

M.A.P.S.

Digest



Volume 4 Number 5

March, 1981

Official Publication of the
Mid-America Paleontology Society

PRESIDENT'S LETTER

After our last meeting a discussion began upon the topic of our organization's title--Mid-America Paleontology Society; why SOCIETY, not club or association? As we talked it began to become clear that the wisdom of our founders surfaced once again. By definition, a SOCIETY is..."a group of human beings broadly distinguished from other groups by mutual interests...participating in characteristic relationships." Every member of MAPS, no matter how far from each other, is linked through a unique partnership that brings us all together via collecting, trading, exhibiting, and studying fossil remains worldwide. We are truly a society among ourselves interacting with other clubs and associations who have a partial or total interest in paleontology locally.

Because of our uniqueness we should try to call attention at all times to our behavioral code of ethics which underpins our delicate relationship with nature at collecting sites, and our interpersonal relationships among other fossil collectors and students. One can belong to a society for a number of reasons, each member defines what they wish to receive and what they wish to do in service, yet each member

is representative of the whole, and their actions reflect upon the whole. The society cannot reject an unwanted part, rejection comes only through the deviousness of the individual who cuts himself
(continued page 2)

MARK YOUR CALENDARS

- 7 Mar MAPS Meeting -- Augustana College
1:00 p.m. Board Meeting
2:00 p.m. Program--Echinoids and Starfish, MAPS new slide program co-authored by Dick Johannesen and Gil Norris.
- 4 Apr Ronald Lewis, Knox College, Lecture and Lab on crinoids. Bring your crinoids for identification
- 24 Apr May Meeting--EXPO III - Western
25 Hall Gym, Western Illinois University,
26 Macomb, IL LIVE AUCTION
- 23 May June Meeting -- Chicagoland Show
24 - 25 DuPage County Fair Grounds
Wheaton, IL
- 23 July Midwest Federation Show --
thru 26 A.C.C.U. of Notre Dame, South
Bend, IN
- 1 Aug Bedford Show/Swap -- Bedford, IN
2 Field Trip

MINUTES OF THE MEETING

After minutes were read and approved, Alberta Cray, Treasurer, reported a balance of \$1,639.26 in the treasury.

Information sheets concerning Expo III are now available. Sixteen tables and thirty-five feet of display have been reserved by members from eight states.

The MAY meeting will be held after the banquet, Saturday April 25, 7:00 p.m., followed by the Live Fossil Auction at 7:30. All this is happening Saturday evening. See you there.

EXPO LV will be held at Western Illinois University. Expo V is in the talking stage. More news later.

Copies of Trilobites of the Chicago Region, by Charles and Patricia Armstrong can be picked up at Expo III or can be mailed--cost \$5.00 plus postage.

A new MAPS slide show dealing with Echinoids will soon be available. More slide shows are in the planning and developing stages. A special thanks to Dick Johannesen and Gil Norris.

The day's program was presented by Dick Johannesen. The topic of the slide show was The Fossiliferous Limestone of the Solnhofen Region of Germany. Much information and many beautiful slides were presented.

Respectfully submitted
Dennis Sievers

EXPO III SHIFTING TO HIGH GEAR

All requests for information regarding EXPO III have been answered.

Should anyone have questions regarding transportation, lodging, meals, activities contact: Gil Norris
2623 - 34th Avenue Ct.
Rock Island, IL 61201

Table reservations and displays contact: Doug or Cheryl DeRosear
Box 125
Donnellson, IA 52625

PRESIDENT'S LETTER, Cont'd.

off from the society and becomes an out-cast by their own volition.

Time is drawing close for the submission of table reservations for EXPO III --- Beware the Ides of April --- all reservations must be received by Cheryl DeRosear by 12 April 81; also, we need to know if you will exhibit by that date.

As you may recall, last year at EXPO II there was a very fine LIVE AUCTION held with many fine fossils. We expect that the auction this year will be even greater since we'll start on Saturday night and go as long as need be into the early morning. We do need your donations in support of the auction. Carol Ann Osterberger is coordinating collection of items. Please contact her if you have a donation as soon as possible. (See information elsewhere in Digest) Yours truly has been drafted as auctioneer and I'd be happy to lose my voice selling many, many items into the wee hours of Sunday.

I leave you with one thought on a cold winter's day, how long will it be until chocolate trilobites corner the candy market? Fare forward.

Paul F. Caponera

LIVE AUCTION

On Saturday, April 25, 1981, at 7:30 PM MAPS will have a live auction in conjunction with the NATIONAL FOSSIL EXPOSITION III.

We would like everyone to provide at least one nice specimen for the auction. Specimens can be left at the information table at EXPO or sent to:

Mrs. Carol Osterberger
7 Q Fernwood Drive
Bolingbrook, IL 60439

Any donation should include genus & species, if possible location, age, formation, etc., and the name of the donor.

+++++

Turn 2 pages of your calendar -- circle APRIL, 24, 25, and 26. Fossils - Friends.

MONSTERS OF THE SKY

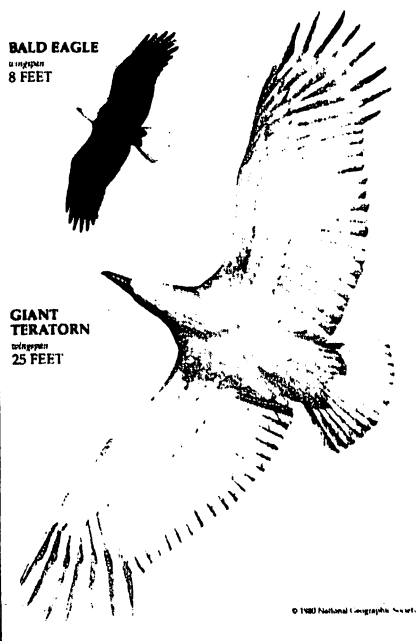
Science News

What's 11 feet long, 6 feet tall weighs 170 pounds and flies? Answer: Argentavis magnificens, the magnificent bird of Argentina, which had a wingspan of 25 feet. Recently unearthed fossil evidence (wing, leg, and skull bones) suggests that

this extinct bird is a previously unknown genus and species of the family Teratornis (monster bird which includes New World Vultures, such as the condor. Markings on the wing bones of the giant teratorn suggest that it was capable of flight and, if so it is the world's largest known flying bird. "It's definitely a most

spectacular creature," says Kenneth E. Campbell of the Natural History Museum of Los Angeles. While in South America on a National Geographic Society expedition he was invited to study the 5-to 8-million-year-old fossils by their discoverers, Eduardo P. Tonni and Rosendo Pascual of Argentina's La Plata Museum.

Submitted by Carlos Bazan, TX



AUSTRALIAN FOSSIL: THE DAWN OF LIFE

SCIENCE NEWS 6-28-80

In the beginning there were bacteria, the major question has been when was the beginning? Until recently, the date established for the first life form was 2.3 billion years ago. Then, the discovery of fossil imprints in sedimentary rocks pushed the date back to 3.5 billion years (SN, 4/12/80, p. 229). Now UCLA paleobiologist J. William Schopf reports the first direct identification of the actual bacterial cells that produced the ancient imprints. The chainlike fossils magnified 2,100 times, represent at
(continued next column)

SEDIMENTARY NOTES

Sharon Powell and Kathleen Morner, IL write snow and rain are good for eroding fossils out of the ground. EXPO III is on their agenda for April and the end to cabin fever.

John Fagan, IL says he has had success in cracking Piere Shale Concretions (Cretaceous) by freezing them in buckets of water the same way in which we freeze Mazon Creek Concretions. The concretions with many small fossils did not seem to work too well. The large Inoceramus sp come out well as do the cephalopods.

Dennis Kingery, WY made press "angling for fossils"--fossil fish, that is. His notes on the door must have gotten to the media. Seems Dennis angled a 17" Diplo mystus recently. Maybe he'll show him off at EXPO III.

Clarence M. Schuchman, CA is compiling a study of Lower Cretaceous ammonoids of California. Unfortunately sites are available only for research. Maybe he will have a display case at an Expo one day.

Rick Poropat, MO is preparing for EXPO III. Rick is an avid MAPS field trip enthusiast.

Carlos Bazan, TX decided in favor of EXPO III. There is the South Central Show in Lubbock, TX the same weekend of EXPO. (Ask Gil Norris about that.) Carlos has not missed an Expo.

least five types of microbial forms of life, according to Schopf. They were contained in fragments unearthed from a desolate region of northwest Australia by UCLA and Australian scientists. The fossils "demonstrate that the surface of the earth was habitable some three and a half billion years ago, and that it was populated by numerous types of relatively advanced bacterium-like forms of life," Schopf says. Less conclusive evidence of life in 3.8-billion-year-old rocks from Greenland was previously reported (SN: 9/15/79, p. 229), but those findings have been challenged as representing remnants of "fluid inclusions," or bubbles, that were not of biological origins.

Submitted by Carlos Bazan, TX

AN ANCIENT LEGACY OF WORLD DOMINATION...

Utah Natural History, December, 1980

If you could have visited Utah 500 million years ago, you wouldn't have recognized the place.

The equator passed through the land area on what is now a north-to-south axis, and there were no Rocky Mountains yet. Most of the land was covered by warm, shallow seas teeming with life.

Most of the present-day invertebrate animal phyla had some representative evolved by the time (The Cambrian Period), but by far the predominant life forms were the now extinct creatures called trilobites.

Trilobites were arthropods with a distinctive oval shape and a segmented external skeleton like modern shrimp, to which they are distantly related. They burrowed in the ocean bottom muck or crawled along the bottom, and some were even free swimmers. Higher forms developed eyes thought to be unique in the animal kingdom. Their eyes were compound, like those of insects, but with a biconvex lens structure that corrected the distortion of the calcite-crystal lenses--very much like modern camera lenses!

Among Utah fossil hunters, trilobites are almost as well known as dinosaurs. The trilobites dominated the earth for some 200 million years, compared to the comelately humans, who have been top dog for scarcely a million. Some 500 different trilobite species are found in Utah alone. Many have not yet been named.

The collecting of trilobite fossils in Utah dates into the state's prehistory. Archeological sites have yielded them in association with other Indian artifacts that were used for decoration. Historical records indicate that the Pahvant Ute Indians used them as amulets and charms.

The era of modern collection began in 1860 when the King Survey Party discovered the abundant trilobite fossils at Antelope Spring, a site that has produced literally millions of specimens for collections and museums around the world...

Lloyd F. Gunther of Brigham City, a wildlife biologist by trade and lifelong collector of trilobites, says there are other Utah localities, mostly in the western desert, in the r-exposed floors of Cambrian seas. Mr. Gunther and his son Val have spent considerable time collecting specimens for Brigham Young University...

"Our collecting has been aimed at finding new species as well as more complete specimens of species previously described on the basis of partial specimens," Mr. Gunther says.

Fossilization of the soft body parts of trilobites is extremely rare and no fossils from Utah are known to show detail of antennae or legs, says Dr. Gunther...

Mr. Gunther is an adjunct research associate for the BYU Geology Department. He has recently completed a monograph on the Middle Cambrian fossils of Utah, which is expected to be published by BYU Press. The book will contain 65 plates of drawing of specimens, most of which are trilobites.

The text has been reviewed by Dr. Richard A. Robinson, formerly of the University of Utah, who is now Distinguished Professor of Paleontology at the University of Kansas. Dr. Robinson is the recognized authority on the Cambrian Period in the American West and is regarded as the father of trilobite study in Utah...



(Lloyd F. Gunther, Brigham City, UT part of our MAPS Society.)

ARIZONA, THE ANCIENT SEA

The Prescott Courier, Friday, January 2, 1981

Picture a sea, warm and placid, the clear waters teeming with life. Multicolored coral, fish, clams, oysters, plankton, all living in the microcosm, the basic food chain. The first indication that all is not well is a stirring of the bottom, sending clouds of silt swirling through the water. Then as the tremor increases, ripping across the ocean floor, thousands of tons of sediment bury a large area.

A Pacific attol? No, this was central Arizona three hundred million years ago.

This scenario is reconstructed by Retirement College students at Yavapai College under the guidance of instructor, Jim Konecny. Konecny has been teaching Earth Science courses at the college for three years. His students learn to recognize the evidence of the torturous birth of this land we call Arizona. Few places show more clearly the signs of the uplifting and subsequent erosion that plays such a large part in the shaping of our planet.

Konecny's students speak in terms of millions of years much as most people speak of months and will tell you that Arizona is a relatively young land, having emerged from the sea no longer than thirty five to sixty million years ago. This is apparent by the sheerness of the mountains as compared to the rounding of the Appalachians, the oldest of our mountains.

Driving along Interstate-17, one can readily see evidence of volcanoes, that were a part of the process of mountain building.

...Konecny's specialty is in the study of fossils, a study that enables us to reconstruct life as it was on our planet eons ago. Some species of life forms existed only during specific geological ages, allowing us to determine how old some formations are by the fossils they contain. This method is used extensively in drilling for oil. By examining the core samples from the drill bit, scientists can tell by the fossils whether or not they are in oil bearing formations.

With the uplifting of the land and its gradual wearing away, by wind and water, we find places in the world where surfaces millions of years old have been exposed. The Grand Canyon is the classic example, showing us stratas of the ages back to the very beginning of time on earth. The Precambrian rock, at the bottom of the canyon, is the result of the first cooling of the planet's crust. Fossils found in the Grand Canyon also indicate that the area was once at the bottom of the sea.

Near Kohl's Ranch, beneath the Mogollon Rim, is an exposure of a formation of the Pennsylvanian era, a vast, three hundred million years old seabed. Each rain, washing away surface soil, exposes more of the fossils buried when the ocean held great quantities of living organisms. This area has been a collecting place for most of Arizona's schools and colleges since 1927 without any indication of exhausting the supply of material found...

Konecny discovered a new fossil species which now bears his name, Fossundecima konecniorum. He has also made a second discovery in the Khol's Ranch vicinity that is now in the process of being verified as new...

Konecny has the ability to present complex scientific information to the understanding of some very unscientific minds. Called upon my most of the schools in and around Prescott, he willingly travels to places such as Hillside to talk to a handful of students in a one room school...work that is shared by his wife, Sylvia

(James & Sylvia Konecny, Prescott, AZ belong to our MAPS Society.)

COMPETITION AND THE RULES OF COMPETITION, Concluded

301-942-3044

Philip Marcus, 2020 Henderson Avenue, Wheaton, MD 20902

Suddenly and unexpectedly the Rules Committee issued a Revisions List which, among other things, changed the Rules as to both thumbnail minerals and thumbnail fossils to require a maximum of 35 and a minimum of 20 specimens.

There was a good deal of opposition to this reduction and within a year the Rule was changed back again to require 50 specimens. As one former chairman of the Rules Committee observed to this writer: "We all know this was tried one year, and there was complaining from all divisions." In another earlier communication to the writer from a Rules official, it was said: "It must please you to know that almost every Federation proposed to go back to specific number of specimens, 50 for thumbnails and micromounts, and 35 for miniatures."

It was not to be that well enough was to be left alone. Some persons or groups began to push for a 35 number with respect to minerals. That thumbnails, especially thumbnail fossils, became submerged in the waves of controversy concerning other categories seems likely. Thus, the URC Digest of April, 1975, stated: The topic of mocos and thumbnails is again raising its ugly head. The question is 35 or 50? Should all or what per cent be judged? If all are to be judged think of the time some one will set (sic) with a scope..." It may be noted that there is a problem with respect to micromounts which does not exist as to thumbnails, namely, the requirement for microscopic examination of micromounts. And there is a far greater variety of fossils than there are of minerals.

Meanwhile the AFMS Fossil Subcommittee was having its forebodings. In a letter to this writer, in February, 1975, its chairlady made the following comment: "At our fossil meeting in Lincoln, if you remember, it was the opinion of those present that they would prefer to retain 50 specimens for both thumbnails and micromounts. This will have to be discussed at Denver, and it's entirely possible that the mineral people will want the fossil people to conform to their way of thinking and use 35. We will wait and see." It would seem questionable to allow "mineral people", on a matter controversial even among mineral exhibitors, to determine what the rules should be as to fossils. And to use micromount rules as the criterion for thumbnail rules leaves much to be desired. The Fourth and Fifth Editions of the Rules have required a showing of 35 specimens for both thumbnail minerals and fossils. Anna and I have declined to exhibit under this Rule.

This writer's club provides that up to 50 specimens may be shown.

Conclusion.

The Rules serve as guidelines for competitive exhibition. They represent a good deal of work on the part of the rulemakers. But some of the rules have an Alice-in-Wonderland quality. The rule making process would do with a dose of democracy. Fossil clubs whose members include those who have entered into competition might well have committees that could encourage an input on the rules that pertain to fossils.

(Ed. note. Philip has volunteered to provide the leadership and write letters to spearhead a campaign to change rules of competition to become more reasonable. He would like the backing of MAPS. Those of you who have had similar experiences would be encouraged to send a letter to Philip Marcus and a copy to MAPS. It is the sort of project a club such as MAPS might well be involved. Thanks for an excellent article, Philip.)

COMPETITIVE OR NON-COMPETITIVE DISPLAY

Diane Dare, 747 E. Blackford Avenue, Evansville, IN 47713

Whether you plan to display your fossils competitively or non-competitively, use the AFMS Uniform Rules as a guide in preparing labels for your specimens. A Reference List, showing where you obtained each scientific name is required for competition, listing the publication (including page number, figure or plate, etc.) or the individual or institution who identified it. All the "required" information should be part of your records anyway!

The required label information is:

1. Phylum (for animals) or Division (plants). Examples: Mollusca, Spermatophyta.
2. Class or subclass (animals) or subdivision or class (plants). I.E. Pelecypoda, Pteriomorphia, Lycopsida, Gymnospermae.
3. Scientific name - genus and species. Only the first letter of the genus should be capitalized; both words should be separately underlines, or italicized. i.e.: Phacops rana or Achistrum sp.

Additional information which can be given (and really should be in your own records) are subgenus, subspecies, and author of the species.

4. Locality: area and state if U. S., area and province if Canada, name of foreign country. Exact location, rock unit (formation, group, bed, etc.) and replacing material are not required, but again, should be in your notes.
5. Period: if Cenozoic, epoch. i.e., Devonian, Miocene.
6. Common name - and if a part of a fossil is used, the common name should include the part, i.e., clam, shark tooth, fern frond, insect wing.

You may also want to note on your labels and/or records other information such as "rarity" or availability of the specimen (it is rare if seldom found in that locality or formation, if seldom found complete, if size is unusual, and so on). And, if purchased, you may want to record the price.

Complete records make your fossils more meaningful and more valuable to you, to those you trade with, and to those who may inherit them after you are gone.

(Ed. note. Diane is 2nd V. President of MWF, and Competitive Display Chairman for the 1981 MWF Show in South Bend. She invites any member who will be in the area to attend and bring a display.)

(Diane Dare, Evansville, IN part of our MAPS Society.) This particular Digest is filled with good news about our very active MAPS members. If you didn't make press, no matter, let's all congratulate these very fine friends.

They (plates) can't cut down, they
 must curl up
 To form a kind of dish
 To stop the oceans spilling out
 And losing all the fish

Yet others seem to hit or slide
 Performing curious functions,
 And where they can't make up their
 minds
 You there have triple junctions.

B.C. and G.C.P. King (1971)

MASTER BUILDERS OF THE PALACES OF THE SEACORAL POLYPS

First Place Article AFMS Contest, 1980

by Grace N. Branch

Within the present limits of Florida and south Georgia during the Miocene period, below the sun-spangled satin of the waters, there lived a fabulous world of living creatures more prolific and colorful than any known; magic, glimmering, flower-like animals, the minute marine creatures, coral polyps.

Coral polyps increase and multiply by budding and splitting; young buds sprout from the body of the parent polyp and remain connected with it. In other instances a jelly-like sac is thrown off from the parent polyp, pear shaped, and very small. This free-swimming larva finally attaches itself to a hard object on the bottom of the ocean. As a protective covering for its delicate body it combines carbon dioxide, which it gives off, with the lime in the sea-water, forming a skeleton (coral) of carbonate of lime. It is thus, by untold generations of small artisans, each in turn erecting its delicate castle, that what we know as coral is formed.

The nearest living coral reefs which exist today are off the southern end of the Florida peninsula, in the Bahamas, and in the Bermudas, where vast masses of rock are being formed by the continuous growth of coral polyps. These particular polyps, tiny creatures though they are, the reef building corals, are the foremost builders in the realm of nature. Similar animals were responsible for much of the rock that make up the foundation floor of the Florida peninsula. In ancient times, Florida and south Georgia must have been well covered with these coral reefs, for today the shores of the adjacent bays give evidence that such a condition must have existed at one time.

Coral animals, when they die, leave skeletons of lime, and these are called fossils. The strata containing the remains of these ancient corals occasionally wash to the surface, and may be dug at low tide in the Tampa area at the deposits on Ballast Point. On a number of occasions, the writer has uncovered the spherical fossil corals properly oriented in the clay. This leads one to the conclusion that here is a part of the original coral reef and that when the coral animals in this vicinity were destroyed, their destruction was of a sudden nature, probably due to diluvial action, great floods bringing in much clay, marl, and sand to smother the animals. Another possibility is that a sudden temperature change killed the animals since it is known that coral polyps will not survive a temperature lower than 68° Fahrenheit.

In the clay and sea-water which covered these fossil corals in the area, there was much dissolved silica, which over a long period of time has replaced the limy corals in the form of a quartz mineral known as chalcedony. The resulting stones are pseudomorphs (a term applied to a mineral which has been changed into another mineral without losing its original structure); hence the name "Chalcedony Pseudomorph after coral" by which they are known. Some of these pseudomorphs have a geodetic form, while others have the shape of the more familiar branching variety of corals. The mineral chalcedony produced from fossil coral polyps is found in Florida in so attractive a form, the writer ventures to suggest it be honored by being designated as the gemstone of the state. (Agatized coral was officially named the State Stone of Florida, June, 1979....ed.)

1. The Miocene is the next to last period of the Tertiary. Miocene sedimentation began approximately twenty million years ago and continued for about twelve million years.
2. The coral polyps belong to the phylum Coelenterata. Within this phylum they are distributed in the class Anthozoa, which includes the precious corals

(continued page 9)

CORAL POLYPS, Cont'd.

and the sea anemones, and the class Hydrozoa. The coral polyps of the order Hydrocorallinae of the class Hydrozoa, and those of the order Zoantharia of the class Anthozoa are the corals which produce massive deposits of coral rock.

3. Many Coelenterate organisms alternate asexual and sexual reproductive cycles. The budding of one polyp from another represents the asexual phase, while the release of free swimming organisms or Medusae represents sexual reproduction. Among the corals those of the class Hydrozoa have sexual reproductive cycles while those of the class Anthozoa do not.

4. All of the world's living coral reefs, with one exception, are within the 30th parallels of latitude north and south of the equator. Bermuda lies at a latitude of 32° north is surrounded by living coral reefs which are maintained by the warm waters of the Gulf stream.

5. Chalcedony is one of the cryptocrystalline varieties of quartz. Other minerals of this variety include agate, carnelian, flint, jasper, onyx, and sardonyx.

The Coral Geode

July, 1979

THE EXCHANGE

If you have the fossil requested in this column, please write or call before answering the ad. Ad to appear two times.

Richard Heimlich, 23871 Moritz, Oak Park, MI 48237 -- 313-542-2298

HELP--Need a complete Permian or Penn. period trilobite other than Ditomopyge to finish a competitive display. Have 15 kinds of trilobites to trade.

Dick Lutin, 916 N. 3rd, Niles, MI 49120 616-684-4315

Wanted--Diplura trilobites, crinoid stems/calyxes on plates.

Will trade--Badlands vertebrate specimens (Oligocene), Cretaceous ammonites, baculites, scaphites, write for complete list.

Stephan Kopacz, 2216 Otis, Warren MI 48091 -- 313-758-3346

Wanted: blastoids (other than Pentremites if non-Mississippian, all the better).

Will trade: blastoids (Devonian), assorted invertebrates. Send description and what you'd desire in trade, will send list of available material.

Don Good, 410 N.W. 3rd St., Aledo, IL 61231 -- 309-582-5232

Wanted--brachiopods (except ORDOVICIAN--

Will trade--Mississippian crinoids.

Contact before mailing.

Please add the following to your membership list:

Justyn Blackwell
311 Second Avenue, N.E.
Carmel, IN 46032
317-846-5348

Collecting 20 years. Artist-free lance commercial
Will trade. Major interest fossil pectens. Has won
DuPont and C.O.A. trophies. Trade pectens, Penn.
thru Pleistocene., Miocene & Pliocene marine from FL
Penn. plant fossils. Wants trading contacts.

Al Hartman
Box 96, 301 Hartman St.
Waterloo, IL 62298

John Russel Moffitt
P.O. Box 9221
Houston, TX 7206
712-869-1067

Collecting 8 years. Geo-physicist. Will trade.
Likes trilobites and cephalopods. Wants to extend
fossil contacts.

ADDRESS CHANGES: Don Faust, 1910 N. 103rd St., Mesa, AZ 85207
Joseph Koniecki, 13834 Moran, Detroit, MI 48212

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.

MAPS is affiliated with the Midwest Federation of Mineralogical and Geological Societies, and with the American Federation of Mineralogical Societies. Membership in MAPS is open to anyone, anywhere who is sincerely interested in fossils and the aims of the Society.

Family membership \$7.00; individual membership \$7.00; junior membership \$5.00 (between ages 8 and 16); dealer membership (non voting \$20.00).

MAPS meetings are held on the 1st Saturday of each month (2nd Saturday if inclement weather) October thru May at 2 PM in the Science Building, Augustana College, Rock Island, Illinois.

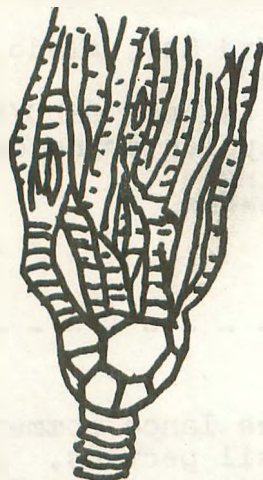
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1st Vice President: Cheryl DeRosear, Box 125, Donnellson, IA 52625

2nd Vice President: Tom Walsh, 501 E. 19th Ave., Coal Valley, IL 61240

Secretary: Dennis Sievers, 414 E. 9th, Davenport, IA 52803

Treasurer: Alberta Cray, 1125 J Avenue, NW, Cedar Rapids, IA 52405



CYATHOCRINITES

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Chikat Tingit
Indian Art USA 15c

Dated Material - Meeting Notice