MARK YOUR CALENDARS

11 JAN MAPS MEETING. (NOTE CHANGE OF WEEKEND.) Augustana College, Rock Island, IL.
1:00 Board & General Meeting combined.
2:00 Program: Show and Tell/Look and See

1 FEB MAPS MEETING. Monmouth College, Monmouth, IL
1:00 Board & General Meeting combined.
2:00 Program: Larry Wiedman will be in charge of the program: Specimens from Jim O'Daniel's Collection. Some of the specimens are from Jim's great, great grandfather's collection and date back to the 1800s.

*** 91/12 DUES ARE DUE ***

Are your dues due? You can tell by checking your mailing label. The top line gives the expiration date in the form of year followed by month—91/12 means 1991/Dec. Dues cover the issue of the Digest for the month in which they expire.

We do not send notices but will let you know if you are overdue by highlighting your mailing label on your Digest. We carry overdues for two months before dropping them from our mailing list.

Please include your due date and name exactly as it appears on your mailing label—or include a label.

Dues are $15 per U.S./Canadian household per year. Overseas members may choose the $15 fee to receive the Digest by surface mail or a $25 fee to receive it by air mail. Library/Institution fee is $25.

Make checks payable to MAPS and mail to:
Sharon Sonnleitner, Treas.
4800 Sunset Dr. SW
Cedar Rapids, IA 52404

ANAPS MEETING UPDATE

As announced in the last issue of the Digest, MAPS members have been invited to attend the Association of North American Paleontological Society's (ANAPS) convention, June 28 to July 1, 1992, at the Field Museum of Natural History in Chicago. Further information from the Society indicates MAPS members may register at a reduced fee of $95 (instead of $125) with proof of MAPS membership. Your current Digest label will serve as proof of membership.

For more information, see the November issue of the Digest, or write to:
The University of Illinois at Chicago
Conferences and Institutes (M/C 607)
Box 6998
Chicago, Illinois 60680

A POEM FOR YOU
by Gene Harris

If you’ve been good as all children should be,
You’ll find loads of presents under your Christmas tree
Like Eurypterids and trilobites
And Triceretops and Ammonites.
Like Carcharodon megalodon and teeth of a Demetrodon.
Like the shark called Isurus
And the bones of Apatosaurus
And Stegosaur hips
And Pteranodon lips.
But if you’ve been bad, on this night of nights
Your stocking will be filled with Coprolites.
The following letter is in response to the question of how to ration tables at EXPO.

Dear Members:

... My name is Charles Oldham; I am 41 years old, an Environmental Engineering geologist for the Kentucky Department of Surface Mining. I also own and operate a small company—River City Geological Survey and Supply. I have been a member of MAPS since its conception.

I have attended some of the early EXPOs (2-5). Somewhere around EXPO 5 or 6 (?) there was a conflict with a large local show...I returned to EXPO in 1989. I was somewhat at a loss when I viewed the show. Where were all the exhibits? What had happened? It was very difficult to swap; almost everyone wanted money. The emphasis on the show floor had changed.

Last year I brought an exhibit of fossil corals from the Falls of the Ohio that was keyed to my paper in the Digest. I made the casual comment that it was a shame that there were not more exhibits. I was taken back when a fair number of people within earshot commented that exhibits took up valuable table space and that the show would be better off without them. Also, that it was their opinion that the material for sale on the dealers' tables was not as good as what they had seen so far. I was very much tempted to pack up my display and shove it back in the truck.

MAPS is at a crossroad. Divisional lines are being drawn by different interest groups. So far, the squeaky wheels have been the "professional dealers." (I will refrain from naming names.) I have been contacted and even confronted by some of these "professional dealers" to side with them. Others have commented that "small non-professional dealers" like me should keep my opinions to myself.

The early EXPOs that I attended (2-5) were truly drawn by different interest groups. So far, the squeaky wheels have been the "professional dealers." Reason? simple, I need to acquire fossils carried by most "professional dealers" are repetitive and can be acquired at their source.

As a dealer and/or collector, I would rather see more back when a fair number of people within earshot commented that exhibits took up valuable table space and that the show would be better off without them. Also, that it was their opinion that the material for sale on the dealers' tables would be a better exhibit than what they had seen so far. I was very much tempted to pack up my display and shove it back in the truck.

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The early EXPOs that I attended (2-5) were truly drawn by different interest groups. So far, the squeaky wheels have been the "professional dealers." Reason? simple, I need to acquire different, unique and reasonably priced fossils. The fossils carried by most "professional dealers" are repetitive and can be acquired at their source.

As for big shows—the bigger the show, the more difficult it is to put on. Big shows take more help, more money—everything is more. A big show becomes dependent (financially) upon drawing dealers who will bear the brunt of the expense. These dealers, in return, demand certain conditions—EXPO insurance, special lighting, RV hookups, table covers, security, loading and unloading, media advertising, etc. In the end the show revolves around catering to the dealers. I know—I have been on both sides of this table. And, lastly, somewhere along the line the "small dealer" is excluded.

As to the subject of the table allotment... For me two tables are not sufficient--three are... Whether or not I am to be considered a "professional dealer" remains to be determined. If I hired a truck large enough, I could cover every table in the entire show and still have stock to set on the floor. Last year I overheard one of the so-called "professional dealers" brag that he registered himself, his mother, and his dog and got six tables. Perhaps this year I should register myself and my five cats—just joking...

Best Wishes,
Charles Oldham

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EXPO TABLES, ETC.

The table situation at EXPO was discussed at length at the December MAPS meeting, and several decisions were made in an attempt to keep table distribution equitable and allow as many people as possible to obtain tables:

1. There will be a limit of 2 tables per person. Exhibitors are encouraged to keep boxes under tables and bring out new specimens when others are sold. (This is the procedure used in Europe where space is sold by the meter.) A great effort will be made to limit tables to 4 per family or group. (We reserve the right to arrange tables as we see fit rather than by request.)

2. Anyone with special needs that would require more than 2 tables (such as the book dealer) may apply to the Board for an exception. Again the upper limit is 4. Requests must be made by March 1 and will be acted on as soon as possible after they are received. All decisions will be made by March 7.

3. Tables in the Ballroom will cost $15 each. Tables in the Lobby will cost $15/table/day with no security and will be used only for overflow. MAPS will not provide storage for Lobby tables. (We don't expect to need to use the Lobby tables.)

Also, a reminder that each exhibitor is asked to donate a quality specimen for Saturday's auction. Profits go to the Paleontological Society for a scholarship. Please donate specimens as early as possible during EXPO so that people will have time to look at them before the auction.

EXPO registration forms, etc., will appear in the January issue, hopefully in about a week.
COLLECTING ORDOVICIAN FOSSILS IN THE LEXINGTON, KENTUCKY, AREA
by: Mark G. McKinzie, Oklahoma City, Oklahoma

INTRODUCTION

In July, 1991, I had the opportunity to collect Ordovician fossils in the Lexington, Kentucky, area. My girlfriend and I were in Bluegrass country attending the National Paint Horse show. While my girlfriend watched horses, I scoured outcrops. Lexington is approximately 80 miles due south of Cincinnati, Ohio, on the south end of the Cincinnati Arch. Even though the outcrops are not as numerous (or as famous) as their northern neighbor, the fossil collecting is still pretty darn good.

LEXINGTON is located in the heart of the inner bluegrass belt in north-central Kentucky. You can actually map the extent of the bluegrass belt as it coincides with the outcrop area of the Ordovician rocks in Kentucky. It is the phosphate in the limestones that contributes to the strong bones of the Kentucky race horses. As one move east, south, or west of Lexington, one eventually crosses into a hillier region known as the "knobs." This is the boundary with Devonian-Mississippian rocks exposed in the area (see Figure 1).

The town itself lies along the axis of the north-south trending Cincinnati Arch. The oldest rocks in Kentucky (of Ordovician age) are located south of here along the Kentucky River. The oldest rocks I was concerned with were middle Ordovician/Champlainian series limestones and shales (see Figure 2). In Oklahoma I collect from equivalent age rocks in the Arbuckle Mountains known as the Trentonian Viola limestone. Back home it is a deeper water deposit than the limestones I examined here. As you move upsection, you pass into the upper Ordovician limes and shales of the Cincinnatian series. In ascending order the major groups are the Eden, Maysville, and Richmond. The Ordovician is overlain by the Silurian Brassfield formation.

In a regional sense, the alternating limestones and shales record the variable rates of clastic influx on an extensive carbonate platform. The Canadian shield was surrounded by a large, flat, and thick carbonate shelf during the upper Ordovician. This epeiric sea was very shallow with thousands of miles of sea bottom at or near normal wave base. Back then, the present-day Atlantic Coast was the site of an extensive

FIGURE 1
INDEX MAP OF LEXINGTON AREA
The erosion of those mountains produced the Queenston Deltaic Complex of New York.

In the immediate vicinity of Lexington, the ocean bottom was far enough from the shoreline that limestones were deposited under normal conditions. On a frequent basis, however, increased sediment influx from the distant mountains caused the deposition of interfering shale and silty units. This alternating lime and shale sequence was repeated time and time again during the upper Ordovician. At no time were the seas deeper than 120 feet in north-central Kentucky.

FOSSILS COLLECTED

I was able to examine nearly a dozen outcrops of Ordovician age during my visit to Kentucky. A partial listing of the outcrops I visited follows the conclusion of this article. I will briefly describe some of the collecting highlights of the trip.

The best single specimen I collected came from an abandoned field a block away from the hotel we were staying at (Locality #2). The hotel is on the east side of Lexington at the intersection of HWY 60 (Winchester Road) and I-75. The rocks exposed are middle Ordovician limestones of the Lexington Is. I discovered a slab containing 4 partially to nearly complete crowns of the crinoid Glyptocrinus dyeri.

Lying draped over one of the crowns is the cephalon and thorax of the trilobite Odontoplura sp. The block had obviously been bulldozed at one time, or all the fossils would have been perfect. It is remarkable how much this trilobite resembles the odontopluerid Leonaspis williamsi from the lower Ordovician of Oklahoma. Further surface collecting revealed nothing but brachs and bryozoans.

Just a mile north of this locality at the intersection of I-64 east, and I-75 south is a beautiful roadcut on both sides of the underpass of I-64 eastbound (Locality #3). About halfway up the outcrop of the north side is a zone of huge bryozoan colonies (see Figure 3). The bryozoan colonies are up to 2 feet across and 1 foot tall, with flat bases and rounded tops. The overall shape is semi-hemispherical, and all the colonies were touching one another. It reminded me of a cookie sheet with the biscuit dough having risen too much, and the biscuits were all clumped together.

One of the colonies had been split in half during the road construction blasting and, instead of being solid, was lined with dog-tooth calcite crystals. It would have been a beautiful display specimen except it was much too large to carry home. As it was, I took home approximately 150 lbs. of fossils with me on the plane. Trying to get those on board was an ordeal in itself.

Moving east on I-64 from Lexington, one passes into progressively younger Ordovician rocks. There are numerous good exposures of Cincinnatian series rocks on both sides of the highway. One and a half miles east of Winchester (30 miles east of Lexington) are a series of good outcrops of
the Eden-Maysville groups (Locality #4). The limestones and shales are extremely fossiliferous (see Table 1). The drainage ditches paralleling the interstate are literally choked with fossils weathered free of the surrounding matrix.

The fauna is dominated by brachiopods and bryozoans of all shapes and sizes. Various species of the orthid brach Platystrophia are very abundant here. Also numerous are the various growth forms of the type Richmondian bryozoan Constellaria. It's amazing how many growth forms this genus could assume at the exact geologic time, and in the same depositional environment. As I have seen time and time again in the Ordovician, the diversity and abundance of bryozoans comes at the expense of the corals. I could have collected hundreds of bryozoan specimens but only found 3 corals during the week stay.

It was refreshing to see molluscan fossils remains, specifically pelecypods, with the shell material still preserved. In the Ordovician of Oklahoma, it is unusual to find anything but molds and casts. Absolutely magnificent specimens of the coiled gastropod Cyclonema bilix can be collected at this locality.

Continuing further east on I-64, one will notice a prominent ridge capping every outcrop. This is the Silurian Brassfield formation, and the rocks directly underneath it are upper Ordovician rocks of the Richmond group. From a few miles east of Mt. Sterling on, one will see this contact at the top of all the outcrops. Most of the outcrops I stopped at in the upper Richmond were barren of fossils.
One mile east of Ollinsville, exit on HWY 60 south and one will immediately see an extensive roadcut on the south side of the road. The Silurian Brassfield also caps the outcrop here. A very diversified molluscan assemblage can be collected at the base of the cut (see Table 2). Notice that the limestones are very sandy and coarser-grained than those at previous outcrops farther west. The fossils are not nearly as abundant, and the bryozoans are noticeably absent. The differences in fauna here and those exposures lower in the Ordovician can be attributed to changes in the sea bottom with respect to proximity to the paleo-shoreline.

ENVIRONMENT OF DEPOSITION

After examining the fossils in the Cincinnatian series, and viewing the changes in lithology associated with them, I realized there is a general shallowing upward sequence as one approaches the Silurian Brassfield formation. It culminates in an unconformity at the base of the Brassfield which represents a period of non-deposition.

The middle Ordovician Lexington limestone and the Eden-Maysville groups both were deposited in an offshore environment where conditions were favorable for an abundance of bottom-dwelling filter-feeders (see Table 1). The sea bottom was dominated by brachiopods and bryozoans. All other fossils were minor constituents of the biota. Though the bryozoans grew in great thickets, they never formed any reef-like structures. The shoreline was miles and miles east of north-central Kentucky at the time. Yet the water was still shallow enough to sweep the bottom on a regular basis. The constant wave agitation probably limited the crinoid distribution to deeper waters where the bottom conditions were more quiescent. The wave action was not strong enough to disarticulate the shelly fauna, and thick accumulations of debris developed. Many brachiopod shells and bryozoan colonies have encrusting bryozoans on them, which suggests that they were exposed on the surface for some time before burial.

On the other hand, the upper Richmond group fauna is dominated by a molluscan element (see Table 2). Large, robust brachiopods are also a major factor of the biota. The Platystrophia ponderosas from here are considerably larger than the ones from lower in the section. The larger size gave the better stability in an even higher energy environment. All the pelecypods were mobile to some extent and were able to move about in a shifting substrate. The cephalopod Orthoceras sp. probably washed in from deeper waters. But that may not be the case. It is not uncommon to find modern-day squids stranded in tide pools after coming into the shallows to feed during high tide.

The shoreline was much closer to Kentucky during the upper Ordovician, and these fossils may have lived very close to the low tide line. This was a very high energy environment, and the waters were well-oxygenated and nutrient-rich.

Note the decrease in diversity as you approach the paleo-shoreline (see Table 1 versus Table 2). This is due to the harsher and more unstable conditions of the onshore environment compared to the more stable conditions of the offshore environment. Ultimately, the differences in fauna reflect the differences in living habitat and the organisms that were best able to adapt to them.

REFERENCES

LIST OF FOSSIL LOCALITIES

1. Go south of Lexington on HWY 27 to Nicholsville (20 miles south). At intersection of business 27 & HWY 27 are outcrops on both sides of road. Jessamine county.
   AGE: Middle Ordovician/Champlainian series (Trenton age)
   FORM: lwr Lexington Is. (Hermitage ls?)

2. Abandoned fields just NW of intersection of HWY 60 (Winchester road) & I-75 on NE side of Lexington. Fayette county.
   AGE: Middle Ordovician/Champlainian series
   FORM: upr Lexington ls.

3. Underpass I-64 going under I-75 on NE side of Lexington on both sides of interstate. Fayette county.
   AGE: upr middle Ordovician/Champlainian series
   FORM: Cynthiana fm.

4. 1 mile east of Ollinsville on I-64 east of Lexington. Get off on access road to HWY 60 and look at large outcrop on south side of road. Bath county.
   AGE: upr Ordovician/Cincinnatian series
   FORM: upr Richmond group

5. 1 1/2 miles east of Winchester on I-64. Numerous outcrops on both sides of highway. About 25 miles east of Lexington. Clarke county.
   AGE: upr Ordovician
   FORM: Eden-Maysville group

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ADVERTISING SECTION

Ads are $5.00 per inch (6 lines x 1 column--43 spaces). Send information and checks payable to MAPS to: Mrs. Gerry Norris, 2623 34th Avenue Ct., Rock Island, IL 61201. Phone: (309) 786-6505. This space is a $5.00 size.

To extend currently running ads, please send request and remittance to Editor by the 15th of the month. We do not bill. Ads do not run in the EXPO issue (April). Ads up to 8 lines by 54 spaces can be printed in smaller type to fit a 1" space.

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How to Prepare Fossils Volume 1

Trilobite Preparation

65 minute video covers set up of the preparation station, use of the air-abrasive, air scribe, microscope, prep box, and much more. Shows from start to finish the preparation of two trilobites. See through the microscope as well as through the prep box window. Techniques can be applied to most invertebrate preparation. Available in VHS for $39.95 or SVHS for $49.95.

Send check or money order to:
Gary D. Chilson
846 SW 26th Place
Davie, Fl. 33328

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FOSSIL BOOKS. Planning to hunt fossils in Florida, Texas, Ohio, Missouri, Montana, Oregon, etc.? We carry the guide books to these and many other states. In fact, we offer nearly 100 popular and professional books on Paleontology. Catalog $2.00 (refundable).

Paleo Books and Prep. Supplies, PO Box 542, Hot Springs, SD 57747.

INSECT INCLUSION AMBER From the Dominican Republic. 3 5Million Years Old (postpaid).
12 Fossil Packet...$100
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721 N.W. 14th Court
Miami, Florida 33125
Telephone (305) 649-9346

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Please ADD the Following NEW OR REJOINING MEMBERS to Your Directory:

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Rt. 2 Box 1078
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918-363-8398

Florida Fossil Hunters
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Orlando, FL 32810

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Lancaster, NY 14086
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Hatfield, PA 19440
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Scott Taylor
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Houston, TX 77025

Noel E. "Gene" Wood
P.O. Box 241
Rock Springs, WY 82902
307-362-8255

Steve Zimpfer
131-1 Pinehurst Ct.
Athens, GA 30606
353-2566

Bruce & Ruth Banick
3811 Schintzius Rd. E.
Eden, NY 14057

Manufacturing Engineer. Will trade. Nothing to trade currently. Wants to be in touch with people who share a common interest in fossils.

Robert Hoffman
Engineer. Collects all types of fossils. Loves to collect local Devonian specimens. Has local items, some excellent for trade. Treasurer and former president of Buffalo Geol. Soc. Will lead field trips.

Paul Mallon
Consulting Engineer. Will trade. Member Delaware Valley Paleo. Soc.

Noel E. "Gene" Wood
Engineer. Will not trade. Major interest fish, leaves. Wants to have a wider association with fossil collectors.

Steve Zimpfer
Interested in cephalopods, echinoids, and vertebrates. Collects throughout the Southeast and would like to meet with other collectors in that region.

Bruce & Ruth Banick

PLEASE NOTE THE FOLLOWING CHANGES OF ADDRESS OR CORRECTIONS:

Lawrence A. Gilbert
DELETE PHONE

Pierre Gonin
ADD PH. ALSO FAX

Gary Lumannick
Teacher. Interested in all fossils, especially eurypterids, Badland skulls, Devonian fish and dinosaur bones and teeth. Has for trade Florida vertebrate and invertebrate fossils as well as some Cretaceous fish from Brazil.

Harvey & Steffie Negrich
3011 Hampton Crescent SW
CALGARY, ALBERTA
CANADA

George Wallace Powell, Jr.
2208 Los Pueblos Ln. #2
Falls Church, VA 22043-2278
New ZIP
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#601 Greenbelt Rd.
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301-577-8718

-8-
The **Mid-America Paleontology Society (MAPS)** was formed to promote popular interest in the subject of paleontology; to encourage the proper collecting, study, preparation, and display of fossil material; and to assist other individuals, groups, and institutions interested in the various aspects of paleontology. It is a non-profit society incorporated under the laws of the State of Iowa.

Membership in MAPS is open to anyone, anywhere who is sincerely interested in fossils and the aims of the Society.

Membership fee: One year from month of payment is $15.00 per household. Institution or Library fee is $25.00. Overseas fee is $15.00 with Surface Mailing of DIGESTS OR $25.00 with Air Mailing of DIGESTS. (Payments other than those stated will be pro-rated.)

MAPS meetings are held on the 1st Saturday of each month (2nd Saturday if inclement weather). October & May meetings are scheduled field trips. The June meeting is in conjunction with the Bloomington, IN, Gem, Mineral, Fossil Show & Swap. A picnic is held the fourth weekend in July. November through April (except February) meetings are scheduled for 1 p.m. in the Science Building, Augustana College, Rock Island, Illinois. The February meeting is held at Monmouth College, Monmouth, Illinois. One annual International Fossil Exposition is held in the Spring.

MAPS official publication, MAPS DIGEST, is published 9 months of the year--October through June.

- **President:** Gil Norris, 2623 34th Avenue Ct., Rock Island, IL 61202
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- **Membership:** Tom Walsh, 501 East 19th Avenue, Coal Valley, IL 61240

**CYATHOCRINITES**

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Mrs. Sharon Sonnleitner  
MAPS DIGEST Editor  
4800 Sunset Dr. SW  
Cedar Rapids, IA 52404

**Dated Material - Meeting Notice**