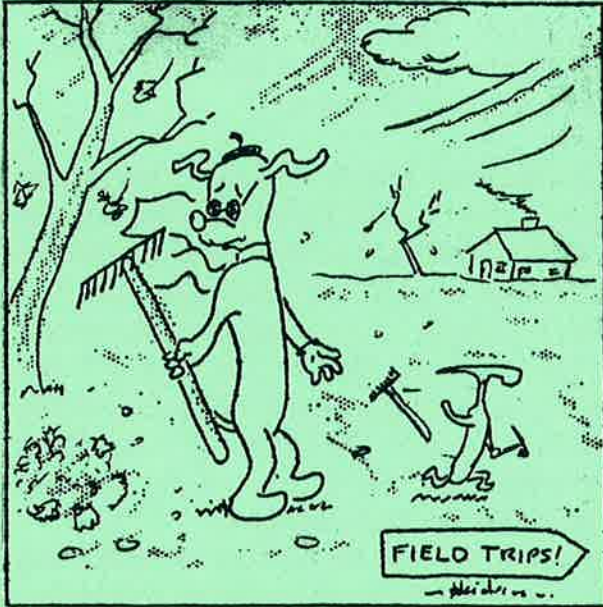


THE ROCKFINDER

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



THE ROCKFINDER

SEPTEMBER, 1999

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The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary 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 before the general meetings. 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 (ph. 289-2028). Co-editor, Herb Luckert, 221 Marquette Ave., South Bend, IN 46617 (ph. 282-1354). Reporters, Bob Heinek, Herb Luckert, club members.

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Yearly Membership Dues (Payable by January 1)

_____ Individual \$10.00 per year
_____ Family \$15.00 per year
_____ Junior \$1.00 per year
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Please indicate areas of special interest.

General Geology____ Beads____
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Signed_____ Date_____

THE ROCKFINDER

Newsletter of the Michiana Gem & Mineral Society

Volume 39, Number 7

September, 1999

The September meeting will be on the bus during the field trip to southern Indiana.

ROCKHOUNDING

Author unknown

I think that there shall never be
An ignoramus just like me,
Who roams the hills throughout the day
To pick up rocks that do not pay.
For there's one thing I've been told--
I take the rocks and leave the gold

Over deserts wild or mountains blue
I search for rocks of varied hue.
A hundred pounds or more I pack
With blistered feet and aching back,
And after this is said and done
I cannot name a single one.

I pick up rocks wherever I go,
The reason why...I do not know,
For rocks are found by fools like me
Where God intended them to be.

UP AND COMING

Sept. 17-18--Tulip City Gem & Mineral Show, Holland Civic Center, 150 W. 8th St., Holland, MI.

Sept. 25-27--Elgin Rock & Mineral Society Show, Hemmen's Cultural Center, Elgin, IL.

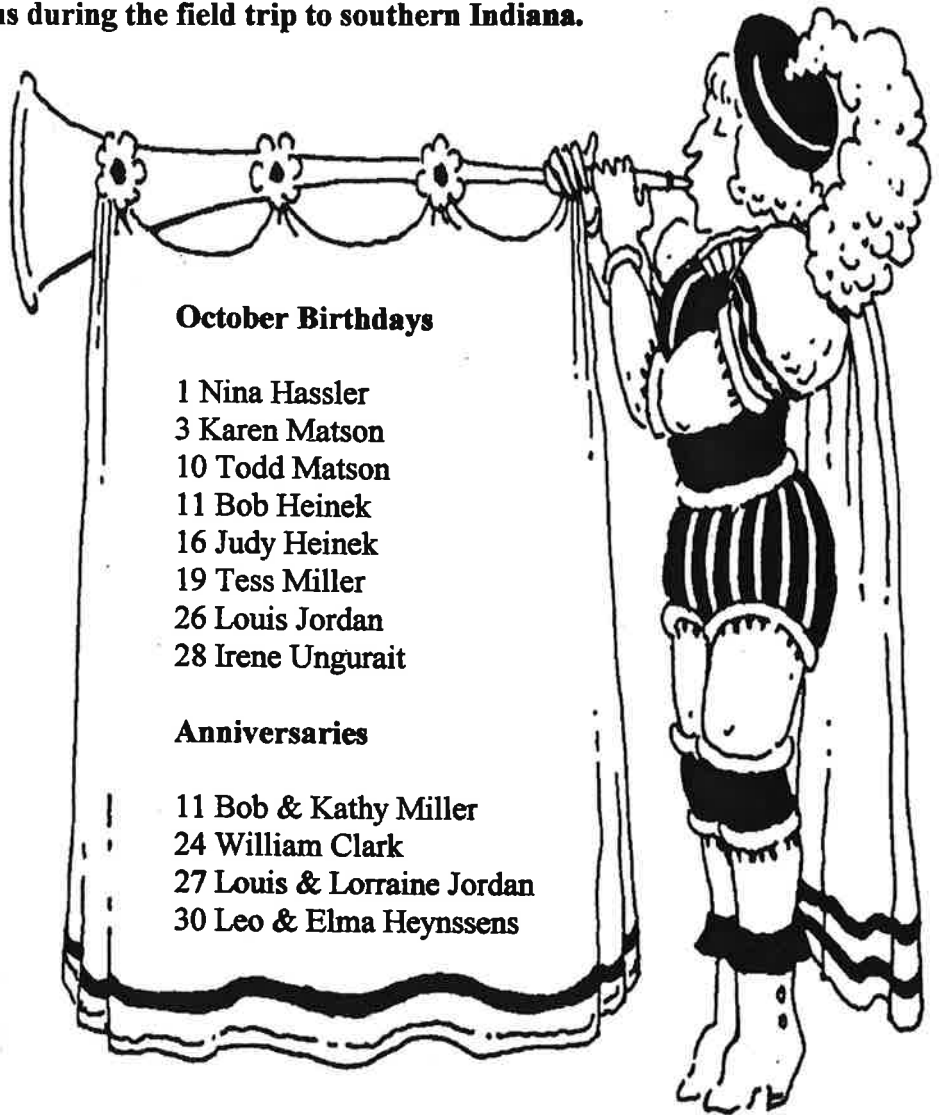
Oct. 2-3--Miami Valley Club show, 1043 Rona Parkway Drive, Fairborn, MI.

Oct. 8-10--Greater Detroit Gem & Mineral Show, new location, South Macomb Community College Expo Center, Warren, MI.

Oct. 15-17--Three Rivers Gem & Mineral Show, Allen County Fairgrounds, Ft. Wayne, IN.

Oct. 16-17--Park Forest Earth Science Club show, Prairie State College, Chicago Heights, IL.

Oct. 22-24--Central Michigan Society show, Marshall Street Armory, Lansing, MI.



October Birthdays

1 Nina Hassler
3 Karen Matson
10 Todd Matson
11 Bob Heinek
16 Judy Heinek
19 Tess Miller
26 Louis Jordan
28 Irene Ungurait

Anniversaries

11 Bob & Kathy Miller
24 William Clark
27 Louis & Lorraine Jordan
30 Leo & Elma Heynssens

MARGARET'S COLUMN



Well, it is over! It really was a good show. Thanks to our displayers and demonstrators, for sure. It was so nice to see the displays from the members. We had displays from the Sharps from Ohio. Thanks to Tom McLaughlin for getting them. Many thanks to all who worked, but you know it takes many to make a good show.

Special thanks to Herb Luckert for picking up the items from the storage shed, and returning them to storage. When Herb picked up the items, there were several of us there to try to clean out the shed, and organize what we have there. We still have three display cases we should sell, as long as members do not use them. Bob Heinek wondered if they could be cut in half. They are 2' x 4', and if cut would be 2' x 2'. Let us know what you think. Bill Crull has two display cases he would sell. One is an aluminum case that would be good for flat items, the other one is a wooden sloping case. Interested? Call Bill.

We owe a big thanks to all the demonstrators: Joan Gardner, Greg Street, Virginia Steel, Tom Fields, Lue Ellen Brown, David Peltz, Stan Jacobs and Bob Miller. Thanks, Bob, for getting them.

It was good to see Bill and Marie Crull at the show. Bill had several displays and worked at the silent auction. Tom Noe worked very hard to make the auction a success, and he did.

Special thanks go to Fred & Pat Baker for set-up and takedown. I know I will forget many who worked, but THANK YOU - THANK YOU.

The Kiddies Korner was a big success! Thanks to the Slattery family. Lauren and Sean were a big help.

I would like to give a special thank-you to Bob Heinek for all he did planning for the dealers, set-up and figuring the money. It takes almost a year to prepare for a show, sending out contracts and making sure we have the dealers we need to cover the cost of putting on a show, so the club will make a profit to help subsidize our field trips.

Speaking of trips, our Ohio weekend is coming up very soon. Kathy Miller and Bonnie

Brueske, along with Matt Brueseke, have made all the arrangements and everyone is looking forward to it. The dates are September 24 through 26.

Gordon Dobecki will be on the trip; looking forward to seeing him. We have missed Gordon since he moved west.

Again, thank you to all who worked. Even though I didn't mention your names, you know who you are. All our club members are good people.



HOW FAST DID THEY GO?

When humans walk, our footprints are neat and leave a complete and fairly level impression from heel to toe. But when we run, we go up on our toes. So did dinosaurs. Complete, level footprints indicate that the creature was walking. Running animals take longer strides and leave partial prints.

Using formulas, scientists can estimate how fast dinosaurs ran. The tyrannosaur in the movie *Jurassic Park* supposedly went 35 miles per hour. "No way," says James Farlow, a paleontologist who specializes in ichnology (ick-NOL-uh-jee), the study of footprints. "A safe (top) speed would be around 22 miles per hour. If they ran at 40 miles per hour and stumbled, they would be seriously injured, just like dropping a watermelon from the third floor."

The scientific study of footprints is fairly new. For more than 150 years after the first fossilized footprints were discovered in New England in 1802, such tracks were simply a subject of fanciful guessing. Some said they were made by large extinct birds. Others thought native Americans had carved them. Hopi Indians pictured dinosaur footprints in paintings and clothing.

(original article by Suman Bandrapalli in *The Christian Science Monitor*, 3/18/97. Excerpted and summarized by the *Pegmatite* editor (June, 1999).

INDIANA DNR EXPANDS FOSSIL COLLECTING BY PERMIT

On August 17, three members of the Indiana Society of Paleontology attended a meeting of the Natural Resource Study Committee of the Indiana State Legislature, held in Brown County State Park. George Aldred, one of the ISP members, had previously written to the state director of the Indiana Department of Natural Resources about the restrictive policy which allows only universities and professionals to collect fossils on Indiana lands managed by the DNR. Until recently, no permits were required for anyone, but new policies had forbidden collecting to anyone except by permit, and permits were not available to amateurs.

The state director asked Aldred to attend the meeting, because fossil collecting would be on the agenda. Director John McCone described the current policy not to allow any collecting permits except to universities and professionals. The DNR has classified fossils as a nonrenewable resource which cannot be collected.

Then the three members of the ISP were asked to speak. They noted that amateurs are the ones who find and donate the most fossils to museums. They also described how members of the ISP abide by specific collecting rules and make donations of fossils to schools and other institutions.

They used examples of weathered fossils to demonstrate that fossils which are left to the elements--rain, frost, snow, erosion--soon disintegrate, with the loss of all scientific information which could have been gleaned from them if they had been collected.

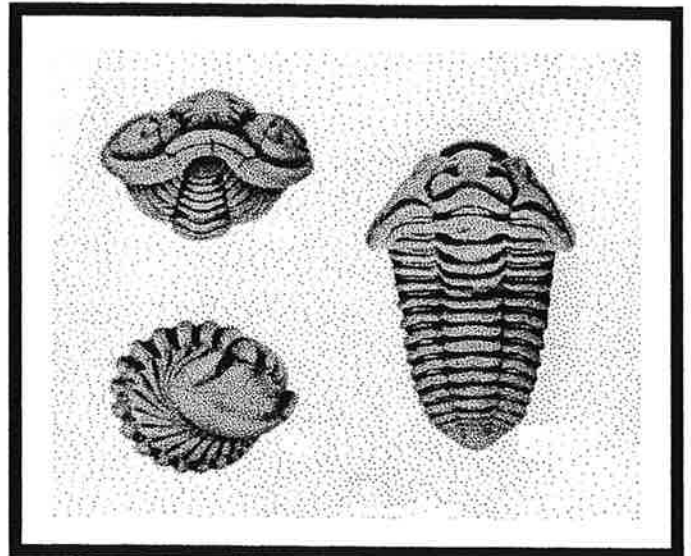
The committee members were quite impressed with the quality of the Indiana fossils which were displayed in good condition. Another ISP member, Margaret Kahrs, showed them a copy of the *Mid-America Paleontology Society Digest*, which she edits, and the committee members wanted to know where they could buy them.

Jack Costello, deputy state director of the DNR, then proposed that, "in a case of this kind, I think the rules should be changed." He acknowledged that ISP members were amateurs, but he said they sounded like professionals to him.

As a result, the committee voted to grant permits for fossil collecting on DNR lands to members of the Indiana Society of Paleontology. The permits have not been issued yet, but will be available shortly.

The members of Michiana Gem & Mineral Society will recall that we have corresponded with the state director of the Indiana DNR on this same point, but without much success. Perhaps it's now feasible to make a case for members of gem and mineral societies in Indiana to receive permits for collecting fossils. Beyond that, perhaps one day we can hope for the restoration of the right of all Hoosiers to collect fossils on state lands.

(Based on information supplied by Margaret Kahrs in the September, 1999, *ISP Newsletter*.)



Flexicalymene meeki. Anterior and right lateral views of enrolled specimen and outstretched specimen. Common trilobite of the southeast Indiana area.

CAMPING ALERT

In case anyone is considering doing some camping next summer, please note the following announcement from the National Forest Service:

"In Alaska, tourists are warned to wear tiny bells on their clothing when hiking in bear country. The bells warn away *most* bears. Tourists are also cautioned to watch the ground on the trail, paying particular attention to bear droppings to be alert for the presence of grizzly bears. One can tell a grizzly dropping because it has tiny bells in it."

10 REASONS MINERAL COLLECTING IMPROVES YOUR LIFE

By Mitch Portnoy

Month after month, year after year, we devote a lot of space in the *Bulletin* to various aspects of the same broad subject: how to collect minerals. We spend much less space on a related and equally important subject: *why* collect minerals.

At a time when flashier hobbies (e.g., bungee jumping) are front page news, we should do more to highlight the various benefits, both social and individual, that can result from mineral collecting. So here is my list of top 10 reasons why everyone should collect minerals.

1. It's educational.

Few mineral collectors would dispute the notion that they, as a group, are brighter than noncollectors. We have to read a lot, think, study and constantly learn. We need to develop project management and decision-making skills. We have to cultivate our innate, often untrained, esthetic sense. We must learn to discern what is good, what is better and what is best. Because of the need to pay attention to detail, we keep our memories active and our intellects challenged.

The hobby ranges from the deepest sea beds to far out into space and includes many subjects neglected in schools today: geography, geology, chemistry, history and art.

2. It's goal-oriented.

In the immense Fortune 500 company I work for, there is a training class, off-site meeting, e-mail, poster or other instrument of corporate-technobabble in which the importance of setting, monitoring and meeting goals is stressed. But mineral collectors don't need this kind of help. Goal-setting is the essence of our hobby.

You must first decide *what* you want to collect (minerals, gems, etc.), based on a variety of preferences (size, quality, cost, chemistry, history, localities, crystal habit, etc.). This is not an easy decision in the vast mineral world! You then have to come up with the "*how*"—will you collect in the field, trade, purchase at shows, order by mail, etc. to get

what you want to build your collection? (You might even create a mental or paper wantlist). Finally, you end the project with the "*where*," i.e., where you store, label, organize, catalog and display your items.

Obtaining what you want requires planning, saving, searching, negotiating and lots of other attributes that serve you well in life.

3. It promotes capitalism and free enterprise.

The mineral business is one of the most unregulated and freest businesses around. For good or bad, the "caveat emptor" spirit abounds and we learn quickly, as collectors, to negotiate and make independent buying decisions. Every collector is a part-time or potential dealer and every collected object is a potential sale. For many youngsters, minerals are the first hands-on introduction to the workings of capitalism.

4. It's (relatively) harmless.

It is true that a quarry wall could fall on you when collecting, or you could get bitten by a rattlesnake, or you could spill some acid on yourself while cleaning a specimen, or accidentally swallow a radioactive fragment. But in an era when extreme and even violent sports are all the fad, there's something to be said for a hobby that entertains individuals in the quiet of their home, the peacefulness of the woods, or the energy of a mineral show. In addition, you are not hurting anything or anyone or doing damage to Mother Earth as she relinquishes her objects of beauty to you.

5. It promotes stable marriages, quality family time and friendships.

The myth of the "rockhound widow" (like a football widow") notwithstanding, I see our hobby improving all kinds of interpersonal relationships. Husband and wife, girlfriend and boyfriend, parent and child can all participate in a club, field trip or show together. They can have related but different interests in this vast hobby of ours. There are many family memberships in mineral clubs and I can count among my best friends people I met in the club I belong to. It is no coincidence the last activity my father and I did together before he passed away a few years ago was to go to a mineral and gem show.

6. It nourishes old age.

Unlike many hobbies that might have to be curtailed during advancing years, an interest in minerals and mineral collecting never has to end. Certain aspects can be sedentary, yet mentally stimulating. And we all love learning from the old-timers in our club and hearing their wonderful stories of people and minerals past.

7. It can be a source of funds.

Unlike some of the more active (e.g., skiing) or faddish (e.g., Beanie Baby collecting) hobbies, minerals can yield some salvage value at the end.

Nobody considers cashing in his old roller blades, but a thoughtfully created mineral collection, carefully assembled over a lifetime, is likely to have at least a partial resale value. (Please note that I do not consider the vast majority of minerals as "investments" in the legitimate sense of that word, and I wince whenever I hear a dealer misuse that term in order to make a sale.

8. It encourages diversity and tolerance.

One of the glories of minerals is that you can collect what and how you please. There is no right or wrong, no bad or good, no professional or unprofessional way to collect. You quickly learn that every collection is different. You learn to respect these differences, even to celebrate and enjoy them.

I always thought it wonderful that the NYMC, even 100 years ago, during the days of "male only" clubs, had women as members.

9. It creates a sense of community.

A mineral club is typically one of the most egalitarian institutions around. Minerals cut across class, economic, educational and professional lines. All ages and social strata participate as equals.

10. Last and most importantly, it's fun!

Maybe this entry should really be number 1 on the list! We should never forget that we all collect minerals for the fun of it. We are brothers and sisters in the world of rocks and minerals. That's what hobbies are for.

Bulletin of the New York Mineralogical Club (Dec., 1998)

BEADERS, BEWARE!

Know what you are buying. The most common errors are:

- ◆ **Sodalite** being identified as lapis. Lapis lazuli is a richer, more royal blue with metallic veining. Sodalite is grayer, steel-blue with white veining.
- ◆ **Dyed howlite** is neither turquoise nor lapis. Dyed howlite is too uniform in color and does not have the metallic veining of lapis nor the depth of real turquoise.
- ◆ **Aventurine** is not jade. Aventurine has little lines of slightly deeper green that are almost iridescent.
- ◆ **Plastic is not amber.** Amber holds an electric charge. If you rub it on your arm, the little hairs would stand up from static electricity. Plastic does not hold this charge.
- ◆ **Garnets** can be dyed on the inside to a deeper, richer color. See if the string has picked up the color.
- ◆ **Phony pearls.** Real pearls feel gritty on the teeth. Some false pearls are called *Laguna Pearls*. If you don't like to check out pearls on your teeth, get familiar with the real thing and the differences will become evident.

Reference: *Best Little Beading Book* by Wendy Simpson Conner
Breccia (Feb., 1999)

BLACK HILLS GOLD — THE LEGEND LIVES ON

According to legend, a French goldsmith named Henri LeBeau became lost during the gold rush days of the middle 1870s in the Black Hills of South Dakota and fell asleep, believing he was dying of thirst and starvation. During a dream, he saw a mountain stream with grape vines growing on its banks.

Upon awakening, he walked over a rise and found the stream and grape vines just as he had seen them in his dream. Out of gratitude, he dedicated his life and talents to creating jewelry in the shapes of grape clusters and leaves fashioned in rose, green and yellow gold. Today, a series of up to 40 different steps is necessary to capture the same dramatic detail in traditional and contemporary Black Hills gold designs.

Anonymous

ON REFURBISHING ENYHDROS

By Ted Robles

One interesting feature of certain geodes is that they contain water. They are then referred to as "enhydros" and make rather valuable curios of agate.

Unfortunately, sometimes the stone, after some years on the shelf, tends to lose its moisture, and become just another geode, and not a very handsome one at that.

I have found out how to restore the water to the cavity in the rock without drilling holes into it or otherwise destroying the integrity of the specimen. My son tells me that I should go into the business of refurbishing enhydros at a couple of dollars a pop (plus shipping), but I suspect that there may be others who have figured it out. Besides, I'm not really interested in selling the knowledge. Rockhounds are supposed to help each other, right?

Okay, you have a specimen of enhydros which has lost all its water. Please don't throw it away or slice it up! Just stop and think. Why did it get dry? Well, I suppose the water just evaporated. Right. Go to the head of the class.

Very few, if any, rocks are totally void of microporosities, small channels or holes through which water might escape over time. So it seemed to me that if water could get out through these micropor-

osities, it could be put back in the same way. All we had to do was get the air out and produce a pretty good vacuum inside the cavity while the stone was submerged in water.

So, here is the process: try it out on any enhydros you have that have lost their internal water.

In a microwave-safe dish (glass or ceramic; I don't recommend plastic for this one!) place your stone, flat side down, and cover it to a depth of about an inch with water. Turn the microwave on high, and let it run about two minutes. Then wait about ten minutes. Repeat this process until the water boils freely when the microwave is not turned on. **DO NOT REMOVE THE HOT STONE FROM THE WATER!** Let the whole thing cool to room temperature, and stay at room temperature for several hours before checking. If the cavity has not filled to your satisfaction, repeat the process. The idea is that the air under pressure is forced out through the porosities in the rock, and as it cools it leaves a vacuum behind, which will slowly pull water into the stone. If you try to hurry the process, or get too impatient to see the results, you may replace air with air, which is not the idea. Also, I suppose it is possible to crack (or even explode) the stone, if you try to force it. Slow and easy is the watchword here, as with so many other projects in the mineral hobby.

Mountain Gem (Feb., 1996)

DANGER

DO NOT USE ANY OF THE FOLLOWING ROCKS OR MINERALS IN YOUR ROCK GARDENS.

Antimony is a bright white mineral and contains arsenic.

Realgar is a vivid red mineral and contains mercury.

Cinnabar is a vivid red mineral and contains mercury.

Galena is a silvery, shiny mineral that contains lead.

Fluorite is a violet or yellow mineral that contains fluorine.

Malachite is a green banded mineral that contains copper.

Koalin is smooth and white, absorbs water and then expands.

Obsidian is dark and glassy and spalls off in sharp needles.

Alabaster is white or gray and water solvable.

Gypsum is clear and shiny and is water solvable.

If you would like to read more about rocks and/or minerals for your rock gardens, *The Audubon Society Field Guide To North American Rocks And Minerals* is recommended.

If you run into problems or have questions feel free to contact June Culp Zeitner at 5203 South Canyon Road, Rapid City, SD 57702-1870. Telephone 605-341-6656.



RAINFORESTS OF THE WORLD, ANCIENT AND PRESENT

By Marty Parks Frey

When it comes to the fossil records of Colorado, many people can't see the forest for the trees. That is, so many people are focused on Colorado's dinosaurs, they miss out on other records of our state's ancient environment.

Dr. Kirk Johnson, a curator of paleobiology at the Denver Museum of Natural History, has spent much of his life collecting evidence of fossil rainforests, and shared his knowledge with Gates Club members at the October (1997) meeting.

Modern rainforests have a shared vocabulary, according to Dr. Johnson. Brazil, Zaire (the Congo), Indonesia and southeast Asia all have areas of rainforest along the equator, where the temperature is a steady 80 degrees year-round. Since the climates are similar, the forests have many common elements. One such element is large trees with buttressed trunks. One kapok tree, photographed on one of Dr. Johnson's trips, had a buttressed base of 93 yards, and was 200 feet tall.

Rainforests have great species diversity, but rainforest leaves are all much the same: long, oval-shaped, big, with extended drip tips for drainage. Smooth-edged leaves indicate a warmer forest, while jagged-edged leaves indicate cooler forest. Dr. Johnson says that leaves can be used as thermometers. Just gather a large sample of leaves, sort them into piles, separating the jagged edges from the smooth, and calculate the percentages. He can do the same thing with fossil leaves. Dr. Johnson has been to more than 730 fossil sites, looking for biological evidence to help identify ancient environments.

Fossil leaves are usually found pressed between layers of sediment rock. Once found, they are wrapped quickly in toilet paper, then newspaper, then boxed for transport. How many leaves does Dr. Johnson need to calculate the prehistoric environment? He needs between 300 and 500 in a modern forest, and the same for a fossil forest. These should be well-preserved, full leaves, not just parts. Some leaves from the Eocene epoch (approximately 58 million years ago) are so well-preserved that the details of the veins show. A modern, 50-foot tree may have as many as 99,254 leaves (as counted by Dr.

Johnson in his college days), so an acre of deciduous forest may produce 10 million leaves yearly. The real prize is a botanical attachment, that is, leaves with flowers attached to a branch. Otherwise, it's a jigsaw puzzle deciding what leaf goes with what tree, flower or pod.

The Eocene fossil rainforests of Wyoming had temperatures of 70 to 75 degrees--not tropical, due to their distance from the equator, but warm, since the Eocene epoch had no polar ice caps. Interestingly, fossil trees from this period, like current rainforest trees, rarely have growth rings, because there is no growth season, just one continuous growth cycle. The Wyoming Buck Springs site, east of Shoshone, west of Casper, was used as a model for a diorama at DMNH. It has yielded 4- and 5-star fruits of the sloanea (a plant found in modern southeast Asia), turtles, a small primate with opposable thumbs, crocodile skulls 1½ feet long and little skulls the size of a nickel, similar to modern bush babies.

When building Denver International Airport, workmen found fossil palm leaves. Current construction in the Denver Basin has prompted many calls to the museum reporting finds. Several years ago one of the best fossil rainforest sites in the world was discovered in Castle Rock. The site is an outcrop of cycad and leaf-bearing mudstone. Dr. Johnson has been digging there since 1994, and so far has found over 40 brand new species. These are better than leaf imprints--the leaves are actually still there, and great care is taken to preserve them. He has also uncovered a new species of cycad, complete with trunk, leaves, roots and seedlings. This is the only known cycad seedling fossil in North America. Thanks to Dr. Johnson's efforts, the DMNH has one of the best fossil leaf collections in the world.

The Gates Rockhound Bulletin (Nov., 1997)

(Rockfinder editor's note: In case you wondered where all the "rainforests" came from a few years ago, rest assured that they were there all the time. They were just called "jungles." The name was changed because people weren't sending money to "preserve the jungles.")



FOR FURTHER READING....

Did *Homo sapiens* interbreed with Neanderthals, with whom they lived in close proximity for thousands of years? Archaeologists in Portugal have uncovered the skeleton of a child which appears to possess a mixture of traits and may be an anatomical hybrid. The child had modern traits such as a well formed chin and short lower arms, along with Neanderthal traits such as short legs, broad chest and large front teeth. Opponents of this theory suggest that the child was simply an unusually stocky *Homo sapiens*.

Science News (May 8, 1999)

In the high-math world of paleohistory, the number of branches on a 370-million-year-old tree can be very important. A tree with many branches affects the climate more than a tree with few branches (we're talking about millions of the trees, of course). So, it raised a few eyebrows when scientists in the Sahara Desert found new fossils of *Archaeopteris*, earth's earliest woody tree. It now looks as if *Archaeopteris* had thick, permanent branches, in addition to the short-lived ones which were known from earlier fossils. Scientists now think that the tree pulled a lot more carbon dioxide out of the atmosphere as it spread and flourished, releasing more oxygen and setting the stage for land-dwelling vertebrates like us.

Science News (May 15, 1999)

Huge magma flows in North and South America, Africa and Europe have been correlated and are apparently part of the same event 200 million years ago. The eruption produced the most widespread lava flow ever discovered, and may have helped to split the continents apart.

Science (no date given)

When engineers in Alberta emptied out a reservoir for repairs to the spillway, wind scoured away the mud, uncovering footprints and Clovis points. Scientists are delighted, and are rushing to preserve as much as they can of the Pleistocene remnants before the site is permanently refilled next year. The finds date to about 11,000 years ago.

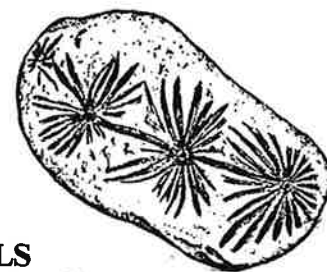
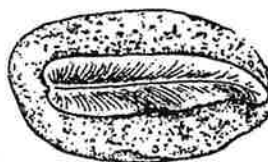
Science (June 11, 1999)

An inch-long piece of stone has confirmed that Neanderthals hunted their prey with spears more than 50,000 years ago. The skeleton of a wild ass has been found in the Syrian desert, with the tip of a stone spear point buried in the neck bone. Apparently the thrust of the spear was so strong that part of the stone broke off inside the bone. Many stone points have shown up at Neanderthal sites, but the evidence for hunting with spears was ambiguous until now.

Science News (July 3, 1999)

Salt crystals preserved for millions of years sometimes have inclusions which trap ancient brine. In the brine are microorganisms which could be remnants of past life on earth. Scientists in the New Mexico desert have grown bacteria which they found inside inclusions in salt crystals which are 250 million years old. Are the bacteria that old? The evidence is pretty good, though some paleobiologists are skeptical.

Science News (June 12, 1999)



MAZON CREEK FOSSILS

MGMS members, if you would like to use the club's permit to hunt for leaf and other fossils in the Mazon Creek area of Illinois, be sure to contact Kathy Miller before you leave. She has the permit and all the necessary information.