

THE ROCKFINDER

Michiana Gem & Mineral Society
Tom Noe, Editor
305 Napoleon Blvd.
South Bend, IN 46617



THE ROCKFINDER

MARCH, 1998

MICHIANA GEM & MINERAL SOCIETY

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The purpose of the Michiana Gem & Mineral Society is to promote interest in and study of the earth sciences and the lapidary arts, and the sharing of knowledge and techniques.

General meetings are held the fourth Sunday of each month, 2:00 PM, EST, at Our Redeemer Lutheran Church, 805 S. 29th St., South Bend, IN. Regular exceptions include May (third Sunday), June (field trip), July (no meeting), August (club picnic) and December (Christmas party).

Board meetings are held the second Wednesday of each month at 7:00 PM, St. Joseph County Public Library, basement level.

The annual club show is Labor Day weekend.

The Michiana Gem & Mineral Society, a not-for-profit organization, is affiliated with the Midwest Federation of Mineralogical Societies and with the American Federation of Mineralogical Societies.

The Rockfinder is published monthly except July and August. Staff: Editor, Tom Noe, 305 Napoleon Blvd., South Bend, IN 46617. Co-editor, Herb Luckert, 221 Marquette Ave., South Bend, IN 46617. Reporters, Bob Heinek, Herb Luckert, club members.

All contributions for publication should be in the hands of the editor by the 10th of each month. Call 289-2028 or 282-1354. Permission is hereby granted to reprint any original *Rockfinder* articles, as long as due recognition is given along with the reprint.

✂ _____

Yearly Membership Dues (Payable by January 1)

_____ Individual \$10.00 per year
 _____ Family \$15.00 per year
 _____ Junior \$1.00 per year
 _____ Subscriber \$7.50 per year

(One-half these amounts after July 1)

Please indicate areas of special interest.

General Geology ___ Beads ___
 Gems & Minerals ___ Silversmithing ___
 Fossils ___ Artifacts ___
 Cabochons ___ Rockhound ___
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Name _____

Address _____

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Please send your dues and this form to
 Michiana Gem & Mineral Society
 c/o Margaret Heinek

7091 E. East Park Lane, New Carlisle, IN 46552

Will attend meetings?

Name _____
 Birthday _____ yes ___ no ___

Name _____
 Birthday _____ yes ___ no ___

Name _____
 Birthday _____ yes ___ no ___

Name _____
 Birthday _____ yes ___ no ___

Date of Wedding Anniversary _____

Phone _____

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Newsletter of the Michiana Gem & Mineral Society

Volume 38, Number 3

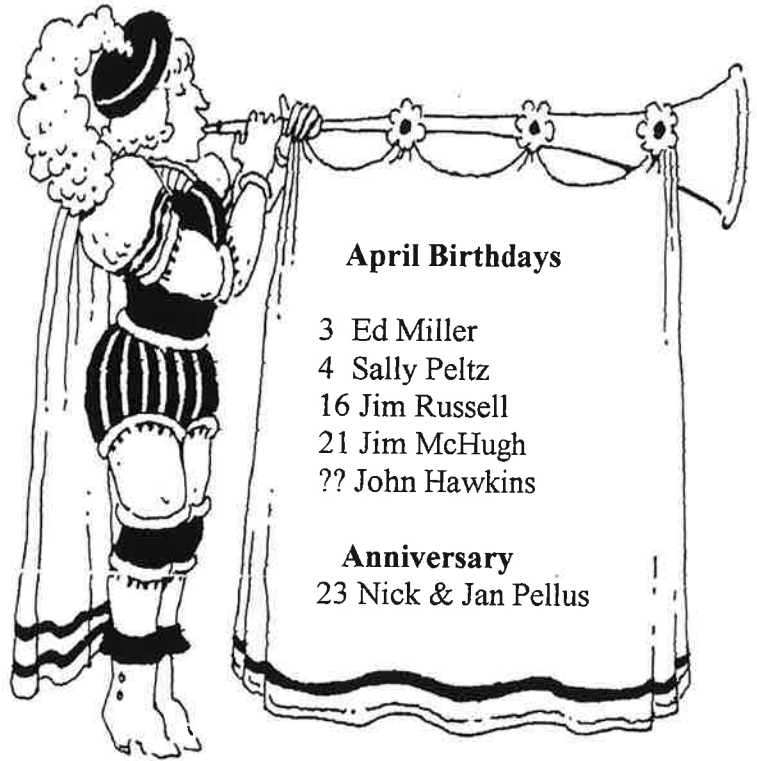
March, 1998

Meeting: Sunday, March 22nd, 1998
Doors open at 1:30 p.m.
Meeting at 2:00 p.m.

Place: Our Redeemer Lutheran Church
905 S. 29th (29th & Wall)
South Bend, IN

March Hosts: Herb & Phyllis Luckert

March Program: To be announced.



April Birthdays

3 Ed Miller
4 Sally Peltz
16 Jim Russell
21 Jim McHugh
?? John Hawkins

Anniversary

23 Nick & Jan Pellus



Bring your friends to the South Bend Gem and Mineral Show!

UP AND COMING

March 20--22: Michigan Gem and Mineral Society show, Commonwealth Commerce Center, Jackson, MI.

March 21: Metro Rock Swap, 23400 Wick Rd., Taylor, MI.

March 27--29: South Bend Gem & Mineral Show, Century Center. MGMS members will be admitted without charge.

April 8--11: Indian Mounds show, Eastbrook Mall, Grand Rapids, MI.

April 17--19: MAPS National Fossil Exhibition and show, Western Illinois University, Macomb, IL.

May 1--3: Kalamazoo Geological and Mineral Society show, County Center Building, Kalamazoo, MI.

May 2--3: Cincinnati Mineral Society Show (50 dealers), 2250 Seymour Ave., Cincinnati, OH.

May 8--10: Flint Gem & Mineral show, IMA Sports Arena, Flint, MI.

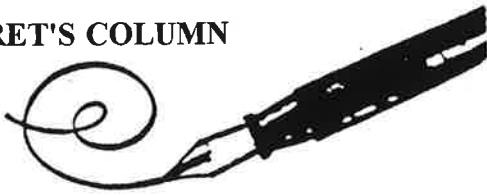
May 15--17: Midwest Mineralogical & Lapidary Society of Dearborn show, 23400 Wick Rd., Taylor, MI.

June 26--28: Show and swap, Bloomington, IN.

June 27--28: MGAGS Rockhound Seminar, Washtenaw Community College, Ann Arbor, MI.

August 11-16: Combined Midwest Federation and American Federation convention and show, Michigan Tech University, Houghton, MI. (Upper Peninsula).

MARGARET'S COLUMN



Spring is almost here, but winter decided to have one last fling. I hope the storms didn't cause you too much trouble.

If you missed the February meeting, you missed a very informative program on minerals given by Mrs. Caponigri, a professor at Holy Cross Junior College.

We also heard about the Sisters of the Holy Cross who are teachers in Bangladesh. Sister Kathryn Edward McDermott told about the students' fascination with the rocks she had taken to them on her trip last year. Several months ago, the Michiana Society had discussed possibly donating money for postage to send more rocks to the school. Sister informed us that postage is so very high that what she would like would be donations of some small specimens that can be carried back after the sisters visit the USA later this spring. So, if anyone has small rocks that would be good for the school, let Sister Georgia know about them, and she will see that Sister Kathryn is notified.

Tom Noe said he has several volunteers who will help him at the silent auction at the show March 27th, 28th & 29th. Any club member coming to the show will be admitted without paying at the door. If you are willing to help with a display, we would appreciate it. Many of the dealers are our regulars at the Labor Day show, but we will also have a couple of new ones. One new one is Bill and Ann Cook with minerals. See you there.

The MGMS still needs a field trip chair, if you want a trip this fall. Kathy Miller will give you her notebook on trips, but she is unable to take the committee this year. Come on, folks, let's go on a field trip this fall!!

Are you going to schools to talk to the youngsters? Please let us know, and while you are there, take pictures. We want to fill a scrapbook to enter in a contest next fall. I took pictures of the members who went to Science Alive in February and gave them to Mike Slattery. Mike would like to see us enter this year. Kathy Miller made up a winning

book several years ago, and she won the AFMS national contest.

See you at the meeting on March 22nd. There are 5 Sundays in this month, so we meet early. If you know anyone who is interested in knowing about the club, let Tom Noe know, and he will send a *Rockfinder* to them.

Our son Don needs your prayers for his recovery. Thank you.

SILENT AUCTION AT MARCH SHOW

The club has been invited to operate a silent auction at the South Bend Gem & Mineral Show, March 27 to 29 at Century Center. This is a money-making activity for the club, and the proceeds go toward our field trips. Tom Noe is organizing the auction, and he would appreciate some help, especially Friday afternoon for set-up. He can't get there himself until after work. If you can help him out Friday afternoon or anytime, please let him know.

Club members have two options: 1) donating items to the club for auction, 2) consigning items. Donated items will be sold and all the money will go to the club treasury. Consigned items will be sold and the owner will receive 80% of the final price, with the remaining 20% going to the club. The owner sets a minimum price for each item, and unsold items will be returned to the owner after the show.

All items should be rock-related (books, jewelry, fossils, crystals, minerals, etc.). Call Tom at 289-2028 to arrange any donations or consignments. You can also bring items (priced) to the club meeting on March 22.



MINUTES OF THE FEBRUARY 22 MEETING

President Heinek called the meeting to order at 2:05 pm. In attendance were 20 adults, one junior and six guests: Sr. Kathryn Edward McDermott, C.S.C., Professor Winifred Caponigri, George and Neva Wooley, Gordon Dobecki and Evelyn Watters.

Refreshments for the meeting were provided by Bob & Kathy Miller and Tom and Pat McLaughlin.

Jessie Zeiger moved that the minutes of the January meeting be approved as printed in *The Rockfinder*, seconded by Sr. Jeanne Finske. All approved the motion.

Committee reports:

First, Margaret shared with us the news of the condition of her son Don, who is having a recurrence of the cancer that was successfully treated earlier. The cancer is in his chest and he is scheduled for two periods of chemotherapy in the coming months.

Diane Gram read the treasurer's report, which was filed for audit.

Sally Peltz gave the sunshine report: Sherry Russell's mother died recently, and Sally sent a card in the name of the club. Jim Russell is past president of the club and both are current members.

Under old business, we considered the letter printed in the February *Rockfinder*, requesting more information from the Indiana Department of Natural Resources about recent policy changes. Herb Luckert made a motion to accept the letter as printed and to send it in the name of the club. Mike Slattery seconded the motion and all approved. Margaret said she would send the letter as president of the club.

The club's participation in the Science Alive program was described by Margaret, who called it a huge success. We gave away over 500 pieces of petrified wood to kids who could identify one of the stones on display, and we also had a game where kids could spin to receive a polished stone. Bob Heinek demonstrated polishing a Petoskey stone by hand, and displays included fossils, petrified wood, dinosaur bone and a (replica) velociraptor claw. Thanks to the club members who helped out!

Pat McLaughlin urged members to sign up for the hospitality committee, which provides refresh-

ments for the club meetings. Her number is 259-1501.

Sally Peltz proposed a change in the format of sending out cards to members through the Sunshine Committee. Since birthdays are already mentioned in *The Rockfinder*, she suggested that we drop birthday and regular anniversary cards, but continue to send cards for illnesses, sympathy, special anniversaries, etc. This would mean a big savings in the budget, considering the cost of postage and the cards themselves. Everyone considered this a good idea and we passed a motion to that effect.

David Peltz described two localities he had visited in the local area, where he found fossils, agate, etc. One, for example, is at the corner of Mayflower Road and Nimtz Parkway. Call David at (616) 683-4088 for more information.

Displays included Petoskey stone, coral and other local finds by David Peltz, and amethyst by Bob and Margaret Heinek.

Door prizes were awarded to Mike Slattery, Sr. Jeanne Finske, David Peltz, Diane Gram and Pat McLaughlin.

After the business part of the meeting, we broke for refreshments (enjoyed by all), and then Professor Winifred Caponigri of Holy Cross College presented a talk on crystallography, greatly enhanced by a videotape, as well as a hands-on exhibit with examples of different kinds of crystals.

Afterward, Sr. Kathryn McDermott spoke a few minutes about our gifts of rock specimens and financial support for the schools in Bangladesh. She suggested that the sisters who travel to Bangladesh could carry the specimens in their luggage, thus saving the expense of postage. Money could then be better used for constructing display cases, which are also needed. Since rocks are practically nonexistent in Bangladesh, any specimens would greatly improve the teaching of geology at the schools run by the sisters. Contact Sr. Georgia Costin at 284-5292 if you would like to donate specimens.

Respectfully submitted,
Gladys Pacholke, Secretary

ROTARY SLINGSHOTS FROM AFMS NEWSLETTER
Mel Albright, AFMS Safety Chair

Do you know why slingshots are so powerful? The answer is that they use stored energy to accelerate something to a high speed. That makes them strike with a great deal of force.

How many slingshots are in YOUR shop? "None," you say. Sorry, you're wrong. EVERY device you have that goes round and around is a slingshot. Your cab machine, your hand tool, your polisher, your saw, your grinder, your facator, and more.

If anything catches on one of these devices, it is accelerated—by kinetic energy this time—and becomes a dangerous missile. That means that when they hit they will have a great deal of force. And YOU might be what it hits. Even worse, your EYE might be what it hits.

So what safety is required when using such devices? First and foremost is an eye shield of some sort. Some machines have one built in. But, most do not. So safety glasses or a face shield are in order. Both are inexpensive and available at your local WalMart or hardware store.

"But my machine doesn't throw anything!" The needed word to add is "YET." All will at some time. For your safety, many are manufactured so that anything that is sling-shot will go away from you ALMOST every time. But, even then, they can and have come toward the user.

I'll add a personal note about a rotary tool. I had a hard rubber abrasive wheel on (1/4 inch thick and 3/4 inch in diameter) and was polishing silver with it. The shaft broke. The wheel and the jagged shaft ran up my face shield and rammed into the wall behind the workbench. It left a dent like a hard hammer blow would. It also left a deep scratch right in front of my eye. I get chills when I think "What If?"

AMBER FACTS

- ✓ During the Roman times, higher prices were paid for small amulets in amber than for healthy slaves.
- ✓ In 79 AD, Plinius wrote that the women of northern Italy wore amber beads against thyroid.
- ✓ Martin Luther carried a piece of amber in his pocket as a protection against kidney stones.
- ✓ In ancient China it was customary to burn amber during large festivities. This practice both signified the wealth of the host as well as honored the guests.
- ✓ According to Mohammed, a true believer's prayer beads should be made of amber.
- ✓ The father of healing, Hippocrates, declared amber active against a number of diseases including delirium tremens.
- ✓ Over 2500 years ago, Tales of Miletos discovered that when amber was rubbed against cloth sparks were produced and then the amber attracted husks and small wooden splinters. This force was given the name "electricity" after the Greek word electron which means amber.

by Leif Brost of the Swedish Amber Museum via Rocks Digest September 15-October 15, '94

FIELD TRIPS

NEW PROCEDURES

1. Field trip chairmen must file an environmental impact statement with EPA at least 90 days before any proposed field trip.
2. Field trips to quarries after a rain should be put on hold until it has been determined that the EPA has not classified a muddy quarry as a "wetland."
3. Anyone finding specimens of better quality than the rest of the group must share equally with all others, giving everyone an equal opportunity. This will be enforced by the Equal Opportunity Commission.
4. Any person finding an exceptionally good specimen must have same appraised and a monetary value assigned by the field trip chairman, who will file a form 1099 with the IRS.
5. An extraordinary discovery of valuable minerals should not be publicized. Since the value of many minerals is based on scarcity, a large new supply will affect market value. If this is publicized in the news media, it could lead to a panic in the stock market, and cause the Federal Reserve to raise interest rates, or lower them, depending on the phase of the moon and the time remaining in the fiscal year.
6. Hammers in excess of four pounds cannot be purchased without a background check and a three-day waiting period.

-by Erston Barnhart, editor Rock Buster News 4/96



APRIL FOOL!

RECIPE FOR GROWING A "SALT CRYSTAL GARDEN"

From Mrs. Stewart's Bluing

In a glass or plastic bowl, put some pieces of coal, coke, porous brick, tile, cement, or sponge. Over these pour 2 tablespoons of water, table salt (iodized or plain), and Mrs. Stewart's Bluing. The next morning add 2 more tablespoons of salt. On the third morning pour into the bottom of the bowl (not directly on the base material) 2 tablespoons salt, water, and bluing, and add a few drops of mercurochrome, vegetable coloring, or ink to each piece. By this time a beautiful flower-like growth should have appeared. If all conditions are not ideal, it may be necessary to add 2 tablespoons of ammonia to aid the growth. A free circulation of air is necessary, and these formations will develop better where air is dry. To keep it growing, add more bluing, salt, and water from time to time. It will "bloom" indefinitely into beautiful rosebuds, coral, and crystal.

LOST DINOSAUR QUARRY REDISCOVERED

The location of a fossil quarry, lost for almost a century, was rediscovered on an August expedition along the Red Deer River by Tyrrell paleontologist Dr. Philip Currie.

Currie, leading a team of 17 professionals and amateurs on a cooperative expedition between Dinamation International Society and the Royal Tyrrell Museum, spent ten days combing the badlands in the footsteps of Barnum Brown, the paleontologist who collected dinosaur remains for the American Museum of Natural History in New York during the great dinosaur rush in the early 1900s.

To locate the site, the group rafted along the river using Brown's scant field notes and four black and white photographs of the original camp and quarry. Previous attempts to find Brown's first quarry had been unsuccessful.

"We were trying to match up landscapes along the river with those in two of the photographs," says Currie. "We spent a day and a half looking, but were having no luck. Another photograph was of Brown's camp taken from across the river. I sent someone across the river with the photo and they found it right away. It was that obvious," explained the Tyrrell's dinosaur curator. To Currie, it made sense that the quarry would be located near the camp. Several hours later, hiking over three high, steep ridges, Currie found what he was looking for.

"All that was left of the quarry was a sinkhole, but there was lots of material. Pieces of skulls, toe bones, bits of ribs. It looks like Brown excavated only about 25 percent of the site and out of that he got nine complete individuals."

Because the quarry yielded articulated leg bones from at least eight albertosaurs, and only two bones from another species, Currie proposes that the animals were part of a social group. Evidence of social behavior among these fierce, meat-eating dinosaurs is of particular interest to scientists, as it is believed that tyrannosaurids, the dinosaur family that *Albertosaurus* belongs to, are the dinosaurs most closely related to modern birds.

Another Dinamation/Tyrrell expedition is planned for the summer of 1998 to recover what remains in Barnum Brown's quarry.

Sept. 30, 1997, press release
Royal Tyrrell Museum

EPOXY PLUS

By Gary Watkins

How many of you use epoxy in your lapidary work for dopping, but have a hard time breaking down the epoxy bond later? Next time try mixing some corn starch in with the epoxy. Not only will the corn starch make the epoxy thicker, but it will break down the epoxy without pulling chunks out of your stone. If you are in a hurry and not working with heat-sensitive material (e.g. opal) heat the bonded epoxy/corn starch mixture. When the corn starch is heated, it expands and shatters the hardened epoxy bond, almost making the stone pop off. If the stone is heat-sensitive or cleaves easily, soak the bonded item in vinegar for 24 hours.

Vinegar has the same reaction as acetone does on epoxy, only it does not attack opal, while acetone will. Some epoxy mixtures may take longer, depending on the brand of epoxy or the ratio used in mixing the epoxy.

From *Glacial Drifter* via *Rock Rollers* (Aug., 1997)

TIPS & TECHNIQUES

By John Betts

I recently needed to clean some old mineral specimens at home where I do not use the more caustic chemical that I keep at work. I discovered that my wife had a cleaner under the sink called CLR (as in Calcium, Lime, Rust). It is sold in most hardware stores and drugstores in New York for cleaning bathroom fixtures, shower heads, etc. I tried a piece of native copper and it worked great. It also removed rust (iron oxide) from prehnites without apparent damage.

It turns out that CLR is a dilute phosphoric acid. It is so mild that gloves are not mandatory, though they are highly recommended. Use it in a plastic container, soak your rock, then pour it back for reuse later. As with any acid, wash very well to prevent unintended action and dry with a clean cloth.

From *NY Mineralogical Society News* (Nov., 1996)

Editor's note: Does anybody else have secret formulas they use? Send them in to *The Rockfinder* if you'd like to spread them around.

WORTH YOUR WHILE TO STOP

By Marie Zigler

Visitors traveling Wisconsin's Great River Road following the Mississippi River on Hwy. 35 north of Dubuque to LaCrosse, Wisconsin, will find themselves enjoying many small towns, the river and its mountainous bluffs, the lovely forests, the sculptured farmlands and the slower pace of state highways.

Only 12+ miles northeast of Dubuque, Iowa, lies the town of Dickeyville. Rockhounds will do a double-take traveling on the town's main street when they spot the grotto and shrine beside Holy Ghost Catholic Church.

It is a unique setting, encompassing what appears to be a large parklike area filled with many shrines and grottoes. They are made of cement and studded with rocks, shells, artifacts, colored glass and memorabilia, all arranged in beautiful patterns. The summertime flowers and landscaped grounds enhance the effect. On the grounds and in the monuments are a great number of sculptures, carved of white carrara marble. Even the fences, which appear almost chain-link, are of cement with a similar decorative treatment.

Built from 1925 to 1931 by a Catholic priest, Father Wernerus, this place shows not only his love of God, but also his patriotic fervor for his adopted country. He was born in Germany in 1873, and emigrated to the United States after he had served three years in the German army. He came to America in 1904 and finished his studies for the priesthood. He brought his older cousin with him to be his housekeeper. She and a parishioner aided him in his great work.

One of his shrines is known as "Patriotism in Stone." In it there are statues of George Washington, Abraham Lincoln, an eagle and a replica of the Liberty Bell. There are also ornate anchors made up in a pattern with colored glass flowers. To the priest they symbolized hope for our country then and in the future. This shrine, like the others, is made up of a wide variety of different stones and shells. Many people wanting to share in the decoration gave of

their collections. Besides the things already mentioned, dishes, glassware and children's things abound.

This was an ambitious project for a small church. People from many places in the world contributed. Father Wernerus himself traveled to many places in the United States collecting. He could be termed a rockhound. He even was a spelunker, going down many caves by himself to collect stalagmites and stalactites. Some of these are wonderful to view.

There are rocks from every state in the union. There are many beautiful agates, geodes in many sizes, petrified wood and other fossils, exquisite specimens, rocks from the Holy Land and other foreign countries. Many shells from today's seas were used (some very rare.) There is much colorful glass, some of which he melted himself. He purchased barrels of broken glass from the smelters of Kokomo, Indiana. Indians from the Keshena reservation in Wisconsin donated many special artifacts.

Almost everything on the grounds appears to be in top shape, this in spite of Wisconsin's winters. The caretaker says the angels of God watch over all. Over 50,000 people visit this spot each year. Its beauty makes it a worthwhile stop.

From *The Strata Data* (Sep., 1997)

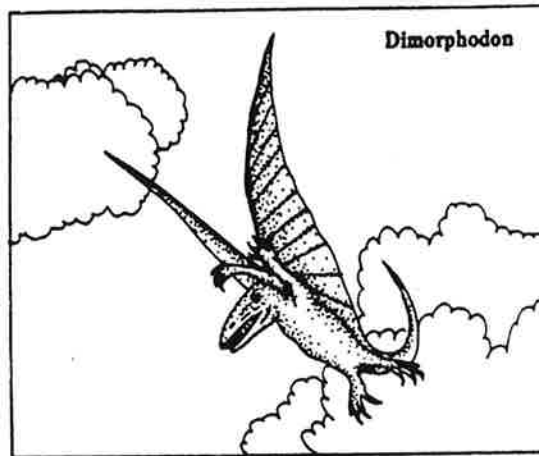
I cannot overemphasize the importance that the thousands of amateur paleontologists...continue to have in influencing the course of intellectual history. Fossils are very much like berries: berries ripen in the fall, gustatory targets for birds and mammals, certainly including ourselves. Evolution has fashioned berries to be attractive so that seeds will be dispersed away from the parental plant. If someone doesn't eat them, they will rot on the vine. Fossils weather out by the billions and, like berries, disintegrate and "rot" away if not picked up by someone who cares, someone who appreciates their potential and real significance.

From *Fossils, The Evolution and Extinction of Species*, by Niles Eldredge

All the words below are hidden in the puzzle.
 Find and circle them.
 Look carefully, since the words may be written in any direction.

T	E	Q	N	O	T	K	N	A	L	P
E	S	E	S	I	R	E	A	H	J	I
O	U	T	U	N	U	W	A	T	E	R
R	R	A	R	D	A	E	H	U	O	I
T	F	W	F	J	S	L	E	O	V	N
S	A	D	J	U	O	F	A	M	O	S
U	C	I	K	S	R	D	O	D	M	E
A	E	E	U	O	E	I	O	R	H	C
D	W	T	E	E	T	H	N	E	S	T
O	D	I	M	O	P	E	V	E	I	S
R	I	J	T	R	A	P	U	O	F	V
E	N	A	O	S	A	J	S	I	E	S
T	S	M	I	K	S	A	W	A	W	I
P	I	T	R	A	T	K	A	L	P	F
D	T	N	E	R	E	F	F	I	D	H

- DIMORPHODON
- PTEROSAUR
- TEETH
- HEAD
- INSECTS
- SIEVE
- PLANKTON
- PTERODAUSTRO
- TRAP
- JAW
- DIFFERENT
- SKIM
- DIET
- WATER
- SURFACE
- FISH
- FLEW
- MOUTH



THE PICK & SHOVEL May 1997

GEOLOGIST USES RADAR TO DIG DEEP INTO PAST

By Ron Kirksey

A university of Akron geologist is experimenting with a way to take the guesswork out of some fossil hunting.

Gerhard Kunze is using ground-penetrating radar technology to find the remains of mastodons that lie buried beneath Ohio farms and fields.

He has been experimenting with the technology for a year, burying cow and mastodon bones, then using the radar to "see" the bones at different depths and angles.

So far, Kunze has detected bones 1 to 2 feet below the surface and hopes to extend that depth

through further experiments. Many mastodon bones, he said, are found no deeper than 2 to 3 feet, often being rudely unearthed during construction projects.

Ohio is fertile ground for fossil hunting, he said.

"The swampy areas in Ohio were once lakes during the Ice Ages," Kunze said. "These lakes attracted large herds of animals, including predators. The predators tore the carcass apart, so you rarely find a skeleton together."

But Kunze said there are a lot more bones out there. And with the radar technique, he said, complete skeletons might someday be detected underground—safe from both predators and bulldozers.

South Bend Tribune (No date.)