

# M·A·P·S

## Digest

Official Publication of  
**Mid-America Paleontology Society**  
<http://www.midamericapaleo.org>

Volume 39, Number 3  
May-Aug., 2016



**“A LOVE OF FOSSILS BRINGS US TOGETHER”**

# Calendar

**2016**

**MAPS Meetings TBD**

**2017**

**March 31-April 2**

**MAPS EXPO XXXIX**

**Location:** Sharpless Auctions  
Exit 249 I-80  
Iowa City, Iowa

**Theme:** Silurian Period

**Keynote Speaker:** TBD

**Topic:** TBD

## Contributions to Digest Needed

The Digest editors encourage the members to submit articles for publication in the Digest issues. The Digest is for the members and should reflect their interests. If you have specimens that you collected and would like to share with other members or would like to describe a favorite collecting site, please write an article in Word, Times New Roman size 12 font, single spaced with one inch margins, and send to the editors. Photos and diagrams can be e-mailed separately or incorporated in the article.

**John:** [Fossilnautloid@aol.com](mailto:Fossilnautloid@aol.com)

**Chris:** [CDCozart@aol.com](mailto:CDCozart@aol.com)

## Call for Papers

The theme for the **2017 EXPO** is the **Silurian Period**. Any paper dealing with Silurian geology or paleontology would be appreciated. The papers should be in Word, Times New Roman, size 12 Font, single spaced with one inch margins, and e-mailed to one of the Digest Editors by the **first week of February 2017**. Diagrams/Photos can be sent separately or imbedded in text.

**John:** [Fossilnautloid@aol.com](mailto:Fossilnautloid@aol.com)

**Chris:** [CDCozart@aol.com](mailto:CDCozart@aol.com)

## DUES INFO

Please send your \$20 2016 MAPS dues to:

**Dale Stout**  
**2237 Meadowbrook Drive S.E.**  
**Cedar Rapids, Iowa 52403**

## About the Cover

This issue's cover features a picture of the MAPS Board with Phil Currie and Eva Koppelhus. Standing (l. to r.): Dale Stout, John Catalani, Phil Currie, Doug DeRosear, Karl Stuekerjuergen, Jim Preslicka, Tom Williams, and Gil Norris. Kneeling (l. to r.): Bill Desmarais, Eva Koppelhus, and Marv Houg. (Absent: Tiffany Adrain.) Photograph provided by Mary and Rick Wells.

## **2016 MAPS EXPO Show Summary**

**Marvin Houg ([m\\_houg@yahoo.com](mailto:m_houg@yahoo.com))**

For those that didn't attend this year's EXPO show and pre-show what did you miss?

- Another three day fossil-only show with a sold out show providing many fantastic fossils for sale, trade, or purchase.
- Great programs during the day, with a diverse range of topics presented by very knowledgeable amateur collectors.
- Great items in our many silent auctions, which were very successful this year.
- Great items in our live auction, including a dinosaur dig trip. This was also a successful auction.
- Great displays including large scale dinosaurs that the kids could sit on and get their pictures taken.
- Fantastic food served at the facility with a variety of foods, most notably the great cinnamon rolls and great pies. (Remember the challenges of getting a good variety of food at the field house at WIU in Macomb.)
- A great pre-show at the Clarion with many vendors selling a wide range of items including fossils, minerals, agates, geodes, jewelry, and etc.
- Another great EXPO Digest with many great articles.
- And topping off a great show was a world class dinosaur speaker, Dr. Phil Currie who spoke to an audience of between 150 and 200 people at our Friday evening talk. Dr. Currie's wife Eva Kopplehaus also spoke to a group at the University of Iowa just prior to Dr. Currie's talk. Dr. Currie's talk was very educational but was tailored to both those that are very technical in the study of dinosaurs and those that are novices. What was critical in bringing Dr. Currie and his wife to Iowa City is that, between the honorarium and the travel expenses from Alberta, Canada, the cost was more than we normally incur. To help offset that higher cost we asked for sponsorships to bring them here. As a result, we had many people and clubs step up and contribute to the point that there was hardly any expense incurred by MAPS. For that we would like to thank everyone who contributed.

One way to judge the success of any venture is how many complaints or problems surface after the activity has closed. While I can't say there were no problems this year, I can definitely say we heard very few complaints this year. We consider it to be one of our most successful shows in several years giving the Board a great platform to build on as we go forward.

So what did we do differently this year?

- Advertised in the local paper for five days leading up to the show.
- Sent the show flyer to most of the rock clubs in the Midwest.
- Set up a Facebook page which received thousands of hits, and is still getting hits today.
- Worked closely with those running the pre-show at the Clarion to help maximize the impact of our advertising dollars.
- Moved the silent auction area to the back of the second room to isolate it from the hourly speakers in the front of the room.
- Put out live auction items for silent auction style bidding to get a better starting bid at time of live auction.
- Brought in one of the top dinosaur experts in the world, Dr. Phil Currie, to be our Friday night speaker.
- Moved the Friday program to the Clarion to provide more room in a setting more conducive to presenting a program to a possibly large group.
- Solicited sponsorships to help defray the cost of bringing Dr. Currie and his wife to Iowa City.
- Printed a tri-fold handout with a synopsis of both Dr. Currie's talk and his wife Eva Kopplehaus' talk. This tri-fold gave other information on the show including the names and program titles for the daytime speakers.

So what about 2017 and how do we make it better. While we always have a few little hitches every year, we can learn from them and try something different next year. Some of the things we will be doing are:

- Have our Friday night program at the Clarion, but in a smaller room.
- Evaluate our advertising and see where we can expand to a larger audience within the limit of our budget. We will be looking at national publications and major shows leading up to EXPO.
- Expand our use of Facebook and Twitter and other social media outlets.
- Evaluating specific displays that may help bring in more people.
- Bring in a nationally recognized speaker that would be matched to our theme.
- Work closely with those working on the pre-show to help maximize our advertising.
- Lastly, and most importantly, is to solicit feedback from this past show on ideas that people may have on how to improve the show.

All this would not have been possible without all the hard work that was put forward by many people.  
To recognize a few:

Show Chairman	Tom Williams
Digest Editors	John Catalani & Chris Cozart
Auction Chairperson	Amy Preslicka
Treasurer & Front Desk	Jim Preslicka
Speaker Hosts	Bill and Karen Desmarais
Day Speakers & News Release	Dale Stout
University of Iowa Coordinator	Tiffany Adrain
Clarion Hotel Organizer	Dan Cooper
Social Media Coordinator	Ray Garton & Zack Heck

I apologize if I left someone out because there were many more people who contributed. A big thank you to these people and the many others who helped put on a very successful EXPO show and a very big thank you to all those who attended this year's show. We are already looking forward to the 2017 show. Please help pass the word.

Thanks again  
Marvin Houg, MAPS President

### **Mid-America Paleontology Society 38<sup>th</sup> Annual Business Meeting April 2, 2016. Sharpless Auctions, Iowa City**

Board members present: Marv Houg, Dale Stout, Jim Preslicka, John Catalani, Tom Williams, Tiffany Adrain (scribe), Chris Cozart, Doug DeRosear, Gil Norris, Karl Stuekerjuergen.

Marv Houg called the meeting to order at 5:16 pm and introduced the Board members and Digest Editors (John Catalani and Chris Cozart).

Marv thanked the MAPS members whose sponsorship contributions helped bring Keynote Speaker Phil Currie to Expo.

Tiffany Adrain read the 2015 ABM Minutes. John motioned to approve the minutes, Jim seconded. Minutes were approved.

Jim Preslicka read the Treasurer's report. Jim was asked if MAPS broke even on the speaker costs. Marv confirmed yes and thanked the sponsors again. Motion to approve Treasurer's report was seconded by John. Report approved.

Marv acknowledged Tom Williams for Expo organization, Amy Preslicka and Don Szczodrowski, Charles Newsom, Dave Rouch, and Dale Stout for managing the Silent Auction.

Marv explained that ads would be permitted in the newsletter and Digest, but without turning them into classified ads papers.

Next year's theme is the Silurian. John has already been approached by authors.

Dan Cooper said joint ads for the Motel Show and Expo were placed in the Iowa Press Citizen. Chicago and Cedar Rapids papers are prohibitively expensive. Rock and gem shows present free advertising opportunities. The UI promoted Expo on news features about fossils found on a UI construction site. Dan will look into advertising at the Tucson show, depending on cost.

Old business: none

New business: none

There was a question about whether next year's speaker would be as good as this year's. There is a cost to use the Clarion, so a geographically-closer speaker will save costs.

John Catalani motioned to adjourn the meeting. Motion seconded. The meeting was adjourned at 5:31 pm.

### **Mid-America Paleontology Society Board Meeting April 2, 2016. Expo, Sharpless Auction, Iowa City, Iowa**

Board Members present: Marv Houg, Gil Norris, Dale Stout, Jim Preslicka, John Catalani, Chris Cozart, Tom Williams, Tiffany Adrain (scribe), Doug DeRosear.

Marv called the meeting to order at 3:48 pm.

Minutes from the February 2016 meeting were circulated (also by email previously). Jim motioned to approve the minutes, Tom seconded. Minutes were approved.

Jim read the Treasurer's Report. Marv has sponsorship checks.

Marv had 1,500 tri-folds printed instead of 1,000. Gil proposed that MAPS pay the extra cost. Tom seconded. Motion approved.

John recommended that the number of printed Digests be reduced. Tom moved that Digests not be mailed to members who had not paid their dues. Chris seconded. Motion approved.

Marv has had a request for an ad to be placed in the monthly newsletter by an auction house selling fossil-related materials. Will this set a precedent and how much should the charge be? John said that ad space should be sold as quarter-, half-, or full-page rather than by column-inches and should make money rather than break even. John proposed the motion to include quarter-, half-, or full-page fossil-related ads on

request in the non-Expo Digest and newsletters. John, Jim, and Marv will work out costs and send to board for vote. Tom seconded the motion. Motion approved.

John recommended a two- to three-year wait period before each Expo Digest is made available online on the MAPS website.

Tom would like a six-table maximum limit for Expo vendors.

The 2017 Expo theme is the Silurian. Several members have offered to submit papers already.

Marv moved to adjourn the meeting, Jim seconded. Meeting adjourned at 4:12 pm.



Bill Desmarais introduces the EXPO 2016 keynote speaker Dr. Phil Currie. Bill was instrumental in bringing Phil and his wife, Eva Koppelhus, to EXPO. Bill documents the process that led to their meeting, friendship, and collaboration that eventually resulted in Phil speaking at Expo on page 9 of this issue.



MAPS President Marv Houg and MAPS Secretary Tiffany Adrain present the 2016 Don Good Award to Sarah Horgen.



MAPS President Marv Houg presents the 2016 Sharon Sonnleitner Award to Bill Desmarais.

## MAPS EXPO 38—How did we get Phil Currie to Speak? William (Bill) Desmarais

It is 1982 and I am teaching a group of students rock climbing and rappelling in Banff National Park, Alberta, Canada. The class is part of a National Wildlife Federation Conservation Summit meeting held at the Lake Louise area. Near the end of the session I notice a tall slender man standing below us watching very intently. After I finish with the students and come back down to ground level the man approaches and introduces himself as Dr. Philip J. Currie. Phil Currie is a lecturer about dinosaurs and the upcoming Royal Tyrell Museum of Paleontology here at the Conservation Summit meeting. To my surprise he asks if I could teach him the rappelling skills he was watching the students do. I said “Oh! So you’re interested in rock climbing?” and he answers, “Not really, but I could use that technique to reach dinosaur fossils in the badlands and on cliffs.” Boy, does he now have my undivided attention. Rock climbing **and** dinosaurs: count me in. Later that evening we meet in the pub of the Chateau Lake Louise over a couple of Canadian beers. Phil explains his passion for dinosaur paleontology and how he could use the rock climbing skills. We strike up a friendship that has lasted now for 34 years.

Since that chance meeting in Banff National Park in 1982 I have been able to work with Phil Currie on several dinosaur digs and even work in his current lab at the University of Alberta in Edmonton. In 1993 I asked Phil to speak as part of “Connections” a natural history speaker series I pioneered in the Cedar Rapids area that connected colleges, the Cedar Rapids school district, and environmental organizations. To my surprise he accepted and I was able to get a small grant from the Greater Cedar Rapids Foundation to fund his visit. We also got Phil to speak for “Connections” in 1997.

During the late summer and early fall of 1998 I was fortunate enough to go work with Phil and his wife Eva Koppelhus in a working coal mine near Grande Cache, Alberta. In that mine thousands of dinosaur tracks were discovered after the coal seam had been removed. The site included tracks of many types of dinosaurs and birds as well as evidence of freshwater clams and tree trunks. All of these ichnofossils where found on a 60-70 degree cliff. Needless to say we had to use those rock climbing and rappelling skills we discussed many years before. I worked for two weeks alongside Phil, Eva, and Rich McCrea, the site researcher, measuring, photographing, and casting many of the tracks. After the experience Iowa Public TV included it in one of their “Living in Iowa” specials.



Bill Desmarais and Phil Currie on a 60-70 degree slope near Grande Cache, Alberta working on Cretaceous dinosaur and bird footprints. Note rock climbing gear.

In 2002 my family and I worked with Phil and Eva but this time at a bone site discovered by the famous (infamous) Barnum Brown. This quarry was in the Dry Island Buffalo Jump Provincial Park a short distance north of Drumheller, Alberta where Phil's Royal Tyrell Museum of Paleontology is located. The site contained multiple skeletons of *Albertosaurus* a large tyrannosaur. This discovery prompted Phil to speculate that large tyrannosaurs might have been pack hunters-a very scary thought. Later that year Phil and Eva came to lecture in Cedar Rapids again but this time at the auspices of the Cedar Valley Rocks and Minerals Society. The crowd for this lecture number over 250.



Phil Currie, my son, Colton Desmarais and Eva Koppelhus at Dry Island Buffalo Jump Provincial Park, Alberta, Canada, site of Barnum Brown's *Albertosaurus* discovery.

A few years later I get a chance to work with Phil and Eva again. This time is another bone site but it is way far north above the Wapiti River outside of Grand Prairie, Alberta. Oh no! Another cliff, but this time a beautiful scene with the Wapiti River flowing a couple hundred feet below us, very unlike the coal mine of a few years ago. However, we still need to use the rock climbing and rappelling skills that brought us together originally. The dinosaur fossils here are of a *Pachyrhinosaurus* species that may be a new species. Besides taking out the fossils here on the cliff Phil says I should come to Edmonton to work on them in the lab at the university. Who am I to say no?



Bill Desmarais, second from bottom, in northern Alberta digging *Pachyrhinosaurus* fossils on a one meter wide quarry two hundred feet above the Wapiti River.

It is January 2008 in Edmonton, Alberta, cold and snowy, when I arrive to work in Phil's lab. It is a perfect time to work indoors in a lab at the university. I am privileged to work with Clive Coy a longtime associate of Phil's who works to prepare fossils in the lab as well as take them out of quarries in the field. The work is on several of the *Pachyrhinosaurus* specimens that we removed the previous summer. I am also honored to work on some historic Sternberg material from the early 1900's.

We have now come to 2015 and my latest dinosaur expedition. Phil has invited me to work with himself and Eva in Dinosaur Provincial Park a UNESCO World Heritage site. This location along the Red Deer River in southern Alberta has more different dinosaur species than any other locality on earth. The badlands of this area are mid Cretaceous in age. It is truly amazing and a dream came true to dig here. Over more than two weeks we dig in three quarries of hadrosaurs and ceratopsians. Moose, elk, coyotes, marbled godwits, and even prairie rattlesnakes visit our camp. The scenery and the fossils are fantastic.



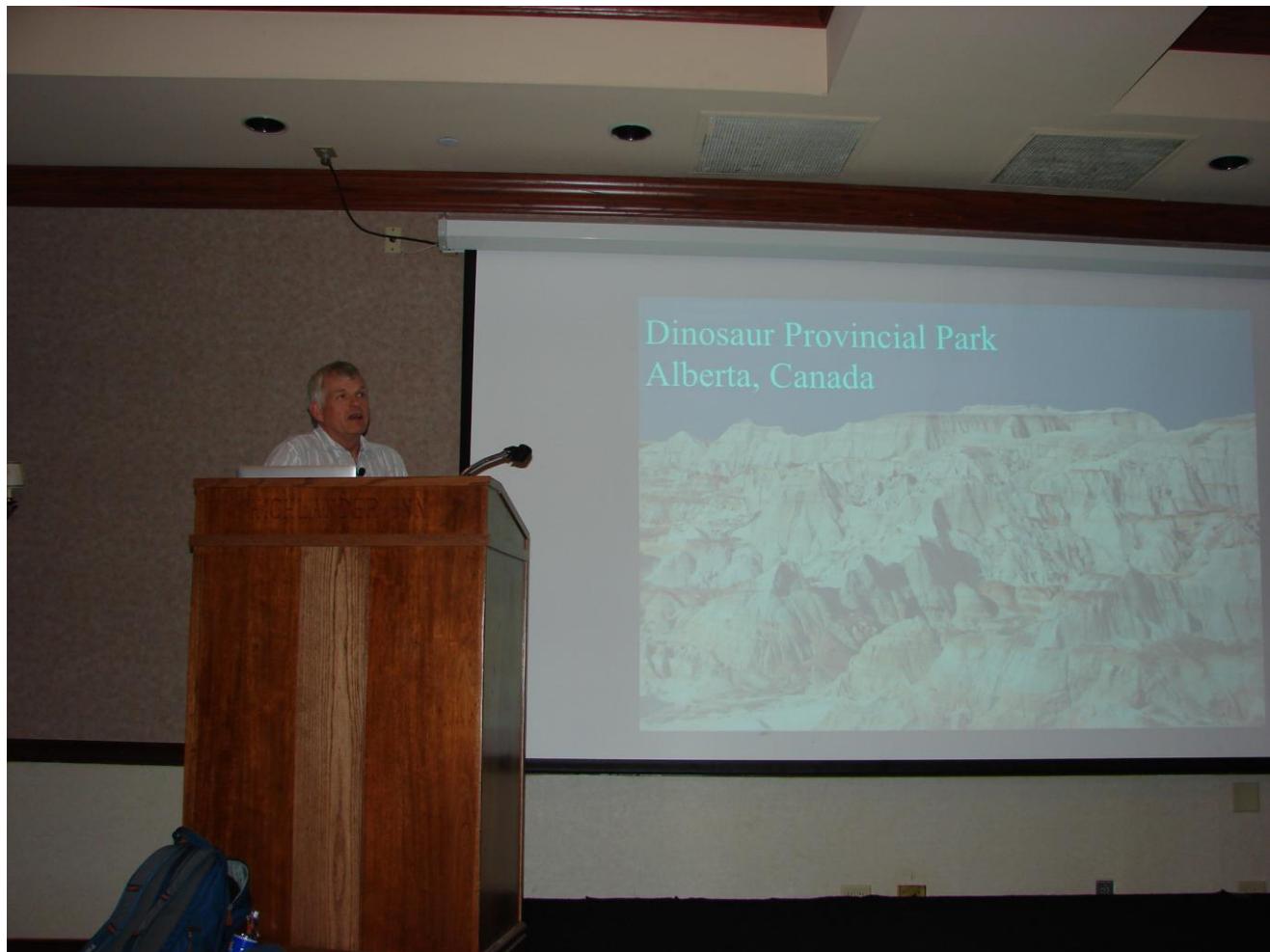
Bill Desmarais pictured working on Sternberg dinosaur fossils in Phil Currie's lab at the University of Alberta in Edmonton.



Dinosaur Provincial Park, Alberta, Canada. This is the core of the park. Note research vehicle.

It should be apparent at this point that I have had a remarkable time over many years with Phil Currie and his wife Eva Koppelhus. This is why MAPS was able to have Phil Currie as a keynote lecturer at EXPO 38; he is a friend of mine and now of the members of the Mid America Paleontology Society as well.

I will add as a footnote that Phil and Eva very much enjoyed their time here in Iowa, short as it was. Phil was impressed with the turn out for his lecture Friday evening and the quality of the Digest. Eva enjoyed her seminar at the University of Iowa as well as seeing an old friend. My wife, Karen, and I were able to show them some of our great Iowa scenery and introduce them to some good ole fashion Iowa foods.



Dr. Phil Currie pictured presenting the keynote address at this year's EXPO. His talk, entitled "The Dinosaurs of Alberta – old history and new discoveries", was well received and was followed by a lively question-and-answer session.

## Unusual Pennsylvanian Age Plant Fossil from the Mansfield Formation of Indiana

### William W. Morgan

For well over a hundred years, enthusiasts, both amateur and professional have collected vast numbers of Pennsylvania Age plant fossils usually from refuse piles produced secondarily to the commercial strip mining of coal. The harshly destructive methods associated with strip mining and the processes associated with the fossilization process itself have resulted in fossils which are almost always fragmentary. Thus, it is quite rare to find morphologically and functionally distinct components of a Pennsylvanian plant still in proper association with one another in a single fossil.

Not realizing this, early investigators routinely assigned different scientific names to the trunks, stems, leaves, and reproductive structures of the same species of plant. Even though for most species the proper paleobiological association of these structures is now well recognized, the originally assigned names are so firmly established that they are still used universally in the scientific literature.



Figure 1. Scale in centimeters.

Figure 1 shows an example of a relatively rare fossil in which a stem of a Pennsylvanian Age tree-like *Calamites* is preserved in its in-life morphological relationship with its leaves, genus *Annularia*. This specimen was collected by Dave Treffinger in a refuse pile of an abandoned coal strip mine in Daviess County, Indiana. The collection site is in the Mansfield Formation, and the estimated age of the coal seams found there are dated to the 320 to 300 million years ago (Simonelli, 2007; Simonelli et al., 2013).



Figure 2. Scale in centimeters.

The fossil is embedded in a flat, dark iron siderite nodule characteristic of those found in abandoned strip mine sites in southeastern Indiana (Shutts and Canright, 1954) as well as in the Mazon Creek locality in northeastern Illinois near Chicago (Witty, 2006). The nodule is split longitudinally so that portions of the same fossil plant are preserved on both halves of the nodule. The same fossil in the other half of the nodule is shown in Figure 2.

In this fossil the *Annularia* leaves attach opposite to one another on the *Calamites* stem. In addition, the whorls of leaflets or pinnules are found equidistantly along the stem or rachis of each individual *Annularia* leaf as well as at each node or junction of the calamite stem. The elliptical shape of the individual whorls and the variable length of the pinnules within a whorl suggest that the leaves are the species *Annularia stellata* (Wittry, 2006).

The internode regions of the *Calamites* stem are much longer than wide, and the internodes are roughly of equal length. These collective characteristics are consistent with those of *Calamites cisti* (Wittry, 2006).

These identifications are made with the reservation that they are based on the identification guide for Pennsylvania plants of the Mazon Creek Formation (Wittry, 2006). However, both *Annularia stellata* and *Calamites cisti* have been identified from sites in southeastern Indiana including Davies County (Canright, 1959).

## References

- Canright, J.E., 1959. Fossil plants of Indiana. Geological Survey, Report of Progress No. 14, Indiana Department of Conservation.
- Shutts, C.F. and Canright, J.E., 1954. Recent collections of Pennsylvanian plant fossils in Indiana. Proceedings of the Indiana Academy of Science, p. 70-74.
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- Simonelli, G.A., Johnson, C.C., Elswick, E.R., Kauffman, E.G., Elbe, C.F. and Hasiotis, S.T., 2013. Sedimentology, geochemistry and paleobiology of a Pennsylvanian marginal marine depositional environment, Mansfield Formation, Indiana USA. Indiana Geological Survey Occasional Paper 71, 18 p.
- Wittry, J., 2006. Articulates: Relatives of the horsetails. In: The Mazon Creek Fossil Flora. The Earth Science Club of Northern Illinois, pages 87-92.



Dr. Currie's talk was attention grabbing and well received.

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: \$20.00 per household covers one year's issues of DIGESTS. All Canadian and Overseas members receive the DIGEST by air letter post. For new members and those who renew more than 3 issues past their due date, the year begins with the first available issue. Institution or Library fee is \$25.00.

MAPS meetings are held on the 2nd Saturday of October, November, January, and February and at EXPO in March or April. A picnic is held during the summer. October through February meetings are scheduled for 1 p.m. in Trowbridge Hall, University of Iowa, Iowa City, Iowa. One annual International Fossil Exposition is held in late March/early April.

The MAPS official publication, MAPS DIGEST, is published 5 times per year – Jan-Mar, EXPO EDITION, May-August, Sept-Nov, Dec. (EXPO Materials). View MAPS web page at: <http://www.midamericapaleo.org>

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