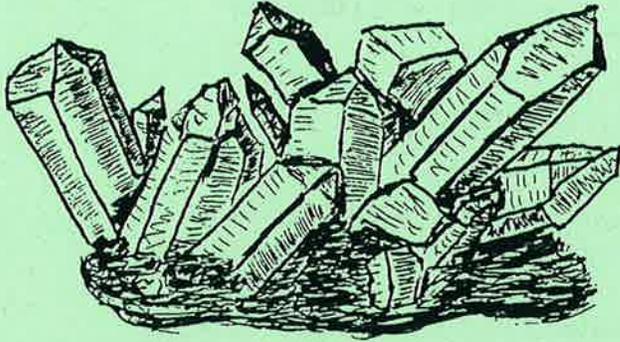


THE ROCKFINDER

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



If you have not paid your dues yet, this will be your last *Rockfinder*. See page 8 for more information.



THE ROCKFINDER

JANUARY, 1998

MICHIANA GEM & MINERAL SOCIETY

1998 BOARD OF DIRECTORS

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 Field Trips
 Membership All Members

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_____ |
| Faceting_____ | Crystals_____ |
| Carving_____ | Micromounts_____ |
| Other_____ | Jewelry making_____ |

Name _____

Address _____

City, ST., Zip _____

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 ___

Date of Wedding Anniversary _____

Phone _____

THE ROCKFINDER

Newsletter of the Michiana Gem & Mineral Society

Volume 38, Number 1

January, 1998

Meeting: Sunday, January 25, 1998
Doors open at 1:30 p.m.
Meeting at 2:00 p.m.

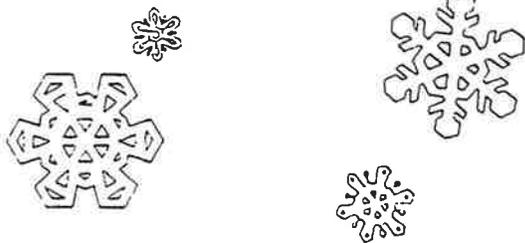
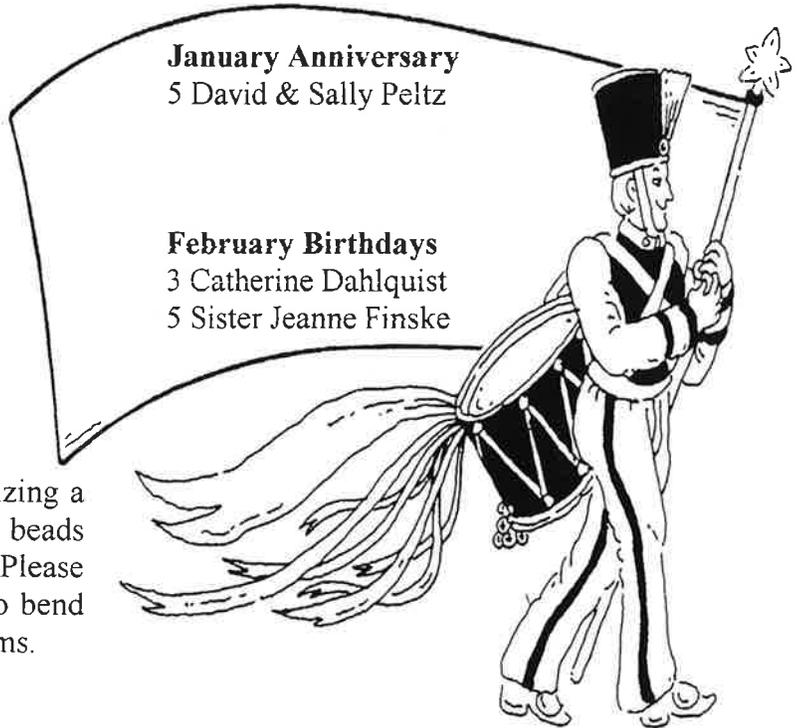
Place: Our Redeemer Lutheran Church
905 S. 29th (29th & Wall)
South Bend, IN

January Hostesses: Gladys Pacholke
Phyllis Smallwood

January Program: Emily Johnson is organizing a hands-on program and bringing wire, beads and patterns to make bookmarks. Please bring your own needle-nosed pliers to bend the wire. These are very attractive items.

January Anniversary
5 David & Sally Peltz

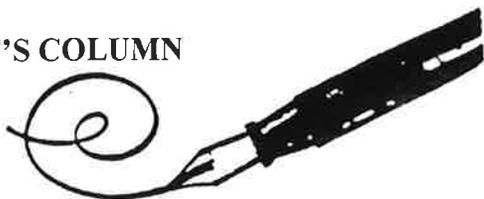
February Birthdays
3 Catherine Dahlquist
5 Sister Jeanne Finske



UP AND COMING

- Feb. 28--March 1: Earth Science Club of Northern Illinois show, College of DuPage, Bldg. K, Glen Ellyn, IL.
- March 7--8: Roamin Club Auction, Schoolcraft College, Livonia, MI.
- March 13--15: Eastern Indiana Gem & Geological Society show, Wayne County Fairgrounds, Richmond, IN.
- March 14--15: Geodeland Earth Science Club show, Western Illinois University, Macomb, IL.
- March 27--29: South Bend Gem & Mineral Show, Century Center.
- April 17--19: MAPS National Fossil Exhibition and show, Western Illinois University, Macomb, IL.
- May 15--17: Midwest Mineralogical & Lapidary Society of Dearborn show, 23400 Wick Rd., Taylor, MI.
- June 26--28: Show and swap, Bloomington, IN.
- August 11-16: Combined Midwest Federation and American Federation convention and show, Michigan Tech University, Houghton, MI. (Upper Peninsula).

MARGARET'S COLUMN



Everyone rushes to get ready for the holidays, and they are over so fast. We had a very nice holiday with our son Don, his wife Anna and their two daughters, Alicia and Melissa, who were here for dinner on Christmas. Anna came down with the flu Christmas Eve, so we did not see too much of them, and they went back to Georgia before the bad weather set in. Rob and his wife Judy, along with Judy's grandchildren, were here too, so you see had a good holiday. We sincerely hope your holidays were good!

1998 January: the beginning of a new year for the Michiana Gem & Mineral Society, so your annual dues are due. As you probably know, we voted in December to raise the club dues. Please pay them promptly, because we would like to get the roster out early. If you have not yet let us know your birthday and anniversary dates, please do so. Our new Sunshine Chairman is Sally Peltz, and she would like to update her list.

WANTED...a field trip chairman. Kathy Miller has done a beautiful job, but she feels she will be unable to work on trips this year. I am sure there is someone (or two) in the club who can take on this job, and do a good job, too. So please let me know if you are interested.

Our next club project is the 1998 Science Alive on Saturday, February 7. Various club members will staff our booth and bring displays. The library has also asked us if we can provide the polishing of rocks for the youngsters. I am not sure if we have any Petoskey stones, and we also need someone who will be willing to take on the project. Do we have a volunteer? The youngsters really enjoyed our presentation when we had the polishing machine. Gordon Dobecki did a good job, and we will miss him. If you are willing to help Bob and me in the booth on Friday for a couple of hours, your help will be appreciated. We usually set up the booth before 9:30 and man it until 11:30 for at-risk students. The Saturday time is 10:00 am to 5:00 pm.

Tom Noe will be asking for help at the Silent Auction booth at the South Bend Show, March 27, 28 and 29th. The money taken in at this booth is usually

used on our field trip in the fall. Help Tom; he does a good job, and will need help on Friday afternoon with the set-up. He usually comes after work, so tell him if you are willing to help.

We have several new members, and we hope they will come to the January meeting and we can welcome them.

Sister Jeanne Finske, our new vice-president and program chairman, would probably like suggestions on future programs. Maybe you know someone who would give an interesting program in the future.

The contracts for the September show have been sent, and most of our dealers have asked to come back. It is interesting to hear the good reputation that our show has from the dealers and attendees. Start thinking about your display and what you would like to do at the show. We need workers at the door, Kiddies' Korner, Silent Auction, displays, set-up, and other places.

See you at the January meeting.

Area Rockhound Fieldtrip Fraternity

A group of area rockhounds and clubs in our region are in the process of forming a sub-organization devoted solely to **FIELD TRIPS**. The group will be known as **ARFF**, and they plan on one "super-duper field trip once a month (more in the spring and summer and fall." Trips will be within a five-hour drive of the Chicago area, Illinois, southern Wisconsin, Iowa and Indiana. (And probably an annual "big one" to Arkansas, Thunder Bay, etc.)

They will take turns planning an absolutely awesome field trip...and, of course, all club members in the area will be invited. There are already volunteers to coordinate trips to Dixon, LaFarge & State-line quarries, Sheffler's, of course, Mazon Creek...oh it is going to be a **GREAT** hunting season!!

On February 28 (the date may change) they are planning an indoor field trip to the Geology Museum at the University of Wisconsin in Madison. There will be a talk on local area mastodons, with emphasis on identifying bones, and then a look at the prep labs where they are actively prepping a local mastodon.

Obviously, Madison is a little far for some of our club members, but if you would like to be informed about ARFF activities, or if you would like to be involved in helping to organize the sub-club and determine how it is set up, you are, of course, invited to attend...or send a rep from our club.

More information will be sent after January 20, but they just want our club to know what they are planning and see if there is any interest from our club or any of our members in ARFF.

A man (unnamed) found mastodon fossils on land in southern Wisconsin, bought the property and has invited volunteers to come and help excavate it this spring and summer. Since he purchased the land, they have found another species--not known right now but a dino thing. So everyone will be invited to participate in the mastodon dig this summer.

The above came over the internet from "Boo," a member of the MWF, who is in charge of setting up a web-site on the internet about the Midwest Federation. Anyone interested? Margaret Heinek or Herb Luckert can get in touch with her for you.

BRUNEAU JASPER

Did you ever wonder why you see so little Bruneau jasper? And when you do, why it is so expensive? It is only found in Idaho's Bruneau Canyon, and occurs in only one area along the steep walls of the canyon, in what is commonly known as a "thunderegg" formation. This formation is extremely rare. Bruneau jasper has beautiful designs, and a range of colors in red, tan and brown. It is a pleasure to work with, and polishes to a high luster. The claim where it is found is privately held, and permission to dig is rarely given. This makes the rock more valuable due to the demand.

Amador Nugget (Oct., 1997)

SHOP HINTS

A good all-around glue for gluing bails, pin backs, bell caps, etc., is Elmer's Stix-All. It is non-toxic, nonflammable, flexible and strong, as well as impact resistant. While it sets up fast, complete

curing takes 24 hours. Elmer's Stix-All can be purchased at most gem shop, hardware stores and variety stores.

Don't be satisfied with scratches in your cabochon. Go back to the grinding wheel again. When a stone is properly polished, you can read the reflection from the bottom of an overhead light bulb in the high polish of your stone.

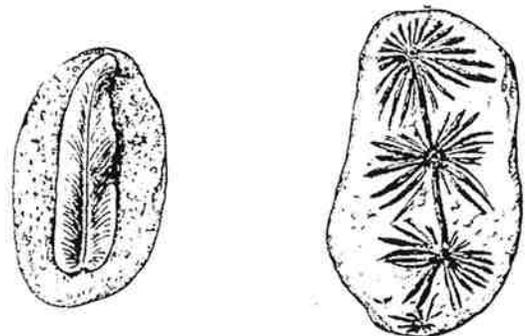
An aluminum scribe is often used with a template to outline stones. This same scribe can give you an idea as to the hardness of a particular stone. If you can see the mark but have to look carefully, the stone is about 7 Mohs. If the mark is very bold, the stone is about 5 Mohs. If the mark cannot be seen, the stone is more than 7 Mohs.

Ft. Lewis Rock Club News, by Dug Digger

A karat is a measure of fineness; 24 karat is fine gold. One karat equals 1/24 (.0417). Thus 14 karat gold is 14/24 fine gold and the balance (10/24) alloy. The usual alloy metals were silver, copper, and zinc. Nickel is used in white gold.

Colors of gold: Yellow, green, red and white are produced by variations in the alloy. Silver and zinc tend to give a green color; copper, red; and nickel, white.

Amador Nugget



Mastodons in Ohio

The figure (right) shows the distribution of the 250 proboscidean fossils found in Ohio. Finds of mastodon fossils outnumber those of mammoth fossils by a 3:1 ratio. Some of the more famous finds are listed below.

Conway Mastodon, found in Clark County in 1878, now in the Ohio Historical Center in Columbus.

Burning Tree Mastodon, found on a golf course in Southern Ohio in 1989. The almost complete skeleton was found with the remains of the animal's last meal in its stomach, as well as bacteria within the stomach contents.

Johnstown Mastodon, found in Licking County in 1926, mounted in the Cleveland Museum of Natural History. Mastodon skeletons were found in the Cleveland area in 1873 and 1875. Mammoth bones were found in Cleveland near East 40th Street during sewer digging activities in 1909.

Deville Mastodon, found in Stark County in 1970, on display at the McKinley Museum of Natural History in Canton. •



● Mastodon ▲ Woolly Mammoth

From Fossilophile (Fall, 1997)



FOR JUNIORS

DID YOU KNOW....

About 10 million passenger cars are made in the United States each year. Each car is made up of 15,000 parts, all of which require mineral products.

The average car weighs 3,000 pounds. Of that, 139 pounds are aluminum, 28 pounds are copper, and 20 pounds are zinc.

The automobile industry uses over 12 million tons of steel in a typical year. This is over 17 percent of the total domestic steel production.

1.7 million troy ounces of platinum were used in making automotive catalytic converters in 1993 alone.

Over half of all lead used in the United States goes into making cars, trucks and buses.

Machine tool shipments to the automotive industry totaled nearly \$3 billion in 1993. If it were not for metals such as chromium, molybdenum, tungsten and vanadium, most of these tools would not exist.

The glass in the windows of a car is made

from silica and limestone, both of which are mineral commodities.

The gasoline or diesel fuel, oil, antifreeze, transmission fluid and grease required for operation of a vehicle are all petroleum derivatives and would not exist if no oil was produced.

The roads we all drive on could not be built without mineral commodities like asphalt, gravel and cement.

Therefore, the next time you drive in your car, remember that mineral resources dug from the earth make it possible.

From "Mineral Industry Information Brochure," State of Nevada, Dept. Of Business & Industry, Div. Of Minerals

A SHOWPLACE FIT FOR THE HOPE DIAMOND

By Randolph E. Schmid

Associated Press

Washington — Surrounded by proud curators and nervous security men, the famed Hope Diamond traveled 75 paces to its new home on Sunday (9/14/97).

"Isn't it great?" enthused curator Jeffrey Post, who is in charge of the Smithsonian Institution's world-famous gem collection. "I think it's the first time it's been on display to look as good as it can look."

Post and Robert Sullivan, the museum's associate director for public programs, removed the diamond from its wall safe Sunday morning, carefully placed it in a black security case, took it to a back room for cleaning, then placed it in the new display.

"They're going to really go nuts in here," said Sullivan, anticipating public reaction when the Smithsonian opens its new display of gems and minerals on September 20th.



Displayed for decades in a wall safe with one side open, the

blue-white Hope Diamond, about the size of a walnut, will be housed in a glass cylinder, "almost a shrine," said Sullivan. Its setting is surrounded by 16 white diamonds and suspended from a platinum chain bearing 46 additional diamonds.

It rotates beneath special lights designed to show off the diamonds' fire and to peer deep into the heart of the 45.52-carat Hope Diamond. The room is called the Harry Winston Galley for the New York jeweler who donated it to the Smithsonian.

Asked the value of the stone, Sullivan said the institution has received estimates but declines to make them public. Essentially, he said, it is priceless.

Along with the Hope Diamond visitors can see a necklace given by Napoleon to Empress Marie Louise.

Detroit Free Press

M. M. S. C O N G L O M E R A T E O C T O B E R, 1997

NATURAL ZEOLITE RESEARCH FINDS HOME APPLICATIONS

Ongoing research at the U.S. Bureau of Mines Research Center in Reno, Nev., using natural zeolites to remove metal contaminants from mine waste waters, has shown that natural zeolites may have a wider application. Recent tests suggest possibilities for using them to resolve several domestic water supply contamination problems. In one test, using a tap-water sample from a home with copper plumbing, copper was decreased from 147 parts per billion (ppb) to 15 ppb. Application of zeolites to a surface water sample from Parachute Creek in Colorado decreased the level of arsenic in the sample from 14,100 ppb to 5 ppb.

This research is part of USBM efforts to develop integrated inexpensive, easy-to use, water treatment systems. Natural zeolites are readily available and low-cost. Laboratory tests have proven that zeolites can remove lead, cadmium, cobalt, manganese, and zinc. Also, zeolites are recyclable, so they can be used repeatedly to clean up contaminated waters.

Natural zeolites could be used in equipment already being marketed for home water purification. The Bureau plans to seek cooperators and industrial partners in this market area who would be willing to work with the Bureau in conducting feasibility studies.

OUR ANNUAL GEOLOGICAL LESSON

Author unknown

Geology is mostly about rocks. There are three main kinds of rocks: ignominious, sedentary and metaphoric.

Ignominious rocks can be taken for granite. Sedentary rocks are mostly chalk, which comes in cliffs, or little round sticks, and sandstone about which the less said the better. Metaphoric rocks are more interesting. One kind is marble which comes in little round balls, flat slabs and shapes that look like naked people without arms which are only kept in museums. Another kind is slate which is for geologists to write on with chalk. The only kind worth mentioning is steatite, or soapstone, which is found in the shape of ashtrays and old-fashioned sinks. The other kinds are, mostly a lot of schist.

Stones come in a lot of different periods. These were invented by geologists, who have to have something to do, and are the only ones who can remember which is which. The only one I can remember is the Plasticene Period which is when man first learned how to model and get oil stains on his rompers.

You have to sort of get used to geologists. At first they seem to have nothing but rocks in their heads, and when they talk about beds, they don't mean what you think. But underneath they are almost normal.

When they go on a field trip with little hammers, they sit around the evening fires on their terminal moraines and sing just like anyone else. Songs like "Lava Come Back to Me," "Shale be Coming Round the Mountain," "You'd Be So Gneiss to Come Home To," and "When the Chalk is on the Greensands, I'll Come Huronian Back to You in My New Red Marl."

When you meet a geologist, be nice to him; he may be somebody's mammal.

Reprinted often. Earliest reference was *Northwest Newsletter* (May, 1993)

MINERALS IN THE NEWS

By Vivien Gornitz

Trillions of Diamonds from Asteroid Collisions

A new place to hunt for diamonds may be in the rocks of ancient craters blasted out by powerful asteroid collisions, according to William J Broad (*New York Times*, June 11, 1996). Although the connection between diamonds and impact craters has been known for over a hundred years, the quantity and size of recently discovered diamonds vastly exceeded earlier finds. In the early 1960s, Edward Anders's group from the University of Chicago had detected microscopic features in the Canyon Diablo iron meteorite from Meteor Crater, Arizona, that could have formed only under the extremely high pressures and rapid heating and cooling caused by a shock wave through the meteorite during impact.

In the 1970s and 1980s, Russian scientists investigated mining impact craters for diamonds. One site in northern Siberia, the 60-mile-wide Popigai crater, which formed 35 million years ago, has yielded peanut-sized diamonds. Although the Popigai diamonds look promising because of their relatively large size, most impact diamonds are too small and too highly shocked to exhibit gem potential. This has not deterred one unnamed company from prospecting for gemstones in an undisclosed North American crater, according to Dr. R.A.F. Grieve of the Geological Survey of Canada.

Billions of tiny diamonds have also been recovered from the shock-melted rock (suevite) associated with the 15-mile-wide Ries Crater in southern Germany. (This crater is also the source of the attractive yellowish-green moldavite tektites--believed to be impact ejecta). Minute diamonds have also been found in numerous locations, worldwide, mixed together with iridium at the geological boundary between the Cretaceous and Tertiary periods, 65 million years ago. It is widely believed that this iridium (and diamond)-rich layer represents fallout from a major asteroid collision that blasted out the 105-mile wide Chicxulub crater in the Yucatan Peninsula, Mexico.

From *NY Mineralogical Society News*

**A PRESIDENTIAL PLEA—
NEW MEMBERS AND MORE MONEY NEEDED**
by John Spunaugle, ALAA, Excerpted from ALAA Newsletter, 1997

Dear Members-

The ALAA continues to be active in the public lands arena, but we need your help and your participation if we are to continue to be an effective voice. Our membership has been fairly static for several years hovering around 750 to 800 members. We know from the membership numbers of the American Federation of Mineralogical Societies that almost 60,000 hobbyists are out there and are members of an organized club. Even with duplicate memberships, there must be at least 50,000 actual members. Add that to the fact that almost two thirds of the people attending rock and gem shows suggest that they are not members of an organized club or society. Thus, the total number of interested hobbyists must number in the hundred thousands.

So I ask you, why are we only 800 strong?

Some suggest to me that the dues are too high. On this subject I am open to suggestions but I believe that if someone doesn't care about the hobby any more than \$25.00, then they don't really care.

Additionally, my concern is that if the ALAA Board of Directors were to reduce the dues, there will simply be less dollars to work with. And if anything, the ALAA needs more dollars, not less, if we are to be an effective voice for all amateur hobbyists.

Our costs continue to rise. Even the ALAA newsletter will cost around \$1.00 per copy to publish and mail.

Since the inception of the ALAA, in 1993, we have raised about \$50,000 from members and other donations, and have spent almost 90% of it on ALAA activities and administrative costs. None of the Board Members receives any payment for their time and are reimbursed only for their out-of-pocket expenses.

Capital equipment and expenses for computer equipment and software have totaled about \$5,000. The remaining funds have been used to carry the voice of rockhounds to legislators and land managers.

When I consider that we have written and introduced a fossil bill in the U.S. Congress, as well as all our other activities, \$50,000 is getting a lot for our money. Compare this to the millions of dollars spent by others without even achieving a Bill introduction.

Another suggestion made to me is that the ALAA needs to be more closely connected to the AFMS (American Federation of Mineralogical Societies, Inc.) and to the Regional Federations. To address this concern and suggestions by Dean Richardson, President of the Utah Federation of Mineralogical Societies at our last annual meeting, the ALAA is working on a draft proposal to form an advisory council from members of the AFMS to help guide ALAA.

MWF Editor's Comments: Although those of us living on the East Coast are not faced with the day to day immediacy of closing and closed public lands, we are affected. Where do you think those

lovely cutting materials that we all love come from? Many of the prime U.S. sources of these materials are being jeopardized daily as more and more localities are deemed "off limits" to collecting.

The annual dues to ALAA are \$25.00. Consider not buying that extra slab or fossil or piece of faceting rough and using the funds on a subscription to ALAA. Your money will go towards efforts at keeping collecting sites in this country open and preserving our individual rights to collect. Once closed, few sites are ever reopened!

C. Weinberger

AMERICAN LANDS ACCESS ASSOCIATION, INC.
—PROTECTING THE PUBLIC LANDS FOR THE PUBLIC—
Membership Application: Please enroll me as a member of ALAA
Annual Membership Fee: \$25.00

Name: _____

Address: _____

City: _____ State: _____ Zip +4 _____

Phone: (____) _____ Hobby Interest: _____

Club Affiliation: _____

Please remit fees to:
ALAA C/O R. Ed Romack, Treas., 655 Eighth St. Idaho Falls, ID 83401

MWF NEWSLETTER 9/97

NEW DUES DUE

A new schedule of dues was voted on and approved at the December Christmas party. Please look at the following categories and select the one that is best for you.

- ◆ Adult single membership (for those 16 years or older in the membership year) \$10.00/yr.
- ◆ Junior single membership (for those 15 years or younger in the membership year) \$1.00/yr., or \$7.50/yr. if a separate *Rockfinder* is sent.
- ◆ Family membership (includes any two adults plus all juniors who are between 4 and 15 years old) \$15.00/yr.
- ◆ Honorary membership--No dues.
- ◆ Subscribing membership (for nonparticipating members who will receive *The Rockfinder*) \$7.50/yr.



Dues for 1998 are payable **NOW**. Please make out a check to Michiana Gem & Mineral Society for the correct amount and mail it to Margaret Heinek at 7091 E. East Park Lane, New Carlisle, IN 46552. You can use the form inside the green cover of this issue of *The Rockfinder*.