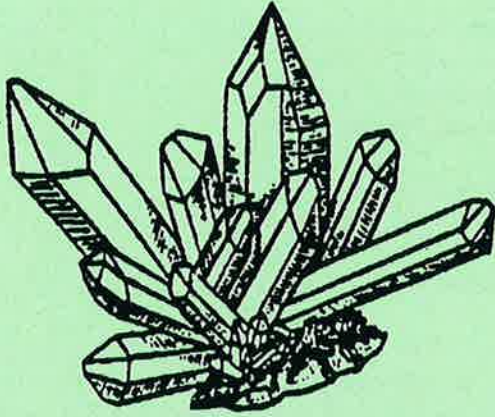


THE ROCKFINDER

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



THE ROCKFINDER

JANUARY, 1997

MICHIANA GEM & MINERAL SOCIETY
1997 BOARD OF DIRECTORS

President--Margaret Heinek
Vice-President--Emily Johnson-Nelson
Secretary--Marie Crull
Treasurer--Pam Rubenstein
Liaison--Mike Slattery
Past President--Jim Russell

HEADS OF COMMITTEES

Programs	.....	Michael Slattery	52332 Carriage Hills Dr., South Bend, IN 46635
Hospitality	.....	Pat McLaughlin	515 N. Clay St., Mishawaka, IN 46545
Educational	.....	Gordon Dobecki	11900 Laughlin St., Mishawaka, IN 46544
Librarian	.....	Bob Miller	1106 Clayton Drive, South Bend, IN 46614
Historian	.....	
Sunshine	.....	Sister Jeanne Finske	Bertrand Hall, St. Mary's, South Bend, IN 46556
Publicity	.....	Tom Noe	305 Napoleon Blvd., South Bend, IN 46617
Membership	.....	All Members	
Field Trips	.....	Kathy Miller	1106 Clayton Drive, South Bend, IN 46554

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. Exceptions include field trip meetings, June (field trip), July (no meeting), August (club picnic) and December (Christmas Party).

Board meetings are held the second Wednesday of each month, 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.

Rockfinder staff:

Editor, Tom Noe, 305 Napoleon Blvd., South Bend, IN 46617
Co-Editor, Margaret Heinek, 7091 E. East Park Lane, New Carlisle, IN 46552-9400

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 (219) 289-2028 or (219) 654-3673. Permission is hereby granted to reprint any original *Rockfinder* articles, as long as due recognition is given along with the reprint.

cut _____

Yearly Membership Dues (Payable before January 1)

_____ Individual	\$ 6.50 per year
_____ Family	\$10.00 per year
_____ Junior	\$ 2.00 per year

Please send your dues and this form to
Michiana Gem & Mineral Society
c/o Margaret Heinek
7091 E. East Park Lane, New Carlisle, IN 46552-9400

Please make address corrections to the mailing label (reverse side) and/or fill in the optional information below.

Check your SPECIAL INTERESTS:

List Family Members (spouse and children):

General Geology _____	Beads _____
Gems & Minerals _____	Silversmithing _____
Fossils _____	Artifacts _____
Cabochons _____	Rockhound _____
Faceting _____	Crystals _____
Carving _____	Micromounts _____
Other _____	

Name _____	Birth Mo/Date _____	will attend meetings, yes ___ no ___
Name _____	Birth Mo/Date _____	will attend meetings, yes ___ no ___
Name _____	Birth Mo/Date _____	will attend meetings, yes ___ no ___
Name _____	Birth Mo/Date _____	will attend meetings, yes ___ no ___
Address _____		
Phone _____	Anniversary Mo/Date _____	

Name _____
City, St., Zip _____

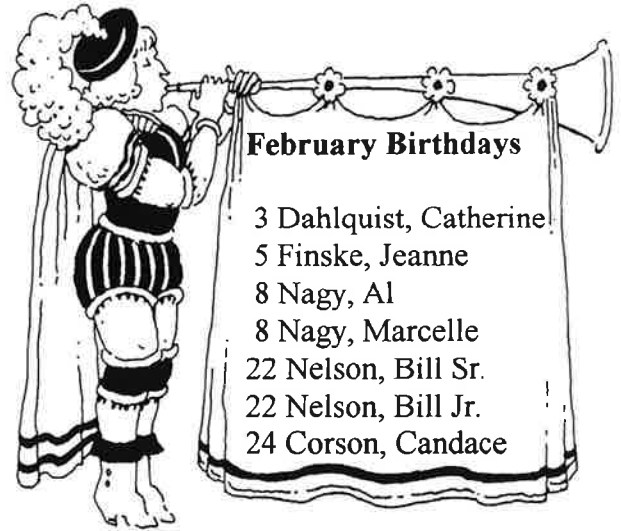
THE ROCKFINDER

Volume 37
Number 1

The Newsletter of the
Michiana Gem & Mineral Society

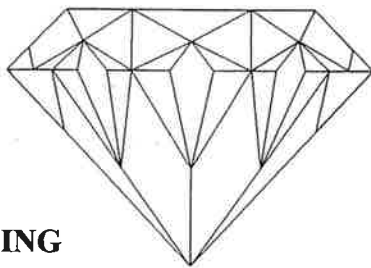
JANUARY, 1997

- Meeting:** Sunday, January 26, 1997
Doors open at 1:30 p.m.
Meeting at 2:00 p.m.
Guests are welcome.
- Place:** Our Redeemer Lutheran Church
805 S. 29th (29th & Wall)
South Bend, IN
- Hosts:** Tom & Pat McLaughlin
- Program:** Larry Hess and his son Brian present and describe "Collecting Sites in Arizona." Should be interesting.



February Birthdays

3 Dahlquist, Catherine
5 Finske, Jeanne
8 Nagy, Al
8 Nagy, Marcelle
22 Nelson, Bill Sr.
22 Nelson, Bill Jr.
24 Corson, Candace



UP AND COMING

- March 7-9--Gem & Mineral Show, Wayne County 4-H Fairgrounds, Richmond, IN.
March 8--Chicago Rocks & Minerals Society Silent Auction, 4600 Peterson Ave, Chicago
March 14-16--"The Beauty of Copper" show, 302 5th St., Michigan Center, MI.
March 15-16--Geodeland show, the Union, Western Illinois University, Macomb, IL.
March 22--Metro Rock Swap, 23400 Wick Rd., Taylor, MI (Dearborn Club).
April 5-6--"Ohio's Treasures" show, 300 Broad Street, Columbus, OH.
April 5-6--Fulton County Rockhounds Annual Show, 250 South Ave. D, Canton, IL.
April 5-6--West Suburban Lapidary Club Show, 2015 Manchester Rd., Wheaton, IL.
April 5-6--G.O.L.D. 21st Annual Show, 4625 W. 110th, Oak Lawn, IL.
April 9-12--Indian Mounds Rock & Mineral Club Show, 28th St. & East Beltline, Grand Rapids, MI.
April 11-13--South Bend Gem & Mineral Show, Century Center downtown, South Bend, IN.
April 18-20--M.A.P.S. National Fossil Exposition (buy, sell, swap, etc.) Western Illinois University, Macomb, IL.
April 19--Illinois State Geological Survey field trip to Columbia and Waterloo (caverns, sinkholes, fossil collecting in limestone). Contact IL Geological Survey.
April 26-27--Blackhawk Rock Club Gem & Mineral Show, 7711 N. Main, Rockford, IL.
May 3-4--"Those Super Sulfates" show, 2250 Seymour Ave., Cincinnati, OH.
June 28-29--23rd Annual Rockhound Seminar, Washtenaw Community College, Ann Arbor, MI.

LOCAL (SORT OF) ROCK SHOP

If you're heading down toward Logansport, you might stop in at Bill's Rock Shop, a few miles west on Highway 25, in Rockfield, IN. Small place, but a nice variety. Bill opens at noon on Thursdays, Fridays and Saturdays.

MARGARET'S COLUMN



Happy New Year! 1997 begins the Society's 35th year. At least the 35th anniversary of the club joining the Midwest Federation. The club was formed in 1961. It started when several men met in a garage in a rock shop in Mishawaka owned by Lou Bordon. When the club was formed the meetings were held in the basement of a bank on 31 North. Bess and Jess Wise, Kenneth Stout, Fred Niebauer, and Bob and I were some of the early members. Jess Wise, Marie Niebauer (Fred's wife) and Bob Heinek were early presidents.

So come to the January meeting and help celebrate the Michiana Club's 35th anniversary.

If you have not sent your dues for 1997, do so. We would like to have the roster out by February 1st. We do not want to lose any of our members; you are all very important.

Science Alive will be held on Saturday Feb. 8, from 10:00 am to 4:00 pm. If you can help, please let us know. If you are able to be there for a couple of hours, it would really help. Bob and I will also be there on Friday morning Feb. 7th., for fourth grade at-risk students bussed in to attend special programs and exhibits. If you are able to help on Friday, also let us know.

Our son, Rob, brought something to our attention that he thought might be of interest to us. This item came from *Focus*, an Indiana Dept. of Resources bulletin, titled "Stone Points for Deer." Archery hunting is legal, and they are now allowed to use primitive archery equipment in the form of broad heads made from flint, chert or obsidian for deer hunting. This change was made and recommended at public meetings. Interesting!

Have you been thinking about your exhibit for the Labor Day show? I sincerely hope to have many displays, so even if you have shown it before, just add something new and show it again. I understand several of our members have been out west this fall and winter and have new items. Ask Tom Noe about his trip to Woodward Ranch in Texas to collect agates. It sure sounds interesting. Our program this month will be given by member Larry Hess on a trip he and his family took to Arizona, and especially to a copper mine. Bob and I hope to make up a display for the American Federation Convention that will be held in Jackson, Miss. in October.

Clubs have been asked to donate cabochons made from local stone. Jess Wise had fashioned cabs from local rock he had collected, and I plan on sending one or two of them for the 50th anniversary display that will be shown in Jackson in October. At the 25th anniversary of the AFMS, a crown was fashioned from donations, and was later sent for display to the Smithsonian Museum. What will happen to the cabs that will be donated this year will have to be determined later. This is an important year for the AFMS, and since I am now the president of the AFMS, an important year for me.

FRED NIEBAUER HONORED

The club has received a certificate with the notification that the late Fred Niebauer has been selected as a charter member of the Bulletin Editor's Hall of Fame. The Hall of Fame was established by the editors who attended the Editor's Breakfast in Boise, Idaho, on July 15, 1995.

Only another editor may nominate someone to this position, because only other editors know the hard work that goes into making an exceptional bulletin. Fred edited *The Rockfinder* for a number of years, and garnered several federation awards for excellence. Sample issues which Fred edited will be included in an exhibit to be readied for the American Federation of Mineralogical Societies 50th anniversary convention in Jackson, MS, in October.

IN GOOD COMPANY The AFMS & Members

(Note: many things in the AFMS have changed since this article was written, but it does give some history and valuable information. I have made updates in several places - Margaret Heinek.)

The American Federation of Mineralogical Societies serves as an umbrella organization to six [seven, as of 1995] regional federations, hundreds of clubs, and thousands of individual gem and mineral hobbyists.

By June Culp Zeitner

Special Assistant Editor (*Lapidary Journal*, Dec., 1987)

Dr. Henry Dake of Portland, Oregon, had suggested in *The Mineralogist* as early as 1938 that it might be possible for the existing federations to have a joint convention. But starting in 1941, most federation activities were restricted because of World War II.

Perhaps spurred by Dake's suggestion, Dr. Richard Pearl, founder of the Rocky Mountain Federation, and Dr. Ben Hur Wilson, founder of the Midwest Federation, met in Ottumwa, Iowa, to discuss the formation of a national federation. Dr. Pearl sent letters to the four existing regional federations inviting them to send two delegates to the Salt Lake City Show in June, 1947. The response was enthusiastic. The American Federation of Mineralogical Societies was founded in 1947 by eight delegates representing the California, Northwest, Midwest and Rocky Mountain Federations. [1997 being the 50th anniversary].

The 1948 convention in Denver was attended by Mr. Eisenberg of Boston and Mr. Woodruff of Washington, who hoped to gather information on how to form a federation of Eastern states. The operational procedures and bylaws of the American Federation were presented and referred to the charter federations for ratification. Ben Hur Wilson was elected president and Richard Pearl vice-president.

The following year, the federation spanned the nation when the Eastern Federation was admitted. Richard Pearl was the second president of the AFMS. Jack Streeter of California was

elected president for 1950 at the AFMS convention in Sacramento. It was also here that Harry Woodruff first expressed his dream for the AFMS Scholarship Fund.

Organization

At first it was felt that the vice-president of the federation should be in charge of the National Show when it was to be hosted by his or her regional federation, but, as the organization grew in numbers and responsibilities, this proved to be impractical. Now, the host club for the regional show is also in charge of what is the combined regional-national show.

The South Central Federation, first called the Texas Federation, was admitted to the AFMS in 1954 as the sixth regional federation, thus insuring the south-central part of the United States a chance to host and visit a national show. The sequence of national shows became Midwest, Rocky Mountain, South Central, Northwest, California and Eastern. The presidency and other offices also rotate. Regional vice-presidents were added so that there would be six officers each year with each region represented [since the formation of the SCFMS there are now seven officers]. The newly elected junior vice-president fills each successive office for one year until attaining the presidency on the sixth year. The junior vice-president is selected by the outgoing president from that region, with the advice of officers of the federation and the AFMS.

Regional presidents and vice-presidents comprise the Board of Directors and they, along with the elected officers, each have a vote at the annual meetings, which usually precede the opening of the show.

The regional officers succeed to the presidency in this order: Midwest, Rocky Mountain, South Central, Northwest, California, Eastern [now South East, the seventh federation]. The parliamentarian and committee chairmen are appointed by the president. The officers are not salaried.



Support and Activities

The AFMS is supported by dues of \$0.25 [currently \$0.50] per member from each regional club and by the AFMS Endowment Fund. The AFMS has many activities and national competitions. There is a slide-show competition, the All-American Club Program, a club publications contest, a junior division, a conservation and legislation committee, a public relations committee and an international relations committee.

At first, trophies were offered by individuals or companies (for example, the first mineral trophy was the Woodruff Trophy), but now all trophies for competitive display are awarded by the AFMS through its uniform rules committee.

The AFMS stamp committee, with the help of thousands of letters from club members, achieved a spectacular success when the four United States Mineral Heritage Stamps were issued. Also, many letters helped get the petrified wood ruling revised, as well as being instrumental in saving some areas from the Wilderness Bill.

The silver anniversary committee of the AFMS asked for donations of cabs of American gem materials for the Smithsonian, and over 1,300 cabs were sent in. A brooch of gems cut by club members, the First Ladies' Brooch, was presented to Lady Bird Johnson for the Smithsonian in 1967.

The AFMS has several publications. There are a rules manual which is periodically revised, gem and fossil lists, and also a guide book for exhibitors. A safety manual and a book of guidelines for bulletin editors are available at moderate cost. Wallet-sized editions of a code of ethics are provided to club members and are important to the public image of the AFMS. Finally, bumper stickers and lapel pins are available.

The Scholarship Fund

Perhaps the greatest achievement of the AFMS is the Scholarship Foundation, which is administered by a separate slate of officers and Board of Directors. The fund of over half a million dollars represents years of contributions by AFMS

club members. A club which has contributed the amount of one dollar per member is a 100% club and is given a certificate. A plaque is awarded to 300% clubs and another for 500%. Additional awards are given as a club's contribution continue upwards. Numerous clubs are already over 1000%. Only the interest is used for two scholarship grants annually for each region. These two-year grants are given to graduate students in pursuit of an advanced earth science degree, and students are selected from each regional federation.

As well as helping the students, the Scholarship Foundation has made for excellent public relations, and has been a real incentive for clubs to work together.

The AFMS as a Union

The familiar AFMS emblem was adopted in 1950. Each regional federation also has its own emblem. While the regional federations work together in many ways, each region is free to pursue its own interests and goals. In other words, the AFMS is not a ruling authority, but rather a union of six related federations [now seven].

Although AFMS membership varies from year to year, in recent times there have been around 800 member clubs totalling about 60,000 people. Although primarily an organization of amateurs, the AFMS has also attracted many professionals in the earth sciences. As a tax-exempt organization, its goals are to expand education in all earth sciences and to serve those interested in the earth sciences and related arts.

It is now 50 [59] years since Dr. Dake started talking about uniting the federations so they could learn from one another and grow together. Certainly the number of clubs and people involved, the quality of programs and exhibits, and the excellent shows of today prove that his idea was right.

[The AFMS has elected 51 presidents, as of 1997, and will celebrate its 50th anniversary at Jackson, Mississippi, on October 17-19, 1997].

CLEANING MINERAL SPECIMENS

By John Betts
(conclusion)

The "Waller" Solution

This method of mineral cleaning was first introduced to me by Roland Franke as a simple method of cleaning iron stain from minerals. Further research reveals different methods of using the basic solution.

As originally described by Roland, the solution is made by dissolving in one liter of distilled water:

8.4 g sodium bicarbonate

17.4 g sodium dithionite

5.9 g trisodium salt of citric acid (sodium citrate)

The minerals are immersed in the solution. The cleaning action can be accelerated by placing in an ultrasonic cleaner. This solution is not appropriate for indoor use because, once mixed, there is a strong odor of rotten eggs. Use only outdoors or in an area with proper exhaust venting. As usual, read all precautions on the individual components' packages.

The solution is good for only about 24 hours and should be discarded after that. Since a liter of solution may be more than you need, the Geological Museum of Copenhagen (Hansen, 1984) suggests a variation--you can prepare a stock buffer solution of one liter water, 28 g. sodium bicarbonate and 59 g. sodium citrate (citric acid). When ready, place your specimens in a container, pour in buffer solution to cover the top, then carefully sprinkle on top 1 g. sodium dithionite for every 30 ml of buffer solution. After five minutes another 1 g. of sodium dithionite is added in the same way. They also recommend sealing tightly with a lid and keeping at room temperature to avoid the formation of sulfides and sulfur.

If you have heavy iron stain, a specimen may require several treatments in succession, as the solution becomes saturated and loses effectiveness. After your piece is clean, wash it in distilled water for the same amount of time that the specimen was in the solution. Then wash it in running (or regularly changed) tap water.

Apparently the solution works by reducing

Fe³⁺ to Fe²⁺ and then dissolving Fe²⁺ in the citric acid. The sodium bicarbonate balances the pH to be neutral. This last point means that theoretically you can clean any mineral in it without worrying about etching it. Practically, though, care should be taken by testing on samples prior to immersing your best piece.

In conclusion, I have stayed clear of the more hazardous hydrofluoric, sulfuric, nitric acids and treatments for specialized uses such as cleaning native copper. If you are looking for more information I highly recommend starting with John Sinkankas's books *Field Collecting for Gemstones and Minerals* (originally published as *Gemstones and Minerals: How and Where to Find Them*) and *Gemstone and Mineral Data Book*, both published by Geoscience Press.

References

Hansen, Mogen, "Cleaning Delicate Minerals," *Mineralogical Record*, March-April, 1984, pg. 103.
"Marcasite Disease and Preservation."

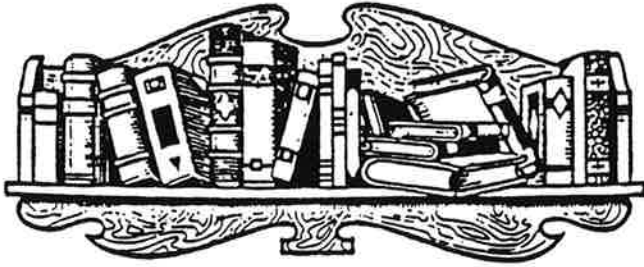
NEW NATIONAL MONUMENT--THE ROCK- HOUND VIEW

George Loud, chair of the AFMS Conservation and Legislation Committee, notes that 9 rockhounding sites were included within the area which President Clinton designated as the Escalante National Monument last fall. Normally, collection of any sort is banned in national monuments, but recent statements by BLM officials in Washington suggest that "recreational activities" in the area will not be affected. So, collecting rights may still be preserved as new rules are written for land-management within the monument.

AFMS Newsletter (Jan., 1997)

SUE WILL GO ON THE BLOCK

The famous (or notorious) *T. Rex* skeleton known as Sue will be auctioned at Sotheby's in the spring. The South Dakota fossil was involved in legal action and seizure for several years while the courts decided the legal owner. What would you bid?



FOR FURTHER READING....

Here are some prices from a September fossil auction held in South Cairo, NY: two carnivorous dinosaur teeth, Moroccan--\$440; cave bear skull, Russian--\$11,000; Green River fish slab with four fish showing--\$137.50; reptilian egg with embryonic skeleton exposed, Chinese--\$22,000; slab with two dino prints, Connecticut--\$330; saltasaurus egg--\$30,800.

Maine Antique Digest (Jan., 1997)

By dating zircon crystals through measuring their isotope ratios, an Arizona geologist has traced the course of a river that dried up over 200 million years ago. Nancy Riggs correlated zircon from several sites and suggests that the ancient Chinle River flowed west out of north Texas into the ocean (which then reached into the middle of Nevada). The zircon crystals she studied were especially rare and thus easy to identify.

Discover (Jan., 1997)

Some Silurian soft-bodied fossils have turned up in Herefordshire, England, collected about three years ago and recently studied. These worms and arthropods have never been seen before, and examples of soft body parts are especially rare because they were nearly always destroyed by burrowing marine creatures before they could be fossilized. The method of preservation here is unique--a thin layer of volcanic ash encased them and contributed calcium, which combined with the carbon dioxide of natural decay to preserve the soft parts perfectly.

Discover (Nov., 1996)

LAPIDARY ITEMS FOR SALE

A lady in Medaryville, IN, (about 80 miles from South Bend) has several boxes of items for sale, including jewelry-making supplies, findings, slabs for cabbing (agates, jaspers, jades, etc., the usual material for cabs), finished jewelry and single cabs, rough opal and chrysoprase, etc., plus a combination saw/grinding unit, with other jewelry-related equipment. Her name is Pauline Comer and you can reach her at 219-843-6324.

Tell Me Why

If a parsley farmer is sued, can they garnish his wages?

Would a fly without wings be called a walk?

Can you be a closet claustrophobic?

If a stealth bomber crashes in a forest, will it make a sound?

When it rains, why don't sheep shrink?

If the cops arrest a mime, do they tell her she has the right to remain silent?

Why is the word "abbreviation" so long?

If a book about failures doesn't sell, is it a success?

Do cemetery workers prefer the graveyard shift?

What do you do when you discover an endangered animal that eats only endangered plants?

Do hungry crows have ravenous appetites?

Is it possible to be totally partial?

Agatized Coral

Agatized Coral is Florida's Gemstone. This extremely rare and valuable type of coral is found in a small area on the west coast of Florida. It was formed 10-25 million years ago (Carbon-14 dating) when this part of Florida was part of the great coral reef. With the passing years, layers of silt were deposited over the coral pieces. Due to a unique mineral content of the silt matrix, the coral went through a process similar to petrification. The coral was replaced by agate, producing these beautiful geodes. These specimens are unknown in any other part of the world.

FINE WINTER ROCKHOONDING IN TEXAS

By Tom Noe

With a few 1996 vacation days staring me in the face last December, I decided that I could combine some warmer climates with a bit of rockhounding. I'd read so much about the agates of west Texas that I could almost hear them calling me: pompon agates, thistle agates, plume agates, bouquet agates...

First, I contacted the local club, the Texas Big Bend Gem & Mineral Society, and received a prompt reply from Phil Plimmer, their newsletter editor and proprietor of Ocotillo Enterprises in Alpine, Texas, which is a rock shop and book shop, among other things. With this friendly "Come on down," I headed for Alpine after spending Christmas with my sister in Kansas City.

First stop was the famed Woodward Ranch, about 16 miles south of Alpine. The owner, Trey Woodward, takes care of the cattle side of the ranch, while Don Parkinson handles the rock shop and various rockhounding activities. Don is a professional artist who lives at the ranch, dividing his time between creative genius and the rock shop. He's also president of the local club, and brimming over with friendliness, hospitality and helpful information. Don sent me off to various areas of the ranch in search of some of the many different specimens: red and black plume agate, mottled and colorful bouquet agate, even veins of blue opal. Since the surface material has been prospected continually over the years, the best chances for good finds come from digging in the eroded volcanic formations. These quartz minerals were formed in pockets and seams in ancient volcanic flows.

Then Don set me up with another club member, Art Worley, for a guided trip to the Needle Peak area, very close to the Big Bend National Park boundary. (Ask Art to tell you the story of when he tried to short-cut across a corner of the park and got into a "discussion" with a ranger.) The Needle Peak area is 8 miles down a dirt road (just a track near the end, after you travel down the creek bed for a while), and is noted for seam agate with thistle and sagenitic formations encased in clear chalcedony,

along with green moss agate. This is found (and mined) on the slopes of the hills around the peak, and also occurs as float on the nearby hills in the desert. It's a magnificent setting, with craggy mountains on the horizon and sandy plains for miles all around. Art said there are several other places to look for agates around Needle Peak, so that's my incentive for another trip sometime. He also has contacts for other trips, which were just about to get finalized when I was there.

Don gave me other names of people to see, so I could make arrangements to hunt on other ranches (this is private land and folks are very hard on trespassers), but I was running short on time and my neck was starting to hurt from bending down to pick up so many agates. Maybe the locals are used to seeing agates littering the ground, but to someone from South Bend, where agates are nonexistent, it was great to sit down in one place and inspect, within arm's reach, 15 or 20 different hunks of agate, then move a few feet over and do the same thing (being careful not to sit on anything thorny).

The weather was fine: chilly nights, and days in the 70s and 80s. The Woodward Ranch has a roundup in mid-April with many field trips, including Mexico, and the club promotes the Lajitas Rendezvous the weekend after Thanksgiving, also a time of nice weather and many field trips.

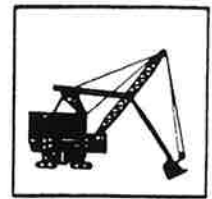
The nearness of Big Bend NP and other interesting activities in the area make this an attractive destination for northerners with the winter blahs, and the club members are eager to show you a good time. There's also fluorite, cinnabar and other mining specimens in the area, for those who are not as gonzo about agates as I am.

You can reach the club at PO Box 1578 Alpine, TX 79831. Woodward Ranch is HC-65, Box 40, Alpine TX 79830.

We should be careful to get out of an experience only the wisdom that is in it - and stop there; lest we be like the cat that sits down on a hot stove-lid. She will never sit down on a hot stove-lid again, and that is well; but also she will never sit down on a cold one anymore.

-- Mark Twain

The National Coal Museum



Looking for something new? The perfect field trip awaits you at The National Coal Museum and Mine Tour. As the only shaft coal mine open to the public in the world, we are positive you will be delighted with your tour.

Experienced coal miners will show you the unique geology associated with coal mining. You'll see...

- The relation between geology and mining conditions.
- The relationship between geology and coal quality.
- The rich geologic history associated in the formation of coal and the associated rock.

You will have a unique look at the coal mining industry: **Past... Present... Future!** You will experience a first hand look at the inner workings of a modern coal mine that was in operation for 18 years. Experienced coal miners will take you down 600 feet below ground, into the actual mine where demonstrations of working machinery will be given.

You won't need any special equipment except for a hard hat that will be provided. The mine is spacious

and lighted and you won't get dirty. It is open year round 7 days a week. Tours of one hour are on the hour from 9 to 5.

The coal industry has been and continues to be, a very important part of America and her people. Sixty percent of our electric power comes from coal.

The National Coal Museum, which is a publicly supported non-profit corporation, is dedicated to preserving the rich heritage of coal mining and focusing on the bright future of the coal industry.

The National Coal Museum is located east of West Frankfort, which is in the southern part of the state of Illinois. Take I-57 to exit 65 at West Frankfort. Travel east on Highway 149 approximately 5 mile to Logan Road, Turn right (south) on Logan Rd, travel

one mile to Mine 25 & Adventure!

Their mailing address is

The National Coal Museum

P O Box 369

West Frankfort IL 62896

or for information call 618-YES COAL

Tour an actual coal mine
600 FEET
UNDERGROUND

