions indicate the temperature of deposition was in the 70 to 150 degrees C range. Similarly, by measuring the freezing point of the same inclusions, it was determined the inclosed solutions were comparable to oil field brines (10,000+ mg/L TDS). Further indication of these types of depositing solutions is the presence of oil in inclusions within the rock, which causes some specimens to be highly fluorescent.

The March meeting of the Midwest Chapter FM was held following the program. Due to the absence of President Henry Barwood, Ernest Carlson presided over the meeting. A discussion of the first annual Midwest Chapter FM, Mineral Seminar and fieldtrip on April 4th and 5th. The symposium is being held in conjunction with the Central Ohio Mineral, Fossil, Gem and Jewelry Show, at Columbus, OH. Seminar pre-registration extends until March 27th 1998. As of March 14, 10 people were pre-registered. Speaker parking is being paid, and arrangements will be made for coffee and snacks at the 10:00 a.m. break. It was decided that seminar attendees ONLY, will be allowed to participate in the Duff's Quarry fieldtrip.

A spring fieldtrip to Maybee, MI is not likely, as the quarry is operating on Saturdays. However, a trip to the Rocky Ridge Quarry, Ottawa County is planned for late April or May. Congratulations to Nelson Shaffer, he has been elected the National FOM President. The current treasury balance is \$1150.34.

Following the Chapter business meeting, Theresa Boundy, from the Ball State Univ., Geology Department, gave a talk on Norwegian metamorphic minerals. Her graduate study was of surface exposures of rock that was formerly buried at a depth of 60 kilometers. At that depth, temperatures reach 800 degrees C. Originally a basalt, but after burial, and volume reduction from the pressure, the mineralogy changed to pyroxene and dark red garnets (Christmas tree rock). This compacted metamorphic rock is known as eclogite. The resulting volume reduction during metamorphism causes fracturing of the host rock, which allows the metamorphic process to expand into larger and larger areas.

Submitted by Kim Greeman -secretary/treasurer. --DUES ARE NOW PAST DUE
Be sure to visit the Midwest Chapter FM homepage at www.indiana.edu/~minerals.