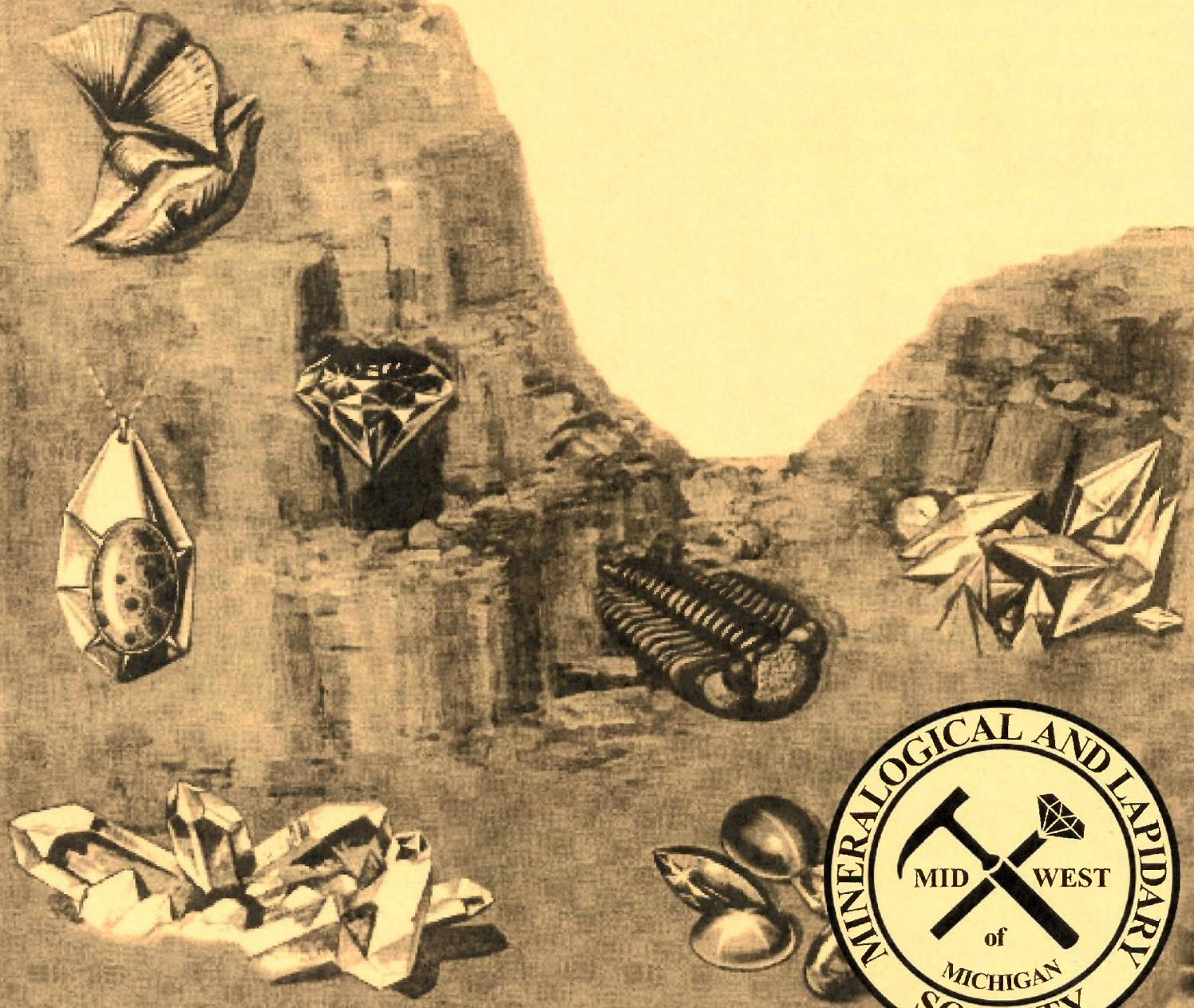


# THE ROCKPILE

Official Publication of the Midwest Mineralogical and Lapidary Society

AFFILIATED WITH • MIDWEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES • AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

April 2024



SOUTHEASTERN - MICHIGAN

---

## Midwest Mineralogical & Lapidary Society

### 2023 OFFICERS

**President:** Mike Bomba (313) 381-8455  
**Vice President:** Dan Gumina (313) 766-8944  
**Recording Secretary:** Andrea Rinker (734) 755-2570  
**Treasurer:** Doris Snyder (313) 291-2133  
**Corresponding Secretary:** Andrea Rinker (734) 755-2570  
**Liaison Officer:** Peter Kuzara (734) 675-5237

### COMMITTEE CHAIRPERSONS

**Club Services:** Ana Ferguson  
**Door Prizes:** Mike Bomba  
**AFMS Scholarship:** Pat Rutkowski  
**Field Trips -** Mike Bomba/Gary Slominski  
**Education:** Dave Hendershot  
**Historian:** Tom Morris  
**Michigan Material:** Tom Morris  
**Membership:** Ana Ferguson  
**MMLS Scholarship:** Velma Bradley  
**Program Coordinator:** Mike Bomba  
**Property – Storage:** Gary Slominski  
**Sunshine Reporter:** Velma Bradley  
**Refreshments:** Gary Slominski  
**Web Site:** Stacey Harper

### ACTIVITIES

**2023 Banquet:** Andrea Rinker  
**2023 Club Picnic:** Stacey Harper  
**2023 Swap:** Lou and Cindy Talley  
**2023 Super Swap:** Bill Barr  
**2023 Auction:** Dwayne Ferguson

**The Rockpile Staff :** Editor Peter Kuzara,  
email: [Kuzara1126@gmail.com](mailto:Kuzara1126@gmail.com) 734-675-5237

**MMLS website –** [www.mmls.us](http://www.mmls.us)  
**Email -** [rockhounds@mmls.us](mailto:rockhounds@mmls.us)

**General Club meetings are held at 7:30 p.m. on every third Tuesday of the month (except July and August) at the Democratic Club of Taylor, 23400 Wick Rd., Taylor, MI 48180**

**GUESTS ARE ALWAYS WELCOME**

### STUDY GROUPS

**Lapidary:** Workshop at Frank Konieczki's  
**Bead Study:** Diane Kuzara  
**Mineralogy:** Bill Barr at David Esch's

### PAST PRESIDENTS

Robert Ellison (interim) 1956  
Louis Cox 1957  
Robert Heldenbrand 1958-59  
Ralph Gamble 1959-60  
Fred Miller 1960-61  
Bert Smart 1961-62  
Leo Nieman 1963  
Nicholas Rothenthaler 1964-65  
Robert Fedoruk 1966-67  
John Good 1968-69  
Cecilia Duluk 1970  
Stanley Franczak 1971-72  
E. Donald Stinnett 1973-74  
Ralph Goniea 1975-76  
Norman Hanschu 1977-78  
Thomas Gibbs 1979-80  
Harry Nagy 1981-82  
Elspeth Gibbs 1983-84  
Loretta Franczak 1985-86  
Roland Snyder 1987-88  
Jay Ross 1989-90  
Tom Morris Jr. 1991-92  
Diane Kuzara 1993-94  
Bill Orban 1995-96  
Glenn Swain 1997-98  
Bill Peach 1999-2000  
Diane Kuzara 2001-02  
Cecilia Duluk 2003-04  
Russ Ranker 2005-06  
Dick DePodesta 2007-08  
Rich Williams 2009-10  
Leonard Swisher 2011-12  
Mike Bomba 2013 - 14  
Diane Kuzara 2015 - 16  
Dan Gumina 2017 - 18  
Diane Kuzara 2019 -2020  
Dan Gumina 2021 - 2022



**From The President's Desk:** Hey there , hope hope everyone is doing well. I'm hoping to see everyone at the Swap and come to the General meeting this month for a presentation on scrimshaw by Don Baker. Thank you Don for sharing your knowledge. Hopefully we will have an early spring so we can all get out and collect some rocks. Happy Easter.

**Mike**

**April Program:** Will be a demonstration on Scrimshaw by Don Baker.

### SAD NEWS

We received news that two of our former members passed away both were club presidents.

Bill Orban President 1995 and 1996

Leonard Swisher President 2011 and 2012

### Dates to Remember!!

**April 1<sup>st</sup>, 15<sup>th</sup> & 17<sup>th</sup> Lapidary Work Shop** 2009 W. Michigan Ave., Ypsilanti, Mi. 7pm. To 10pm. Space is limited so please call Frank Konieczki 734-323-2218 before attending.

**April 4<sup>th</sup> & 18<sup>th</sup> Bead Study group** will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm. Diane Kuzara 734-675-5237.

**April 16<sup>th</sup> Board Meeting** will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 6:30 pm.

**April 16<sup>th</sup> General Meeting** will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 7:30 pm.

**April 18<sup>th</sup> Mineral Study Group** will meet at the West Side United Methodist Church, 900 S. Seventh St., Ann Arbor at 7:30 PM. Contact for the group is Frank Konieczki 734-323-2218.

**May 2<sup>nd</sup> & 16<sup>th</sup> Bead Study group** will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm. Diane Kuzara 734-675-5237.

**May 6<sup>th</sup>, 20<sup>th</sup> & 22<sup>nd</sup> Lapidary Work Shop** 2009 W. Michigan Ave., Ypsilanti, Mi. 7pm. To 10pm. Space is limited so please call Frank Konieczki 734-323-2218 before attending.

**May 16<sup>th</sup> Mineral Study Group** will meet at the West Side United Methodist Church, 900 S. Seventh St., Ann Arbor at 7:30 PM. Contact for the group is Frank Konieczki 734-323-2218.

**May 21<sup>st</sup> Board Meeting** will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 6:30 pm.

**May 21<sup>st</sup> General Meeting** will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 7:30 pm.

### Sister Club Events

**April 4-6—WYOMING, MICHIGAN:** Annual show; Indian Mounds Rock & Mineral Club; Rogers Plaza Town Center, 972 28th Street Southwest ; Thu. 9:30-9, Fri. 9:30-9, Sat. 9:30-7; Contact Kreigh Tomaszewski, (616) 243-5851; Email: kreigh@gmail.com; Website: indianmoundsrockclub.com/

**April 20-21—TROY, OHIO:** Annual show; Miami County Gem & Mineral Club; Miami County Fairgrounds, 650 N. Co Rd 25A; Sat. 10-6, Sun. 10-4; Contact Dewey Buck, (937) 308-3012; Email: deweybuck12@gmail.com; Website: [www.mcgamc.org](http://www.mcgamc.org)

**April 27-28—CUYAHOGA FALLS, OHIO:** Show and sale; Akron Mineral Society & Summit Lapidary Club; Emidio & Sons Expo Center, 48 East Bath Road; Sat. 10-6, Sun. 10-5; Contact Evelyn Tryon, (330) 673-9664; Email: Gemboree76@gmail.com; Website: [www.summitlapidaryclub.com/gemboree](http://www.summitlapidaryclub.com/gemboree)

**April 27 & 28 North West Ohio Rockhound Club Annual Show**

Where St James Lutheran Church, 4727 W Sylvania Ave, Toledo, OH 43623, Information  
Contact: Suzanne Shimatzki, (419) 376-2650;  
[sshimatzki@gmail.com](mailto:sshimatzki@gmail.com)

**May 3-5—KALAMAZOO, MICHIGAN:** Annual show; Kalamazoo Geological and Mineral Society; Kalamazoo County Expo Center, 2900 Lake St; Fri. 2-8, Sat. 10-6, Sun. 10-5; contact Dave Haas, (269) 370-3656; Email: [stonehouserock@cs.com](mailto:stonehouserock@cs.com)

**May 4-5—SHARONVILLE, OHIO:** Annual show; Cincinnati Mineral Society and the Cincinnati Dry Dredgers; Sharonville Convention Center, Geofair, 11355 Chester Road contact Terry Huizing; Email: [tehuizing@fuse.net](mailto:tehuizing@fuse.net); Website: [www.geofair.com](http://www.geofair.com)

**May 31 - June 1 - 2 State Line Gem & Mineral Society Annual Show**  
Where Fulton County Fairgrounds, 8514 OH-108, Wauseon, OH 43567, USA ([map](#))  
Contact: Sherman Kardatzke, (517) 673-5487;  
[sakardatzke@gmail.com](mailto:sakardatzke@gmail.com) [www.statelinegms.com](http://www.statelinegms.com)

Michigan Mineral Beginning With The Letter D : Diopside  $\text{MgCaSi}_2\text{O}_6$



Diopside crystal from De Kalb, New York (size: 4.3 x 3.3 x 1.9 cm)

Diopside is a monoclinic pyroxene mineral with composition  $\text{MgCaSi}_2\text{O}_6$ . It forms complete solid solution series with hedenbergite ( $\text{FeCaSi}_2\text{O}_6$ ) and augite, and partial solid solutions with orthopyroxene and pigeonite. It forms variably colored, but typically dull green crystals in the monoclinic prismatic class.

Color: Light to dark green, maybe blue, Brown, colorless, white to snow white, gray, pale violet.  
Hardness: 5.5 - 6.5 on the mohs scale  
Occurrence: Dickinson, Houghton, Keweenaw and Marquette counties.  
From the internet Wikipedia

**JASPER**



Royal Imperial Jasper

The discovery of Imperial Jasper in the 1990s marked a significant milestone in the realm of fine jaspers, as it joined the ranks of the five highly esteemed jaspers renowned for their exceptional and captivating appearance. These deposits of Imperial Jasper can be found approximately 50 miles northwest of

Guadalajara, Mexico, situated on the east side of a densely vegetated, steep canyon.  
From the internet

### **Do Diamonds Really Come Really Come From Coal?**

**No**, diamonds do not actually come from coal. While it's a common misconception, the formation of diamonds and coal involves different processes and conditions.

Here's a detailed breakdown of why it's not true: **Depth and Formation Environments** Coal: Coal is a sedimentary rock formed from the compressed remains of ancient plants buried near the Earth's surface. The pressure comes from the weight of layers of sediment stacked on top, not the kind of intense pressure needed for diamonds.

**Diamonds:** Diamonds, on the other hand, form deep within the Earth's mantle, around 150-200 kilometers (90-125 miles) below the surface. This immense depth creates the extreme pressure (about 50,000 times atmospheric pressure) required for diamond formation.

**Time** Most diamonds are dated to be billions of years old, far predating the existence of land plants like trees, which are the primary source material for coal. Coal formation is a much more recent geological phenomenon.

**Compositional Differences** Coal contains various impurities like hydrogen, oxygen, nitrogen, and sulfur, along with carbon. These impurities prevent the pure carbon crystal structure required for a diamond. Diamonds, in contrast, are nearly pure carbon (around 99.95%) with a highly ordered atomic arrangement.

**Where Do Diamonds Really Come From?**  
The most likely scenario for diamond formation involves carbon sources deep within the Earth's mantle

**The Journey to the Surface** Once formed deep within the mantle, diamonds need a way to travel the vast distance to the Earth's surface. This incredible journey is facilitated by: **Kimberlite Pipes** Kimberlite pipes are carrot-shaped geological formations that are the primary source of mined diamonds today. They

are vertical tubes of igneous rock that breach the Earth's crust, originating from deep within the mantle. Kimberlite itself is a rare, ultramafic volcanic rock rich in magnesium and iron. Violent volcanic eruptions called kimberlite eruptions can carry diamonds upwards in a fast, pressurized flow. Unfortunately, not all kimberlite pipes contain diamonds, and even those that do may have very few. The likelihood of finding diamonds depends on whether the kimberlite pipe actually sampled a diamond-bearing region of the mantle during its upwards journey.

**Conclusion** In summary, diamonds and coal share the element of carbon, but they have distinct geological origins and form under completely different conditions. Diamonds come from the Earth's mantle through a process involving high pressure and high temperature, while coal forms from the compression of plant material in swampy environments.

From the internet GeologyIN

### **Mammoths Are Fascinating Long After Their Extinction**

By Jim Brace-Thompson, AFMS Regional Vice President

From the May, 2023 A.F.M.S. Newsletter

Other than dinosaurs and Megalodon sharks, few prehistoric critters hold attention so much as the great beasts of the Ice Ages: cave bears, saber-tooth cats, ground sloths, and mammoths. Our ancestors painted their images in the caves of Europe. Mammoths roamed the earth starting five million years ago. Examining cells from mammoths frozen in Arctic permafrost, scientists have determined they shared 98.5% of their genes with today's African elephants.

It's believed elephants migrated out of Africa and evolved into two family trees. One led to today's Asian elephants; the other, to mammoths. Mammoths tromped their way throughout the Northern Hemisphere. In some states, their bones are so common that they've been named the state fossil, as in Alaska, Nebraska, and Washington. Their bones have been found in my state of California, including the locally famous Moorpark Mammoth (an example

of the Southern Mammoth, *Mammuthus meridionalis*) and Columbian mammoths (*Mammuthus columbi*) excavated from the tar pits of Rancho La Brea.

On the Channel Islands, a unique group of pygmy mammoths, *Mammuthus exilis*, trumpeted just offshore from my hometown of Ventura. It's believed this population became stranded and underwent "dwarfism," or shrinking over the course of generations, as often happens to large animals that find themselves on small islands with limited resources. Most mammoths went extinct 10,000 years ago. A remnant population on Wrangel Island in the East Siberian Sea held on until 3,500 years ago – or the time of the Egyptian pharaohs!

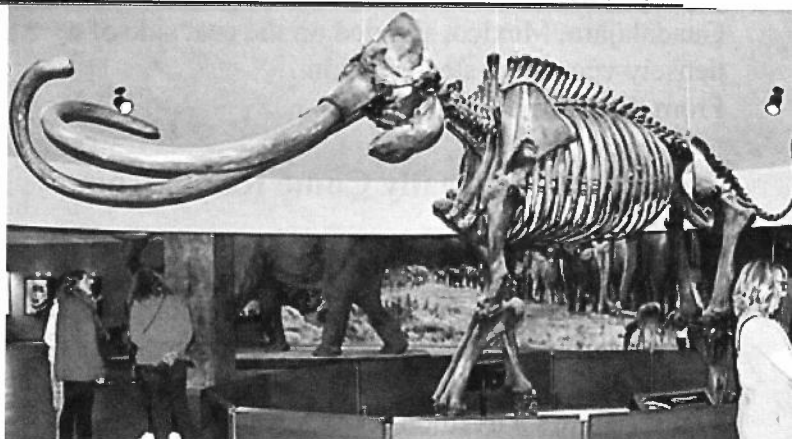
What finally did them in? Did cavemen hunt them to extinction? Were they wiped out by some deadly disease? Or did they simply fail to adapt to changing climate? And is it possible that someday, using cells from mammoths frozen in the Siberian permafrost, we'll be able to clone and raise the mighty mammoth to walk and amaze us in a "Pleistocene Park"? The answers are yet to be written, and the questions invite you to join in the hunt.

The Imperial Mammoth was truly huge. Photo by Jim Brace- Thompson, who further noted that at the La Brea Tar Pits and Museum in Los Angeles, where this photo was taken, "You can still see tar bubbling up in spots on the grounds around the museum!" The Channel Islands Pygmy Mammoth at the Santa Barbara Museum of Natural History. Photo by Jim Brace-Thompson. Source: MWF News, Dec 2023.

#### ***For more facts about mammoths:***

<https://en.wikipedia.org/wiki/Mammoth>  
<https://www.livescience.com/56708-mastodon-facts.html>  
<https://earthathome.org/quick-faqs/mammoth-vs-mastodon/>  
<https://www.nps.gov/articles/mammoth-or-mastodon.htm>

***They are really fascinating!***



*The Imperial Mammoth was truly huge. Photo by Jim Brace- Thompson, who*

Source: MWF News, Dec 2023.

## **For April Fools – How to Determine if Something is Fake Gold!**

by Brad Zylman

Although the exact origin of April Fools' Day is uncertain, playing springtime pranks is a nearly universal custom, adopted around the globe and throughout history — perhaps, as some have suggested, beginning with the Roman festival of Hilaria, which was celebrated by dressing up in disguise. For this article, we will focus on the many ways that cheats have tried to fool you with fake gold that looks like real gold. There are many ways.

You can always spot a fake if you have the right tools at your disposal. There are some incredibly good fakes (coins, ingots, jewelry), but they all will fail at least one test. If a piece of metal is not gold, it will not have the correct chemical, physical, and electromagnetic properties. The best fakes can get two of these right, but they can never get all three.

There are a variety of different fakes that depend on what kind of item is in question. For bullion/coins, the item needs to pass four tests:

- 1. Size**
- 2. Weight**
- 3. Chemical**
- 4. Electromagnetic**

To pass the first two tests, the metal would need the same density as gold (or at least very close).



Gold plated fake gold bar

Most fakes fail here because they use brass, nickel, etc., which are less dense than gold. If the metal is less dense than gold, the ingot/coin will need to be bigger/thicker than it is

supposed to be to weigh the correct amount. On the other hand, if they replicate the fake coin/ingot to be the right size, then the weight will be incorrect. Often, they make very thick gold bars, they weigh correctly, and it is hard to see that it is too thick while in the packaging. The packaging hides what is really going on. So, what follows are some common gold substitutes that might be designed to fool you.

**#1) Tungsten Carbide** – this has a similar density to Gold, so you could make something out of tungsten carbide that is both the correct weight and size. (Ignoring that tungsten carbide does not look like gold.)

If the inside is tungsten carbide and coated in a thick outer cover of gold, it will pass the first three tests. It will also pass an XRF (X-Ray Florescence) analysis if the outer gold layer is thick enough... If it passes those tests, you are dealing with a pretty good fake. Someone spent some time trying to make a fake that will fool anyone but an expert at this point. Good fakes can pass some of these tests but not all of them.

The next test is chemical. It is not ideal to do an acid test on a gold ingot or coin, but sometimes you must. It is implausible that there is an alloy that is the same density as gold and has the same chemical reaction to nitric acid... so it will usually fail here if it's not gold. A good fake can still beat this, though...

But, even a gold ingot/coin with a tungsten carbide core will not have the same electromagnetic properties as pure gold. The electrical conductance and the way a magnetic field propagates through the material will have a different signature. If you still are unsure about an ingot, then sometimes you have to saw it in half to make sure it's the same metal all the way through. If it passed all these tests and looks like gold, then it probably is. If it's fake, somebody spent a lot of money to make a fake that hits all the properties of gold, and you won't know anyway.

**#2) Fool's Gold** – Iron Pyrite has tricked many prospectors and casual rock hunts, so much so that it earned its name. "Fool's Gold" is technically known as pyrite or iron sulfide ( $\text{FeS}_2$ ) and is one of the most

common sulfide minerals. Pyrite is found in a wide variety of geological settings, from igneous, sedimentary, and metamorphic rock to hydrothermal mineral deposits, as well as in coal beds and as a replacement mineral in fossils. It is often found with quartz, just like gold.

The most common mineral mistaken for gold is pyrite. Pyrite is called "Fool's Gold" because it resembles gold to the untrained eye. The United States Geological Survey (USGS) explains that "Fool's Gold can be one of three minerals.

Chalcopyrite can also appear gold-like, and weathered mica can mimic gold as well. Compared to actual gold, these minerals will flake, powder, or crumble when poked with a metal point, whereas gold will gouge or indent like soft lead. In addition, actual gold will leave a golden yellow streak when scraped on a piece of unglazed porcelain. Pyrite and chalcopyrite will leave a dark green to black streak, and the common micas will leave a white streak."

Pyrite is so named from the Greek word for fire (pyr) because it can create sparks for starting a fire when struck against metal or stone.

**#3) Brass Alloys** – Brass often looks like gold or gold metal, but in reality, brass can be many different mixes of metals, and its uses reach far back into antiquity. Brass is traditionally an alloy of copper and zinc, while bronze is an alloy of copper and tin. However, there are so many alloys in use that brass and bronzes can be somewhat fluid in composition, being known as brass-bronzes and bronze-brass containing zinc, tin, nickel, aluminum, silicon, and even titanium. Here are a few examples that can fool a layperson.

**Nordic Gold** – A gold-colored copper alloy from which many coins are made. It has been used for several coins in many currencies, most notably in euro 50, 20, and 10 cents, in the Swedish 5 and 10 kronor coins (for which it was originally developed and introduced in 1991), as well as the Polish 2 złote commemorative coins. Its composition is 89% copper, 5% aluminum, 5% zinc, and 1% tin.

Being a copper alloy, it contains no gold. Its color and density are unlike pure gold. It is non-allergenic; resists abrasion) and is resistant to tarnishing. It has been studied for its antimicrobial hospital applications, too. Many copper alloys are antimicrobial. Mariann Sundberg developed Nordic Gold while she worked for the Finnish metal company Outokumpu. The European Central Bank says that the alloy is "difficult to melt and used

exclusively for coins."

**Pinchbeck** – a form of brass, an alloy of copper and zinc mixed in proportions to closely resemble gold in appearance. It was invented in the early 18th century by Christopher Pinchbeck (died 1732), a London clock and watchmaker. Since gold was only sold in 18-carat quality at that time, the development of Pinchbeck allowed ordinary people to buy gold 'effect' jewelry on a budget. The inventor allegedly made pinchbeck jewelry clearly labeled as such. Christopher Pinchbeck and his descendants created the original Pinchbeck until the 1830s. Later, dishonest jewelers passed Pinchbeck off as gold; over the years, the name came to mean a cheap and tawdry imitation of gold. Today, depending on the dealer, "Pinchbeck" can mean original Pinchbeck or any gilt metal. Pinchbeck fell out of use in the second half of the 19th century, being replaced by low-carat gold, which had been legalized in 1854. Pinchbeck is typically composed of copper and zinc in ratios of 89% copper to 11% zinc; or 93% copper to 7% zinc. It closely resembles the ancient alloy called Abyssinian gold.

**Panchaloha**, also called Pañcadhātu (which means 'five metals'), is a term for traditional five metal alloys of sacred significance used for making Hindu temple statues and jewelry. The composition is laid down in the Shilpa shastras, a collection of ancient texts that describe arts, crafts and their design rules, principles, and standards. Panchaloha is traditionally defined as an alloy of Gold, Silver, Copper, Zinc, and Iron, but it is about 90% copper, making it a brass. Since it has a religious significance and looks brassy gold in color, it is sometimes called Hindu gold.

Panchaloha, also called Pañcadhātu (which means 'five metals'), is a term for traditional five metal alloys of sacred significance used for making Hindu temple statues and jewelry. The composition is laid down in the Shilpa shastras, a collection of ancient texts that describe arts, crafts and their design rules, principles, and standards. Panchaloha is traditionally defined as an alloy of Gold, Silver, Copper, Zinc, and Iron, but it is about 90% copper, making it a brass. Since it has a religious significance and looks brassy gold in color, it is sometimes called Hindu gold.

For brasses and bronzes to be passed off as gold, you can always try a skin test. This simple test involves holding the piece of gold jewelry between your hands for a couple of minutes. The sweat from your hands will either react with the metal and change the color of your

skin or leave it unaffected. When real gold is in direct contact with your skin, there is no discoloration. If the gold is fake, it will cause your skin to turn black, blue, or green at the contact points.

**#4 Gold Alloys** – Since all the glitters is gold, why not use a "watered down" gold to make something that looks like it's pure gold? This is somewhat the idea behind Tumbaga. It is an alloy composed mainly of gold and copper. It has a significantly lower melting point than gold or copper alone, which is advantageous. It is harder than copper but maintains malleability after being pounded, which is also very beneficial. Tumbaga can be treated with a simple acid, like citric acid, to dissolve copper off the surface. What remains is a shiny layer of nearly pure gold on top of a stiffer, more durable copper-gold alloy sheet. This process is referred to as depletion gilding.

By Law, gold that has been alloyed with copper or any other metal needs to be stamped to show its karat weight or purity so you know what you're buying. This stamp is called a hallmark, and it must be displayed to know that you're buying real gold. Hallmarks show the gold's level of purity and manufacturer to lend greater credibility to a piece's authenticity and to make it easier to identify and verify. Since anybody can engrave any hallmark they choose, this level of identification is not 100% foolproof. Any gold marked less than 10k (41.7% purity) is considered fake.

**Sources:**

[https://en.wikipedia.org/wiki/Nordic\\_Gold](https://en.wikipedia.org/wiki/Nordic_Gold)  
<https://www.britannica.com/science/pyrite>,  
[https://en.wikipedia.org/wiki/Pinchbeck\\_\(alloy\)](https://en.wikipedia.org/wiki/Pinchbeck_(alloy))  
<https://en.wikipedia.org/wiki/Tumbaga>  
<https://en.wikipedia.org/wiki/Panchaloha>  
<https://www.quora.com/Is-there-any-fake-gold-that-can-fool-experts>  
<https://lexiejordanjewelry.com/blogs/posts/how-to-tell-gold-is-real>

From MMS The Conglamcrate 4/23

**HAPPY  
EASTER  
FROM  
THE  
ROCKILE STAFF**



**THE MIDWEST MINERALOGICAL AND LAPIDARY SOCIETY (MMLS)** is an educational non-profit organization founded in 1956. The Society now has more than 100 members and is affiliated with the Midwest Federation of Mineralogical Societies and the American Federation of Mineralogical Societies. Significantly, MMLS has been recognized numerous times by the Midwest and American Federations with first place (gold level) awards in the annual All American Club Awards Program.

**PURPOSE:** The purpose of The MMLS shall be (1) to promote interest in and increase knowledge in the fields of mineralogy, geology, and paleontology, including lapidary and related arts; (2) to publish articles and information pertaining to these fields; (3) to encourage collections and to display specimens in these fields; and (4) to arrange field trips in support of the interests and activities specified.

**GENERAL MEETINGS:** the third Tuesday of each month, September through June, 7:30 p.m. at the Democratic Club of Taylor, 23400 Wick Rd., Taylor, MI 48180 **GUESTS ARE ALWAYS WELCOME.**

**MEMBERSHIP:** Applications for membership can be obtained at any general meeting or from any MMLS member. **DUES:** Entrance fee - \$3.00; annual dues - \$20.00 (adult), \$2.00 (junior) on a year basis. Membership expires each Dec. 31.

### **ANNUAL EVENTS:**

March - Spring Rock Swap and Sale, Banquet      Fall- 2 Day SuperSwap and Sale      November Annual Auction  
Yearly Picnic

**STUDY GROUPS:** Special-interest study groups meet monthly, September through June. Currently the following groups are active: Bead Study, Mineralogy, Wire Study is conducted on individual basis.

**FIELD TRIPS:** Several one day field trips and one longer (one to two weeks) field trips are conducted each year. Mostly, these field trips focus on the collecting of mineral and fossil specimens at quarries, mines, and other known collecting sites in the United States and Canada. Field trips are restricted to MMLS members.

**SCHOLARSHIP FUND:** MMLS has established a scholarship Endowment Fund which provides scholarships to qualified students enrolled in an accredited college or university in southeastern Michigan who have completed at least their junior year and have a major in geology, mineralogy, paleontology or lapidary and related arts.

**SEAMAN MINERAL MUSEUM:** MMLS has designated the A.E. SEAMAN Mineral Museum, Houghton, Michigan, as it's "adoptive" museum, pledging to support it with gifts to the museum's endowment fund and the donation of mineral specimens and services.

### **INTERNET WEB SITES OF INTEREST:**

Midwest Federation:  
[www.amfed.org/mw11index.html](http://www.amfed.org/mw11index.html) American  
Lands Access Association: <http://amlands.org>

American Federation:  
[www.amfed.org](http://www.amfed.org)

### **The Rockhound's 10 Commandments:**

Thou shall not touch thy neighbor's minerals unless he places them in thy hands.

Thou shall not test the strength of crystals by pushing, squeezing or biting.

Thou shall not drop thy neighbor's fossils, for many do not bounce properly.

Thou shall not place thy neighbor's specimens in thine own pocket.

Thou shall not collect at a neighbor's land unless thy neighbor knowst he's there.

Thou shall not argue names of minerals too violently; for sometimes thou couldst be wrong.

Thou shall not climb above thy neighbor's head when on a field trip, lest thou art willing to spend the rest of the day digging him out.

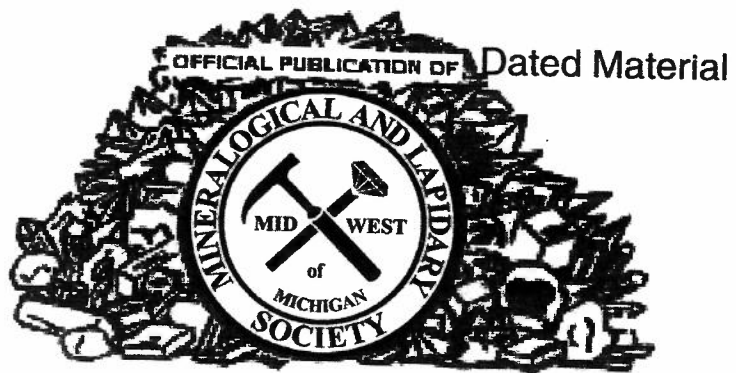
Thou shall protect thine eyes, hands & feet, so that they mayst enjoy many future field trips.

Thou shall not encroach upon thy neighbor's diggin's, lest thy neighbor's hammer be dropped upon thee.

Thou shall not break uncollectable specimens.

Midwest  
Mineralogical and  
Lapidary  
Society of  
Michigan

EDITOR  
20281 THOMAS  
BROWNSTOWN, MI  
48183



*The ROCKPILE*  
Bulletin Editor Contest Awards



■  
1993 – 1st Place (Large Bulletin) AFMS  
1991 – 1st Place (Large Bulletin) MWF  
1990 – 1st Place (New Editor) AFMS  
1990 – 1st Place (New Editor) MWF