

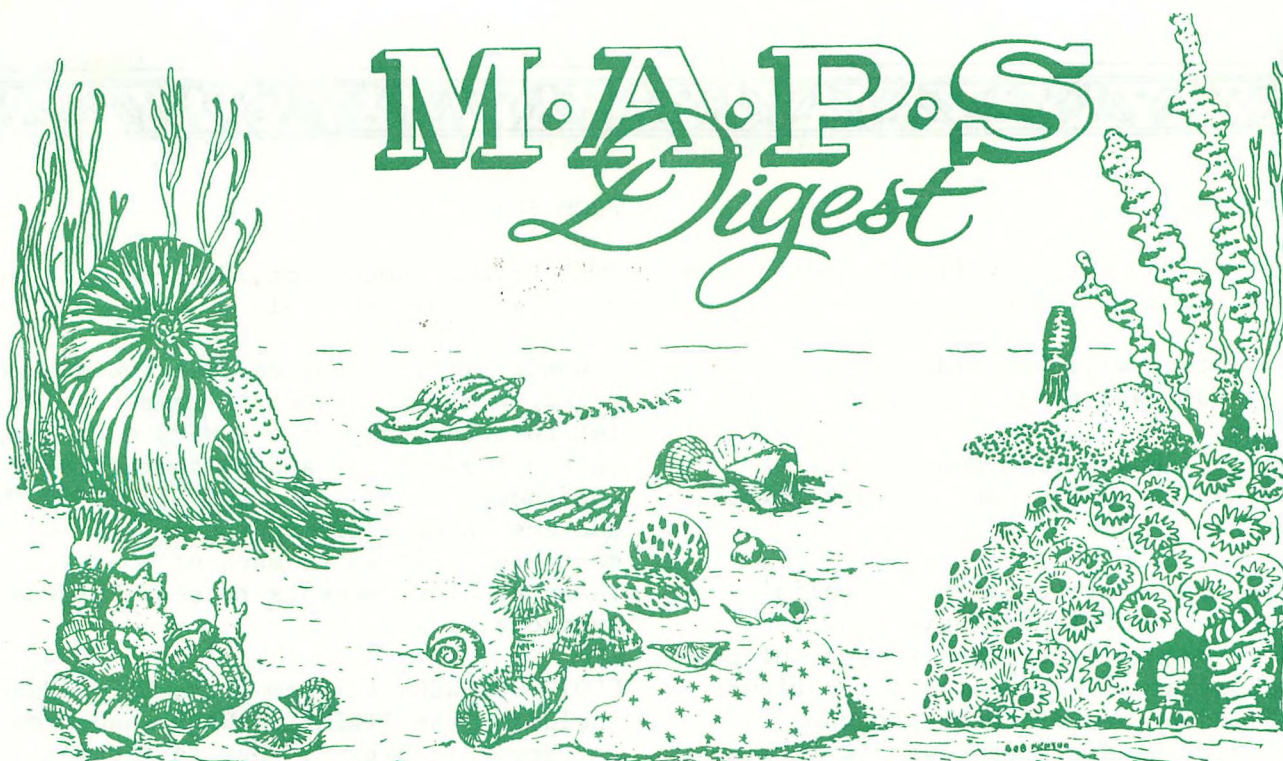
M.A.P.S. *Digest*

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Official Publication of
Mid-America Paleontology Society

December, 1984

MAPS BOARD OF DIRECTORS

wishes each of you a warm holiday season.

Your continued interest in and support
of MAPS is an expression of confidence.

At the October Board Meeting it was agreed
we will not raise dues this year.
The projected postage increase
may necessitate a change in the
future.

Your dues are due January 1.
We hope you will see fit
to continue this good
relationship.

(X)

...All nature is pre-
paring for the snows
and the long winter
sleep.

--Grant H. Smith



Winter is for dreams.

MARK YOUR CALENDARS

1 Dec MAPS MEETING -- The University of
Iowa, Trowbridge Hall, Room 227
Iowa City, Iowa
1:00 p.m. Board Meeting
2:00 p.m. MAPS Meeting -- Julia
Golden, Curator of Paleontologi-
cal Collections, The University of
Iowa, will speak on Computers For
Inventorying Fossil Collections
(see page 2)

12 Jan MAPS MEETING -- Augustana College
Fryxell Museum, Rock Island, Il
1:00 Board Meeting
2:00 MAPS Meeting -- Maybe a
film. Karl wrote the letter
no answer yet. But he has
a couple more ideas.

8 Dec Myrtle Beach Fossil Club
Santee Cooper Auditorium
Corner of Oak St. and 21st
Ave. N, Myrtle Beach, SC
Second Annual Fossil Fair
Drawing for a 45 piece
shark tooth collection.

DECEMBER MEETING

The December MAPS Meeting will be held in Trowbridge Hall, Room 227, December 5.

The Board Meeting will be held at 1:00 p.m. in Room 227 followed at 2:00 p.m. by the regular meeting. There is a parking lot east of Trowbridge. Enter from Dubuque Street between Market and Jefferson and walk across the street.

In addition to the presentation by Julia Golden, Curator of Paleontological Collections, Marv Houg will tell about types of programs which exist to be handled for various computers, and prices of those programs. Both talks will be directed toward work with an IBM -- PC. (Elsewhere in the Digest is an article on COMPUTERIZED MICROMOUNTS with APPLE program references.)

Some of you may be working with other computers and have software you can refer the audience to. This should be an excellent program

Please note Augustana will not be open so there will be no heat on Saturday January 5 the date of the regularly scheduled meeting. Meeting date changed to January 12.

(☿ ☿)

ERROR -- PLEASE NOTE

Page 5, November, 1984 issue of MAPS Digest. CALIFORNIA GEOLOGY is \$5.00 per year (12 copies). Page 9 of the Digest is correct.

(☿ ☿)

What the heart has once
had,
It shall never lose.

--Henry Ward Beecher



FROM THE MATRIX

JOHN RIVERS, Rochester, NY --Here is my check for membership renewal.

I wonder if you realize just how much the Digest means to associate members. We do not get to attend any of the MAPS meetings, go on the field trips and seldom get to attend the shows. To us . . . the Digest is the nucleus which holds us together. (Ed. comment--there it is to each of you who take those precious moments to send information for everyone)

LLOYD GUNTHER, Brigham City, UT -- Thanks for including the STRIMPLE AWARD announcement in the November Digest. Due to Metta's deteriorating condition, I will not be going but Val will represent us there in Reno. (Metta found peace only a few days after Lloyd's letter.) Dr. Rigby came up Sunday . . .he gave me a draft of the Citation he will present at the Reno Luncheon. . .This together with my remarks will be published in the May, 1985, issue of the JOURNAL OF PALEON-

TOLOGY. . .

Salt Lake City

Jim Jenks/has made a rather remarkable discovery. A year or more ago he showed me a fossil we could not identify. It came from the Triassic-Thaynes Formation near Bear Lake where we collect ammonites. He let me send it to the Smithsonian. It is presently under study so it would be premature to say for sure just what it is. . .Dr. Nicholas Hotton III, is currently studying it and is quite excited about it. Jim has some additional material he is sending to help solve the mystery.

It is always stimulating (to do a bit of collecting) even when one does not find much. Our mountains are snow clad right now at the higher elevations. We keep thinking it is too early to last but the weather is always breaking records one way or another. Val and I have a site we wanted to visit at least once more this year which is rather high up.

IRENE D. OFFEMAN, Houston, TX -- I wonder if this press release would be of any interest to your readers--see p. 4.

Please print again who to contact and what slide programs and study guides are available from MAPS. Thanks (see p. 3).

MAPS SLIDE PROGRAMS

Jim Konecny, 3036 Geronimo Road, Prescott, AZ 86301, is MAPS Slide Program Chairman.

Available for you and/or your local club:

- 1) Fossils And The Story They Tell, Script only; 2) Brachiopods--Advanced College Level, includes Script, Tape and Study Guide \$2.00 each; 3) Sponges--College Level, includes Script, Tape and Study Guide \$2.00 each; 4) Plant Fossils by Dick Johannesen, Script only; 5) Canadian Fossils by Betty Speirs, Tape only; 6) Not quite ready but watch the Digest for more information, Cephalopods Script, Tape and Study Guide \$2.00.

Send all requests for presentation to Jim Konecny, If study guides are ordered, make all checks payable to MAPS and send checks to Jim at the time you place your orders. MAPS will mail slides to you, YOU are responsible to INSURE and return to Jim.

(☺ ☺ ☺)

MAPS BOOK SALE

Trilobites of the Chicago Region--\$6.00 includes cost of handling. If you love those little critters, you'll want to add this book to your library.

Send checks payable to MAPS, to: Allyn Adams, Treasurer, 612 W. 51st Street, Davenport, IA 52806

Give yourself a Christmas gift--PAY YOUR DUES!
Send a friend a gift--Trilobites of the Chicago Region.

(☺ ☺ ☺)

a d v e r t i s i n g s e c t i o n

FOSSIL SETS for the beginning collector:

10 trilobites from Cambrian to Devonian. . . .	\$20
10 cephalopods from Mississippian to Cretaceous	\$20
10 echinoids from Cretaceous to Pliocene . . .	\$20
10 insects containing 8 Eocene insects on shale, 1 Oligocene and 1 Pliocene insect in amber.	\$20
10 echinoderms containing 3 cystoids, 1 blastoid 1 echinoid and 4 crinoids, including 1 complete crown	\$20
ALL 5 SETS	\$90

Complete list of fossils in General Catalog 22, \$4

Special Bulletin 37, \$5 GEOLOGICAL ENTERPRISES, INC, Box 996, Dept. MD, Ardmore, OK 73402

THE CURATOR'S CORNER

Gerald Kloc
Buffalo, NY



In the previous article (NOVEMBER DIGEST) I discussed how Quaternary-0 can be used to remove shale matrix from a fossil. This article will discuss one method that can be used to remove limestone or sandstone matrix from a fossil.

There are elaborate and expensive ways of removing limestone and sandstone matrix from fossils that are not available or practical for fossil collectors. An engraver can be acquired from hardware stores or catalog houses for as little as \$10.00 These \$10.00 engravers are small and are fine if one uses it for light work. However, if one is going to do extensive engraving, I would suggest the investment in a heavy duty engraver. I suggest this because I have done extensive engraving and had two \$10.00 engravers break down and become useless. Yet, I have seen the heavy duty engravers last for years.

Because engraving only chips away small pieces of matrix, it can be very time consuming. To save time, one should trim large pieces of matrix before engraving. This trimming can be done with a hacksaw, chisel, trim saw, rock trimmer, grinder, Dremel or anything else that can trim. Thus, the time needed to chip away the matrix with an engraver is greatly reduced.

As one is chipping away matrix with the engraver, one will notice a weak zone in the rock between the surface of the fossil and the matrix. It is this weak zone one takes advantage of when removing small pieces of matrix from the fossil. Be careful, for if one lets the chips get too big then the matrix may remove a piece of the fossil. As time goes on, one will develop techniques which can quickly remove matrix and learn to take advantage in removing the matrix when it breaks along a preferred direction.

Safety precautions should be taken when using an engraver. First safety glasses are a must because small chips can easily fly into one's eye.



Secondly, it is highly advisable to use ear plugs because the continuous loud noise of the engraver can be deafening.

As one continuously uses an engraver, one will find it to be an invaluable tool for fossil cleaning. Also, the engraver can be used hand-in-hand with Quaternary-0 where an engraver can save time by removing large pieces of shale before and between boilings.

(A call to Gerald revealed he uses a Craftsman, 15amp Engraver, 60H2, Model #758.4270).

(¶ ¶)

CARNEGIE INSTITUTE NEWS RELEASE--Thanks Irene

FOR IMMEDIATE RELEASE: CARNEGIE MUSEUM SCIENTISTS FIND SPECTACULAR 50 MILLION-YEAR-OLD FOSSILS

Pittsburgh, Pennsylvania, September 25, 1984... Two paleontologists from Carnegie Museum of Natural History have discovered a spectacular cache of 50 million-year-old mammals, lizards, frogs and fossil eggs during a recent expedition to the Wind River Basin of central Wyoming. The excellence and diversity of the fossils is unparalleled among known 50 million-year-old localities.

The fossil skulls, skeletons and jaws are the exceptionally well-preserved remains of primates, horses, opossum-like marsupials, rodents, carnivores and shrew-like mammals. Of the nineteen skulls recovered so far, six belong to ancient primate relatives of living monkeys, lemurs and tarsiers. One belongs to the earliest known "dawn horse" of North America. Several of the species are new to science, while others have been known previously only from bone fragments.

Drs. Leonard Krishtalka and Richard Stucky, of the Section of Vertebrate Fossils, Carnegie Museum of Natural History, discovered their fossil bonanza about 50 miles west of Casper, Wyoming, while on an expedition funded by the National Science Foundation. The site is in a desert-like area which was once, during the Eocene Epoch (53 to 38 million years ago) a sub-tropical forest with many streams and marshes, and a rich wildlife. The animals

were buried in a succession of marshes, which were an ideal environment for fossil preservation.

According to Drs. Stucky and Krishtalka, the co-directors of the project, "The fossils will allow a much better understanding of the animal life and ecology in western North America 50 million years ago. They will also help us answer some critical questions concerning the extinction and evolution of animals. Fifty million years ago North America witnessed the appearance of many of the modern groups of mammals and the extinction of most of the ancient groups. We'll also get answers to some specific questions. For example, the fossil primate skulls are crucial clues to deciphering the origin and geographic dispersal of the living New World monkeys and the Old World tarsiers, lemurs, lorises and early anthropoids."

Good fossil remains of small mammals from 50 million years ago are rare. Predators and natural forces usually destroy the bones before they can be buried and preserved. "finding such a wealth of well-preserved skulls and jaws is truly remarkable," says Krishtalka.

Scientists have known about the rich fossil areas of central Wyoming for a century and paleontologists from Carnegie Museum of Natural History have been collecting fossils in the Wind River Basin since the 1930s. On June 23, 1984, the Carnegie Museum paleontologists began excavating a quarry at a site which had seemed promising at the end of the 1983 season. They immediately uncovered the partial skull of the oldest known horse, *Hyracotherium*, or "dawn horse," and numerous jaws of small mammals. When the 1984 season closed at the end of July, six quarries had been opened, two of which proved very productive. Krishtalka and Stucky returned to Pittsburgh with nearly 3/4 of a ton of fossil-bearing rock.

The National Science Foundation has funded this survey of Eocene faunas for three years, of which 1984 is the first completed field season. Additional support was obtained from the M. Graham Netting Research Fund of the museum. . . Stucky and Krishtalka believe that the fossil-rich sites have barely been tapped, and should continue to produce exceptional specimens in the years ahead.

The museum paleontologists are both veterans at searching for fossils in the Wind River Basin: Krishtalka, an Associate Curator in the section, has participated in eleven expeditions, and Stucky, the Collections Manager for the section has made seven trips. The research team also included Douglas Swarts of the University of Pittsburgh, and Susan Rose, a geology student from the University of Colorado. . .

Krishtalka and Studky will present their preliminary findings from the Wind River Basin at the annual meeting of the Society of Vertebrate Paleontology, to be held at Berkeley in November, 1984.

(¶ ¶)

COMPUTERIZED MICROMOUNTS--Esther Behnke

From Earth Science News, February, 1983
Later AFMS Newsletter, October, 1984

. . .Computers come in 3 sizes, roughly: Large which is room-size and larger; mini, which is about the size of a couple of desks; and micro, which is the size of a typewriter. My computer is in the later category. A computer consists of several parts, namely, a keyboard which looks like a typewriter keyboard and allows the operator to tell the computer what to do; a monitor on which the operator can read the computer's answers or display games (a TV set may be used instead); a disk drive with which to run and save your program and data; and a printer on which to get a print-out of your data. The computer itself contains a series of silicon chips and electronic "switches" which do all the calculations and "thinking" according to your instructions. The disk drive and disk can be likened to a phonograph player and a record. As the needle of the phonograph runs over the record, it transmits the music to its speakers so you can hear the music. Well, the program and data are stored on a soft, plastic disk, as little electronic "bits" and "bytes" of information. When a disk is inserted into the disk drive, the "head" comes down and "reads" the electronic data, transmitting it to the monitor or printer so you can see it. If this sounds a bit threatening to you, just look around your house and count all the computers you have--digital watches, push button washers and dryers ovens, clock radios, the dashboards in your new cars, the fuel-injection engines--the list can go on and on. Computers have sort of snuck on you.

At this stage in their development, computers do not yet think independently. You can give them a list of alternatives and they will check the data against each alternative to find one that matches. When you put in your program, or instructions, the computer will follow them exactly. If you don't put in the complete instructions, the computer cannot second-guess you. There is no such thing as "computer-error," rather the truth is "people-error."

There are two ways you can program your computer: write your own in the language your computer understands, (basic, RPG, etc.) or, buy a packaged program. This is just like using a cake mix or making a cake from scratch. To make a program from scratch, however, you must learn the language--in Apple's case, it is Applesoft Basic, a version of Microsoft Basic. I have written some of my own, and I have adapted several packaged programs. The ones I've used for Dan's cataloging and inventory programs are CCA Data Management and PFS Report. (Ed. comment--I have The General Manager. Needed is a program which will be able to do a search.)

Simply, the first thing to do is decide exactly what information you want to input--and then how do you want to get it back! In other words, if you want to record a mineral's name, chemical composition, crystal classification, date of purchase or find, what mine it came from, city, county, district, state, etc., how do you want your printout to look? Do you want to list all minerals alphabetically by name? Numerically, by the number you assign to each, so you can keep track of your last number? Do you want it to print out all, say, phosphates, or minerals in the hexagonal system, or, minerals from Arizona? Deciding what you want is necessary before you purchase a program to insure that "that" program can do what you want it to do.

In my case, both of my programs will sort out the information by any of these fields. For instance, it will alphabetically arrange the minerals by name, and the (sic) sort all minerals with that same name, numerically by their assigned numbers





as the example shows:

ACMITE

#2039 Summit Rock, Klamath Co., OR
3021 Mont St. Hilaire, Quebec, Canada
3085 Summit Rock, Klamath Co., OR

ADAMITE #1088 Mapimi, Durango, Mexico
1089 Kamareza, Laurium, Greece
1097 San Rafael Mine, Quartz Mt., Nye Co., NV

NOW DON'T FORGET --

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*****
*****
* DUES ARE DUE *
*               *
*****
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WE WOULD SURELY MISS YOU IF
YOU GO!!

So, I have compiled a file for Dan which shows just the mineral names and numbers, so he will always know what number is next to assign to a new acquisition. One file contains the name, number, mine, county, state, and country, sorted alphabetically by name, subsorted numerically. Another file contains the names and numbers of his duplicates for trading. How you set up your files is up to you. You are constricted only by the storage capacity of the disk and the parameters of the program.

The end result of all this is a set of neat, clean, readable and accessible files. NOW, the big questions are, can YOU do it, and SHOULD you do it. To answer the latter one first, if you keep accurate records now, it would be advantageous to computerize. If you don't keep records, or don't keep accurate and full records, a computer is not going to be of much use to you, since you have to input information in order to output information.

Addressing the first question, if you can type fairly well and can think in a logical, ordered way, you will find computing is easy to do. The hardware (equipment) and the software (programs) come with fairly well documented manuals that will do a good job of instructing you in their use.

If anyone has any questions or comments regarding microcomputers, programs, or cataloging minerals, please feel free to call me. I am also interested in exchanging ideas and information with people who are already using computers.

(See you at Trowbridge Hall, Saturday, December 5. Bring your sharp mind, plenty of paper and pencils, and your questions.)

THE MAZON CREEK NODULES

Text- - - - - Jim Konecny
Illustrations - - Sylvia Konecny

(You should know that when Jim and Sylvia sent this article along about EXPO time, they included a letter saying they were also sending the information to June Maxwell, Editor of Southern California Paleontology. Your editor knew she was going to get scooped--she did. Not all of you get June's excellent publication, so you still get a chance to read about Mazon Creek Nodules, one of the most sought after fossils.)

For over a century paleontologists, both amateur and professional, have been collecting the Pennsylvanian Age plant and animal fossils of the Mazon Creek Area of Northern Illinois. The general limits of this area fall within a triangle formed by the towns of Morris, Wilmington, and Exsex. The fossils occur in the Francis Creek Shale Member of the Carbondale Formation. The remarkable preservation of even the most delicate parts of both plant and animal are the reason that these fossils are so sought after. These specimens come neatly packaged in their own container - namely, a nodule or concretion. It is the concretion that contributes to the remarkable preservation. These concretions are made up of ironstone, or more specifically Siderite, Fe CO_3 (iron carbonate). Ironstone concretions are rare, occurring only in certain Upper Carboniferous strata and have been reported from England, France, Germany and the U.S.A.

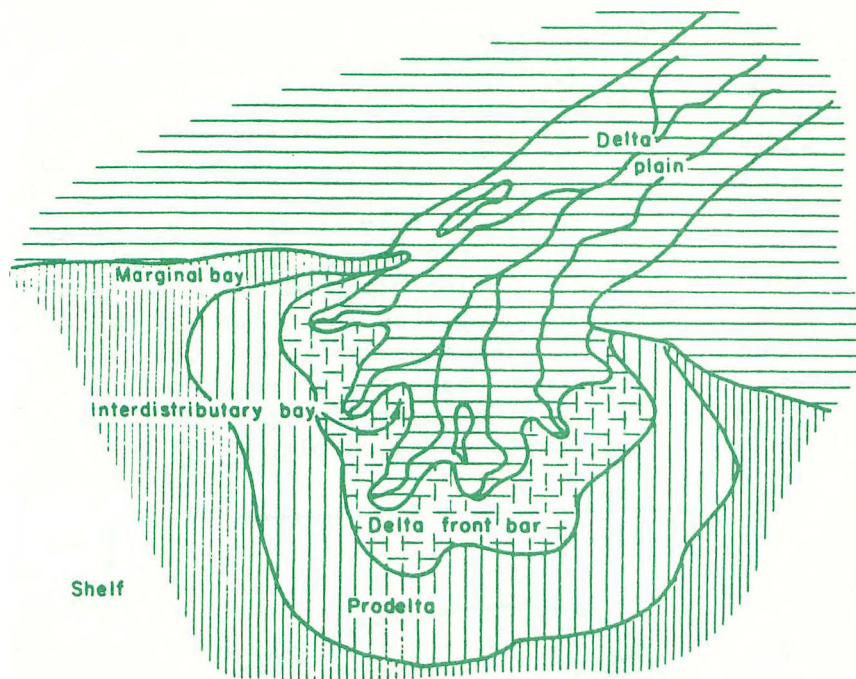


Fig. 1 - Generalized distribution of delta facies. Vertical lines denote areas of marine influence, and horizontal lines, continental influence. Modified after Fisk et al. (1954).
from Shabica, 1970.

In Pennsylvanian Time Northern Illinois was made up of six distinct environments--upland, swamp forest, river channels, delta, drowned coast and shallow sea. The Mazon Creek Area is located on the large deltaic complex, fig. 1. This environment could be compared to the bayou region of Louisiana. Although the nodules occur only in the deltaic complex of sediments, we must have knowledge of the surrounding environment in order to piece together the conditions that formed them. The entire process was a complicated combination of various chemical actions and reactions. The chemical action given off by a decaying organism will form these nodules, but only under the right conditions. Basically, these are very rapid burial, high pH and iron rich sediments. A body lying on the sea floor is subject to destruction by wave action, scavengers or simply rotting away, fig. 2 & 3.

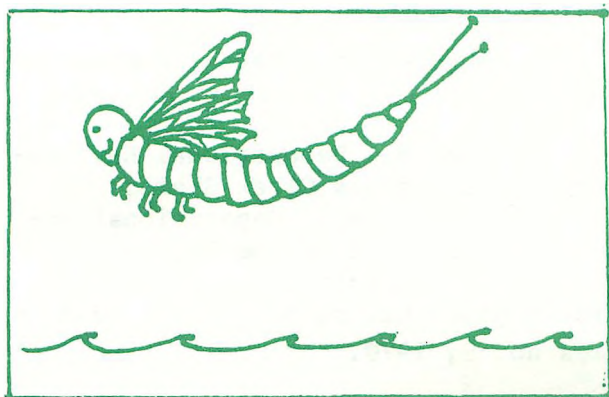


fig. 2

An insect flies above the shore-line.

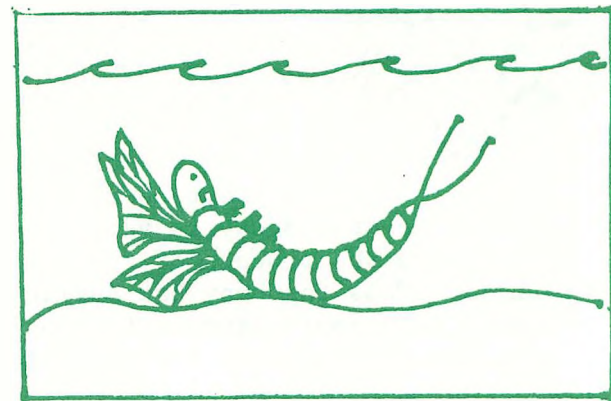


fig. 3 A catastrophe struck and killed the insect, plummeting him into the water and he sinks to the bottom.

The discovery of upright tree trunks in the headwall of one of the strip mines confirms that there had been rapid sedimentation. A tree trunk could not have remained unsupported for very long. Richardson (1969) states "The accumulation and compaction of a few meters of shale could have occurred in a period of weeks or months rather than years or decades." The organisms lying on the bottom are therefore sealed off from oxygen and scavengers by this rapid sedimentation, fig. 4. When an organism dies it is

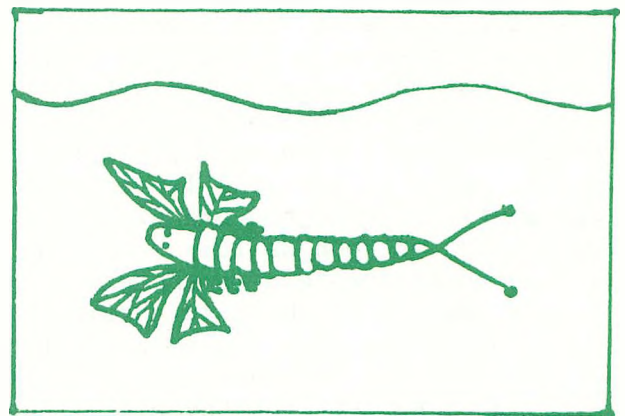


fig. 4 Sediments from flood waters have buried the insect.





immediately subject to aerobic (with oxygen) decomposition.

However, since the organism is immediately buried, the free oxygen is quickly used up and anaerobic (without oxygen) decay takes place.

Each type of decay produces a different chemical action. The term of aerobic decay is very brief, therefore inhibiting the process of rotting away the organism. Thus the body has sufficient time to make a firm impression in the enclosing sediment before anaerobic decomposition destroys it, fig. 5.

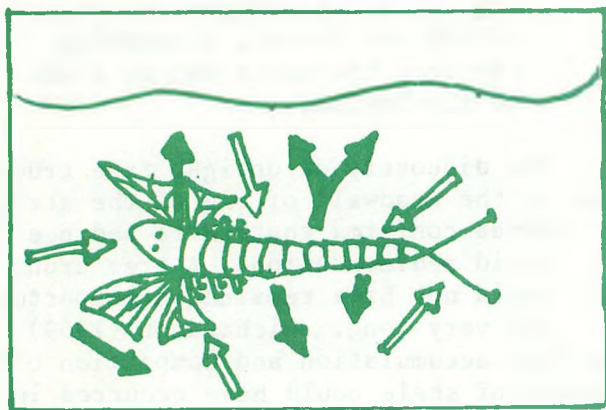


fig. 5
Chemical action starts quickly.

Let us bear in mind that there are swamps adjacent to or near the delta. The large amount of decaying vegetable matter is producing peat bogs. The chemical process that is decaying the plant material is also releasing iron from the soil. Moving pore water coming from these peat bogs supplies the iron that is needed. This water, however, is low in pH: much lower than is needed for the very restricted condition to form Siderite. The nearby marine water is also too low in pH. Earlier it was mentioned that the organism was subject to decomposition as soon as it was buried. During this process the protein in the organism is converted to ammonia which in turn raises the pH. This decomposition also liberates carbon dioxide (CO_2). Additional carbon dioxide, for the carbonate, was supplied from the nearby degrading

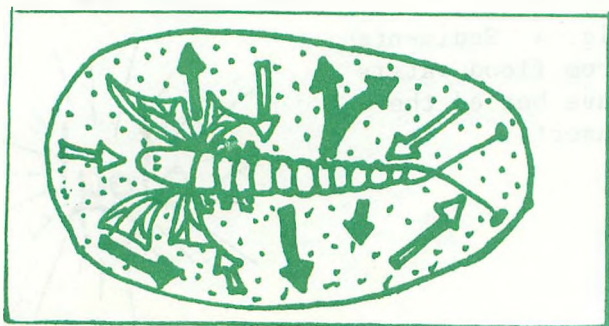


fig. 6 Continued chemical action has precipitated a type of gel around the body.

As we can see, a micro-environment has developed around the decaying organism. The only place that the pH and CO_2 concentration was high enough to form the Siderite was in the area immediately surrounding the body. As the various complicated chemical actions were going on, they formed a type of gel surrounding the body, fig. 6. Continued chemical action along with ensuing load pressure completed the hardening process, fig. 7. The Siderite concretion is now complete - ready for an eager paleontologist to find and split open and expose the beautifully detailed plant or animal within.

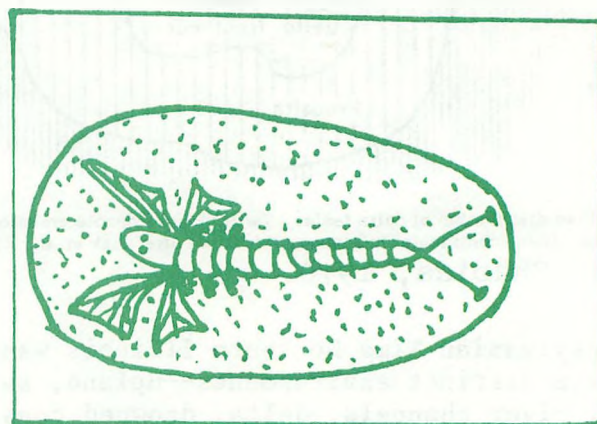


fig. 7

The nodule is complete.

REFERENCES:

- Burnham, Laurie. Studies on Upp Carboniferous Insects: 1. the Geraridae (Order Protorthoptera). Psyche, vol. 90, nos. 1 & 2, 1983.
- Konecny, James E. & Sylvia. Personal Notes on the Mazon Creek Area of Northern Illinois. Earth Science, vol. 22, no. 5 1969.
- Richardson, Eugene S. & Ralph Gordon Johnson. The Mazon Creek Faunas. Proceedings of the North American Paleontological Convention. Part I, 1969.
- Richardson, Eugene S. Personal Communications.
- Shabica, Charles W. Depositional Environments in the Francis Creek Shale. In Smith & others, eds., Depositional Environments in Parts of the Carbondale Formation - Western & Northern Illinois Illinois State Geological Survey Guidebook Series no. 8, 1970.

Woodland, Bertram G. & Richard C. Stenstrom.

The Occurrence and Origin of Siderite Concretions in the Francis Creek Shale (Pennsylvanian) of Northeastern Illinois. In Nitecki ed., Mazon Creek Fossils, 1978.

Zangerl, Rainer & others. Early Diagenetic Phenomena in the Fayetteville Black Shale (Mississippian) of Arkansas. Sedimentary Geology, 3, 1969.

(Ø Ø)

LETTER -- September 27, 1984, to B. L. Stinchcomb
St. Louis Community College at Florissant Valley,
3400 Pershall Road, St. Louis, MO 63135

From John Pojeta, Jr. United States Department of
Interior, Geological Survey

"...Privately owned land is usually OK, because few land owners won't let you look and take a few rocks. Public land is something else. I don't have any documents to send you, but a panel is being formed by the NAS to look into paleontological collecting, scientifically valid criteria of significance, etc. After this panel finishes its work, BLM says it will use the report to develop regulations on collecting; in the interim BLM will produce its own rules. Good luck."

Above is a letter from John Pojeta regarding an inquiry on proposed regulations on fossil collecting, you may want to circulate through MAPS.

There seems to be a significant increase in regulation of fossil collecting on public land. I think MAPS should become involved and have some input to the above recommendations by the National Academy of Science; for one thing few of these people are geologists or paleontologists and there seems to be a persistent move toward heavy regulations on collecting pushed through by archeologists.

(Ø Ø)

RESPONSE TO: LEGALLY BINDING WAIVER TO RELIEVE QUARRY OWNERS OF INJURY LIABILITY-- Bruce & Charlotte Gibson, Cincinnati, OH, MAPS Digest, October, 1984

GARTH ZIEMBA, West Chicago, Illinois--...Please find enclosed a waiver I adopted from the General Dynamics permit. It has been used successfully by myself to gain access to two local quarries that had a reputation for "definitely non-entry". However, perhaps I should point out that the quarry management might have been cooperative since they showed a certain degree of interest in my reason

for wanting access--attempting to locate information regarding the source of Midwest gold and diamonds. In any case, the waiver might be useful in some form.

It is a fact that waivers are actually no good. Even if people state good intentions about accepting full responsibility this might alter drastically after a serious incident. The courts have already demonstrated they view with distrust the abrogation of one's rights. A company is expected to possess a higher level of responsibility awareness and common sense than that perhaps shown by some poor, naive rockhound. Therefore, waivers take advantage of the latter in the sense an individual may be signing away rights in ignorance of dangers the quarry might know (or should know) are present.

Also, even if a man signs a waiver in full awareness of the situation, his wife or children can issue a challenge since he should not be allowed to sign away rights that could affect their livelihood in the event he becomes injured and unable to work and provide for them.

On the other side of the coin, if one illegally trespasses by, say, climbing a high fence and is injured--you can sue the quarry for not adequately preventing you from trespassing!

Even if a quarry is successful in defending a lawsuit against them they still have the expense and aggravation. Naturally, some people will utilize a situation to attempt to gain a settlement out of proportion to their true injuries and expense.

The whole situation is becoming unreasonable and the key to access will probably depend upon clubs showing a continued commitment to demonstrate they can hold meets safely and that their members conduct themselves in a satisfactory manner. A sizeable comprehensive, club insurance policy would no doubt give quarry owners some peace of mind since a bird in the hand is worth more than a potentially unsuccessful and protracted lawsuit.

More from others
next month.

January MAPS
meeting the 12.
page 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: January 1 through December 31 is \$7.00 per household.

MAPS meetings are held on the 1st Saturday of each month (2nd Saturday if inclement weather). September, October, May, June and July meetings are scheduled field trips. The August meeting is in conjunction with the Bedford, Indiana Swap. November through April meetings are scheduled for 2 p.m. in the Science Building, Augustana College, Rock Island, 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: Peggy Wallace, 590 So. Grandview, Dubuque, IA 52001
1st Vice President: Marvin Houg, 3330 44th St. N.E., Cedar Rapids, IA 52402
2nd Vice President: Don Good, 410 N.W. 3rd Street, Aledo, IL 61231
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MAPS DIGEST Editor
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Dated Material - Meeting Notice

DUES ARE DUE

