

THE ROCKFINDER

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



THE ROCKFINDER

APRIL, 2003

MICHIANA GEM & MINERAL SOCIETY

2003 BOARD OF DIRECTORS

President.: Diane Gram 574-272-6885
 Vice-Pres: Don Church 269-651-7616
 Secretary: Sr. Jeanne Finske 574-284-5903
 Treasurer: Bob Heinek 574-654-3673
 Liaison: Marty Perry 574-674-6762
 Past Pres.: Don Church 269-651-7616

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), July (no meeting), August (club picnic) and the November/December meeting and Christmas party. Board meetings are held before the general meetings. The annual club show is Labor Day weekend.



Yearly Membership Dues (Payable by December 1)

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

Please indicate areas of special interest.

General Geology _____ Beads _____
 Gems & Minerals _____ Fossils _____
 Cabochons _____ Field Trips _____
 Faceting _____ Crystals _____
 Carving _____ Micromounts _____
 Other _____ Jewelry Making _____

Name _____

Street _____

City, ST., Zip _____

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

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

HEADS OF COMMITTEES

Programs Don Church 269-651-7616
 Hospitality Pat McLaughlin 574-259-1501
 Educational Emily Johnson
 Librarian Sam Shapiro 574-234-9648
 Historian Ed Miller 574-498-6513
 Sunshine Sally Peltz 269-683-4088
 Publicity Phyllis Luckert 574-282-1354
 Membership Sally Peltz 269-683-4088
 Field Trips Kathy Miller 574-291-0332

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. Editor, Tom Noe, (ph. 574-289-2028). Co-editor, Herb Luckert, 221 Marquette Ave., South Bend, IN 46617 (ph. 574-282-1354). Reporters, Bob Heinek, Herb Luckert, club members.

Permission is hereby granted to reprint any original *Rockfinder* articles, as long as recognition is given along with the reprint.

Additional family names:

Name _____

Birthday _____

Name _____

Birthday _____

Name _____

Birthday _____

Name _____

Birthday _____

Date of Wedding Anniversary _____

Phone _____

PLEASE READ AND SIGN THIS SECTION:

With my signature I hereby release the Michiana Gem and Mineral Society, Inc., and its individual members and the owners of any premises upon which I enter under permit granted to the society, absolutely free of any liability whatsoever, to my person or my property, and further I will respect the equipment and property of the aforesaid owners.

Signed _____ Date _____

THE ROCKFINDER

Newsletter of the Michiana Gem & Mineral Society

Volume 43, Number 4

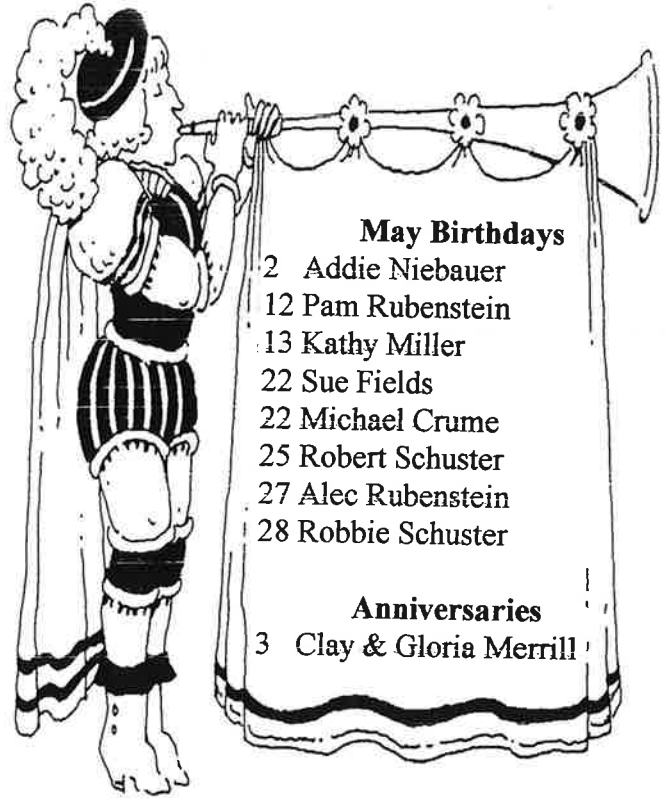
April, 2003

Meeting: Sunday, April 27, 2003
Doors open at 1:30 p.m.
Meeting starts at 2:00 p.m.

Place: Our Redeemer Lutheran Church
805 S. 29th Street (19th & Wall)
South Bend, IN

Program: SHELL CREATIONS--New member Pat Bell will display and demonstrate her craftwork with shells. Members could bring in their own items which make use of shells.

Refreshments: Ed and Patti Enos and Phyllis Smallwood



UP AND COMING

There is no April show at Century Center this year.

May 2-4: Kalamazoo Geological and Mineral Society show at the fairgrounds.

May 3-4: Cincinnati Gem, Mineral, Fossil and Jewelry Show, Cincinnati Convention Center.

May 23-25: Memorial Day Rock Swap, Hidden Hill Campground, Newark, OH.

May 30-June 1: Midwest Mineralogical & Lapidary Society show (Dearborn club), Allen Park Civic Arena, Allen Park, MI.

June 4-6: Combined California and American Federation convention and show, Ventura, CA.

June 27-29: Lawrence County Rock Club show, Monroe County Fairgrounds, Bloomington, IN.

June 28-29: MGAGS Rockhound Seminar, Washtenaw Community College, Ann Arbor, MI.

July 11-13: Rocky Mountain Federation convention and show, Casper, WY.

July 30-Aug. 3: "Rockin' Around the World Show," Kingwood Center, Mansfield, OH.

Aug. 1-3: Northwest Federation convention and show, Kennewick, WA.

Aug. 15-17: Midwest Federation convention and show, Cottage Grove, MN.

Labor Day weekend—our annual MGMS club show at Century Center.

Oct. 17-19: Eastern Federation convention and show, Poughkeepsie, NY. Oct. 25-26: Evansville lapidary Society show, Washington Square Mall, Evansville, IN.

DIANE'S COLUMN



April showers bring May flowers? April snow slowed down my daffodils; they are trying to bloom. Spring brings the return of our club snowbirds and good stories of their adventures.

I went to the spring (saw just a few flakes of snow) rock show in Berrien Springs. I took my mother, who resides in a nursing home, along for the ride. I enjoyed seeing several of our club members there. I also met many interesting people. I had a hard time pulling myself away from the Russells' area. Jim and Sherry's trees and glass beads are beautiful.

I have been trying to learn HTML (Hyper-Text Markup Language) to create web pages. I put together a simple web page several years ago. The past few months I have found some time to work on it. Those of you who do web searching know how quickly the time passes when you are in front of a computer. If you would like to check out my page, the URL is <http://www.nd.edu/~dgram>.

MINUTES OF THE MARCH 24 MEETING

President Diane Gram opened the March meeting of the Michiana Gem & Mineral Society at 2:00 p.m. There were 25 members present. The minutes were read and approved as published in the March issue of *The Rockfinder*. The treasurer's report was read, approved and filed for audit.

Committee Reports: Liaison Marty Perry presented information about the Midwest Federation's program recognizing Members of Distinction from individual societies. She proposed that the club elect members in the near future. During the discussion, the following names were mentioned as possible nominees: Tom Noe, Kathy and Bob Miller, and Margaret and Bob Heinek.

Sally Peltz graciously agreed to serve as Membership Chair in addition to her duties as Sunshine Chair. She requested that members notify her about persons who should receive cards from the club.

Sam Shapiro volunteered to fill the post of Club Librarian.

Ed Miller will continue to serve as Club Historian.

New Business: Diane spoke of the need to increase our membership dues. She proposed the following changes:

Regular membership--from \$10 to \$15;

Family membership--from \$15 to \$20;

Junior membership—no change.

It was moved, seconded and passed that we accept these changes, effective January, 2004.

It was moved, seconded and passed that Bess Wise, one of the founding members of Michiana Gem & Mineral Society, be listed as an Honorary Member, which includes a subscription to *The Rockfinder*.

Changes to the 1982 bylaws were read, as proposed by the Bylaws Committee. Copies of the old and the new bylaws will be available for discussion at the April meeting.

Door prizes were awarded to Marsha Miller, Annitta Hostetler, Margaret Heinek, Bill Nelson, Sr., Phyllis Smallwood, Bob Miller and Sam Shapiro.

The May meeting will not be on the fourth Sunday, but on the THIRD Sunday, May 18.

The meeting closed at 2:55 p.m. After the program, "How To Set Up a Rock Display," by Margaret Heinek, the club members enjoyed re-freshments provided by Sally Peltz and Yvonne Church.

M. Jeanne Finske, Secretary

DISPLAY ORGANIZER NEEDED

If you are able to help organize cases and displays for the club's Labor Day show, please let Margaret Heinek know. This person would gather information about the number and size of the displays that members bring in, to make sure we order plenty of tables to hold them. Contact Margaret by phone at 574-654-3673 or by e-mail at marheinek@aol.com. This job does not take a lot of time, but it needs to be done.

PROPOSED CHANGES TO OUR BYLAWS

The current bylaws (printed after this notice) require that all proposed changes be published in *The Rockfinder*, so that members will know what is happening. The changes listed below have been proposed. Please review them, since we will discuss them and vote on them at the April meeting.

NOTE: These changes were all acceptable to the Bylaws Committee, and the committee urges that you vote for them. If you want to propose more changes after reading the bylaws, you may do so at the next meeting. We may or may not have time to discuss them at the April meeting, but they will have to be published in *The Rockfinder* before being voted on.

The following phrases will either replace phrases in the current bylaws or will be inserted as new text. Check the current bylaws and compare that text with these proposed changes.

ARTICLE I: 1 "...16 years of age or older..."

I: 2 "...who shall have an adult sponsor acceptable to the society..."

I: 3 "...a quorum of the members of the society..." "...or related..."

I: 4 replace "...one or two parents/guardians..." with "parents/guardians each having..."

I: 6 "shall receive the society's newsletter, *The Rockfinder*."

ARTICLE II: 3a "\$15.00 per year..."

II: 3d "\$20.00 per year"

ARTICLE III: 2 "...and shall appoint a nominating committee for the election of officers."

ARTICLE IV: 2 delete "maintain" and add "schedule"

ARTICLE V: 4 ...of October. "The nominating committee shall present its slate of officers, and nominations shall be accepted from the floor. Election of officers shall be held at the annual meeting in December..."

V: 6 For discussion—There is a proposal to stipulate the *minimum* number of meetings and/or activities a member must participate in to qualify for subsidized travel to an annual field trip (for example, a member must help out at X number of society functions to be eligible for the free bus trip).

It has also been proposed that Tom Noe (a professional editor) go through the bylaws and fix inconsistencies, bad phrasing and punctuation, *without changing the meaning*. This is a "change" to the bylaws and it needs to be voted on, but the committee did not think the specific changes had to be published ahead of time.

BYLAWS OF THE MICHIANA ROCK AND GEM SOCIETY, INC.

Now called The Michiana Gem and Mineral Society, Inc.

As amended in September, 1982

ARTICLE I – MEMBERSHIP

1. **REGULAR MEMBERS.** A regular member shall be any individual over 16 years of age, who shall subscribe to the purposes of the club, its bylaws and regulations and who shall annually pay dues fixed by the bylaws, and shall have one vote at each regular meeting.

2. **JUNIOR MEMBERS.** A junior member shall be an individual under 16 years of age, who shall subscribe to the purposes of the club, its bylaws and regulations and who shall annually pay dues fixed by the bylaws. **A junior member will not have a vote.**

3. **HONORARY MEMBERS.** Honorary members shall be elected by the majority vote of the members of the club, and honorary members shall be active in earth science, lapidary arts and related subjects.

4. **FAMILY MEMBERSHIPS.** A family membership shall include husband, wife and all children over 4 years old, and under 16 years of age, who shall subscribe to the purposes of the club, its bylaws and regulations and who shall annually pay dues as fixed in the bylaws. With husband and wife each having one vote at each regular meeting.

5. **REGULAR MEMBERS ONLY** shall hold office or vote at regular meetings.

6. **SUBSCRIBING MEMBERSHIP** shall be a nonparticipating member who shall receive *THE ROCKFINDER*.

ARTICLE II – DUES

1. Application accepted to membership in the last five months of the fiscal year shall pay one-half the annual dues (August through December).
2. Dues are payable upon acceptance of membership.
3. The annual dues of the club shall be payable annually in advance of the date of the annual meeting as per the following schedule
 - a. Single Membership-----\$10.00 per year
 - b. Junior Membership----- \$1.00 per year (\$7.50 with ROCKFINDER)
 - c. Honorary Membership-----shall pay no dues
 - d. Family Membership-----\$15.00 per year
 - e. Subscribing Membership----\$ 7.50 per year

ARTICLE III-ELECTIVE OFFICERS: DUTIES

1. The duties of the **President** shall be to preside over all regular meetings, to preside over special business meetings, to appoint all committee chairmen, and to be a member of all committees ex-officio. The President shall have the responsibility of replacing any member of the Board of Directors who fails, through negligence, to serve in his/her elected office. Resignation or death automatically calls for the appointment of an interim replacement.
2. The duties of the **Vice-President** shall be to officiate in the absence of the President, and conduct the annual elections.
3. The duties of the **Secretary** of the club shall be to keep an accurate record of the proceedings of all meetings of the club and the meetings of the Board of Directors. To keep an accurate file of the membership.

4. The duties of the **Treasurer** shall be to receive all dues and to make all disbursements. He/she shall keep a full and accurate account of such transactions and render a report at each regular meeting and make a financial report to the Board of Directors or to the President when requested. It shall be the duty of the treasurer to furnish bond immediately upon taking office in an amount to approximate the amount of the current assets of the club.
5. **LIAISON OFFICER** shall act as Midwest Federation liaison representative. His duties shall be to receive all reports and communications from the Federation Secretary and transmit them to the proper officers of the club. He/she shall also furnish promptly to the Federation Secretary a list of all officer and their addresses and other pertinent information as shall be required.

ARTICLE IV – PERMANENT COMMITTEES: DUTIES

1. The duties of the **Board of Directors** shall be to act for the membership in matters delegated by the membership. The members of the Board of Directors shall include elected officers of the club and the immediate past president.
2. The duties of the **Education Committee** shall be to organize and maintain programs of general interest to the club.
3. The duties of the **Membership and Publicity Committee** shall consist of maintaining and increasing the membership of the organization. It shall develop and maintain a directory of members and prospective members which the editor of the bulletin may use for a mailing list. It shall also nominate persons for honorary membership. It shall include the preparation of bulletins and all articles published by the organization under the organization's name. In the interest of economy, publications will be limited to paid-up members, organizations that have been approved by a vote of the Board of Directors, and to prospective members that have been approved by the membership committee.
4. Committee chairmen shall select their committees from the regular members of the organization.
5. The duties of the **Historian Custodian** shall be to keep records of all historical data pertaining to the club, to keep a record of all acquisitions such as books, minerals and equipment and to keep a file of geological and mineralogical locations of interest with all facts such as locality, type of geologic interest, and whether public or private property.
6. **Hospitality Chairman** shall select a committee to serve as hosts and hostesses at each meeting.

ARTICLE V- MEETINGS

1. The regular meeting of the club shall be held at a place designated by the Board of Directors the fourth Sunday of each month excluding July and August. June may be a field trip, December will be our Christmas Party
2. Special Executive Board meetings will be called by the club or the President. Due notice of a special meeting must be given to the Board of Directors and such business may be transacted as is required between regular meeting of the club.
3. Notice of special meetings called by the club or President shall specify the principal items of business to be considered on the agenda of the meeting.
4. The nomination of elective officers shall be held at the regular meeting on the fourth Sunday of October, election of officers shall be held at the regular meeting on the fourth Sunday of November. Elected officers to take office in January.
5. The annual meeting of the club shall be held on a Sunday in December as designated by the Board of Directors.
6. Field trips shall be sponsored at such times as the proper committees of the club shall direct. Notice of field trips shall be given to members by the secretary of the club or publicity committee.

7. The order of business at regular meetings or special meetings, when so ordered by the presiding officer, shall be:
 - a) Call to order
 - b) Reading of the minutes of previous meeting
 - c) Treasurer's report
 - d) Report of permanent committees
 - e) Report of the special committees
 - f) Communications
 - g) Unfinished business
 - h) Open forum
 - i) Program
 - j) Adjournment
8. All parliamentary procedures shall be in accord with Robert's Rules of Order. A quorum of the club shall consist of a minimum of 15 regular members.

ARTICLE VI – AMENDMENTS

These bylaws may be altered or amended at any meeting of the club by a two-thirds vote of the members present, provided that such two-thirds shall be at least 15 affirmative votes. Two weeks' notice of such alteration or amendment must be given in writing via the club publication



“IT’S BASALT! IT’S IGNEOUS!”

By Sam Shapiro

I read somewhere the other day that the members of my generation, who can remember the Great Depression, Pearl Harbor and Hiroshima, are passing away at the rate of 1,000 a day. In a recent issue of the *New York Times*, I saw the obituary of one of them, Dr. Clifford Frondel, who taught mineralogy at Harvard from 1939 to 1977, and was a field marshal in the army of rockhounds in which we are all privates. Professor Frondel was also curator of the Harvard Mineralogical Museum, where I met him casually when I was an instructor at Brandeis. He took a Brandeis group around the museum, and gave a lecture on some of the 48 minerals he had discovered; two of them, Cliffordite and Frondelite, were named after him.

The great moment in Dr. Frondel's career took place on July 25, 1969, in Houston. He was present when a box with 48 pounds of rocks brought back by the Apollo 11 astronauts from the Sea of

Tranquillity was opened. At the time, nobody knew what to expect. However, after examining them, Dr. Frondel exclaimed, "It's basalt! It's igneous!" The rocks were just like the ones in our collections, formed by geological events on earth with which we are familiar.

Later that year, after examining some dust samples from Apollo 12, Dr. Frondel was put into quarantine for two weeks. Nobody was taking any chances. There might have been alien life on the moon, and if it leaked into the environment the consequences might have been devastating.

In his long career, Dr. Frondel developed a method for detecting kidney stones by X-ray technology and created spectrochemical methods to detect art forgeries. He was the third American geologist to be accepted by Italy's national academy of science, and had a worldwide reputation. "He was a giant in 20th-century mineralogy," said Dr. Carl Francis, who succeeded Dr. Frondel as curator of the Mineralogical Museum.

A Geologist in the Badlands

By Tom Noe

Sheep forage at the rim
of this unfinished mesa.
In a slight updraft,
bending over the lip,
pale grass wiggles bare-rooted.
The edges are eating the center.
Wind, water, hooves, the touch of a bird's talon—
Everything adds to the loss.
The land will become fully horizoned.
Stare and look away:
Ghosts of the mesa are there still.

The rifted mesas bear veins,
Like a diagram sketched on the wind
and flattened on a bedding plane,
erasing the height.
Sitting on this balcony,
wrenching unrecorded history from the signs
(a color, a crack, a tiny yellow sparkle or crystal),
is like finding a tombstone with your own name.
Your tongue tells of the disintegration,
Which arises not like a bubble surfaces
but like a piece of candy melts into a pool.
I sit and look
and then stand and look.
Nothing comes on the wind, and I grab it.

CORUNDUM

By Janice Erickson., G.G. (GIA)

Corundum, from the Hindu word "kurand" or "kuruvinda," is the family name for both rubies and sapphires. The word "ruby" comes from the Latin word "ruber," meaning red. The word "sapphire" comes from the Greek word "sappheiros," denoting lapis lazuli. Similar words are found in Persian and Hebrew, possibly derived from Sanskrit. It wasn't until 1802 that rubies, sapphires and fancy sapphires were formally united under the same mineral species heading of "corundum." Mineralogist Count de Bournon published a paper that described the analogies of these stones and gave them the general name of corundum. Red corundum stones are known

as rubies, although some give the ruby name to what others may call pink sapphires. The word "sapphire" denotes the blue sapphire. If you wish to describe a sapphire of any color other than blue (i.e., a fancy sapphire), include the color of the stone as well (for example, yellow sapphire, white sapphire, green sapphire).

Corundum is a mineral made up of aluminum and oxygen (aluminum oxide) and pure stones would be perfectly colorless. The cause of the red color is chromic oxide as an isomorphous replacement of some of the aluminum atoms. Sometimes iron and titanium are present as color modifiers. Blue sapphires are colored by iron and titanium as replacements for some of the aluminum atoms. Corundum which occurs with rutile and hematite may result in asterisms in highly domed cabs, resulting in a 6 (rutile) or 12 (rutile and hematite) rayed star. Chatoyancy in corundum is very rare, but color-change sapphires are available.

Corundum crystallizes in a hexagonal or trigonal system. The hardness is 9 on the Mohs scale, just below diamond with a hardness of 10. The specific gravity is about 4.00. Corundum is doubly refractive and shows dichroism: ruby is purplish red and orangey red; blue sapphire is violetish blue and greenish blue; other colors of sapphires have their own dichroic colors. Because of the strong dichroism, cutters must orient the stone carefully before faceting or capping to have the most desirable color appear face-up in the finished stone. Stones may be transparent to opaque.

One of the most valuable sapphires is the Padparadscha sapphire. This is a light to medium toned, orange-pink to pinkish orange found in Sri Lanka. You may see orange stones defined as a Padparadscha, but the pink color must be present to be correctly called Padparadscha. Yashmir sapphires are often regarded as the finest quality blue sapphires, with other fine sapphires coming from Myanmar, Sri Lanka, Thailand and Australia. Of course, quality corundum stones may be found in other locations around the world.

Corundum stones have been valued since ancient times and have often been associated with royalty in coronation rings and engagement rings as well. There is much folklore and mythology associated with these stones.

PLATINUM, THE MYSTERY METAL

By Sam Maselli

Personally, platinum appeared early in my life, when I worked in the research lab of a chemical company. The platinum was in the form of thin foil containers the size of a hockey puck and I was told then (1955) they were worth 300 dollars each. Most things were five times cheaper then, but since the little dishes resisted destruction like Superman they were worth the huge price. Later I learned that ordinary people used platinum for jewelry and a spark plug tipped with platinum lasted longer than you can believe.

My ignorance was nothing compared to the 16th-century Spanish who picked it out of their pans as they worked the streams of Colombia for gold. They called it "platina," which means "little silver," and thought it would ripen into gold if left in the river. The problem these Spaniards had was that the metal would not melt (only later it was found that the addition of arsenic would lower the melting point). Although pure platinum was difficult to smelt, it was a metal that would form alloys with other metals, including gold.

Platinum is found with other metals but even the purest ores have five other metals (often called the platinum group) palladium, osmium, ruthenium, iridium and rhodium. The most used metals of the platinum family are platinum and palladium, but the other metals have interesting uses. Platinum alloyed with iridium has a higher melting point and is more resistant to acid; platinum + cobalt has high magnetic qualities. The *National Geographic Magazine* November, 1983, issue has an excellent article by Gordon Young, from which much of the above information was learned, but the *Lapidary Journal*, August, 2001, issue and the article "Platinum," by Liz Kuhns, page 24, really sparked my interest. Her article was a personal account of a tour of the Rustenburg platinum mine, which produces a large amount of the world's platinum. She is a jewelry designer working out of Egg Harbor, Wisconsin, but could easily write for a living.

The deposits of platinum-bearing ore in the U.S. are nonproducing. The Sudbury Basin produces platinum as a byproduct. Mines in Siberia are coming

on line, but current conditions in the former Soviet Union are likely to make production difficult. The mines in South Africa, like the one that Ms. Kuhns visited in the Bushveldt Complex, where platinum is the primary metal being mined, are the world's big producers. The price of platinum has in the past fluctuated greatly but new high tech uses and the use of catalytic converters containing platinum in automobiles will keep the price high. If the price rises high enough, perhaps new mines may open and old deposits may be worked commercially.

Platinum in old jewelry should not be overlooked as a source and would qualify for an upgrade of stones in the setting, but new work will be expensive. Platinum alloys might be more practical and would certainly be a topic that I would like to read about. I would like to know how to test jewelry for platinum content, as it was a popular metal in Art Deco design. I would hate to be like the 16th-century Spaniards who threw the platinum back into the river simply because I could not recognize it.

The Tully (Sept./Oct., 2001)

