



# THE GOLDEN NUGGET

March 2007  
Number 07 - 03



*The Official Voice of the Montgomery, Alabama Gem & Mineral Society*

## March Program

**When:** Thursday, March 8, 7:00 p.m.  
**Where:** Mureal Crump Community Center  
1735 Highland Ave.  
Montgomery, AL  
**What:** Unknown at press time!

## K Refreshments

Mary Lou McHugh will provide the drinks and the Iris McGehee will provide the snacks for the March meeting.

Next month's refreshments will be provided by the David Echols, drinks, and Randy Hirst, snacks.

Please remember to bring paper plates, napkins and cups. Ice is available at the community center.



## Happy Birthday!

Clara Glover – 20<sup>th</sup>

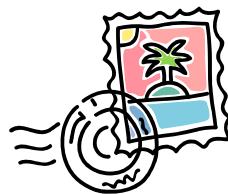
MaryLou McHugh – 13<sup>th</sup>

## Graves Mountain "Rock Swap and Dig"



- 8 am to 6 pm, Friday, April 27, 2007
- 8 am to 6 pm, Saturday, April 28, 2007
- 8 am to 6 pm, Sunday, April 29, 2007
- 8 am to 6 pm, Friday, October 5, 2007
- 8 am to 6 pm, Saturday, October 6, 2007
- 8 am to 6 pm, Sunday, October 7, 2007

(All times are Eastern Time zone)



**Don't forget to bring in those stamps for your chance to win a class at William Holland or Wild Acres!**

## Upcoming Shows

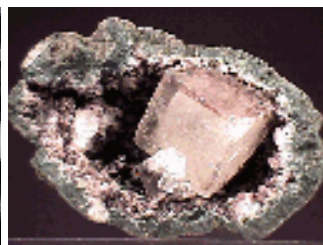
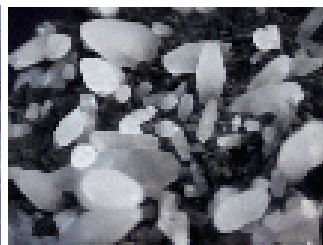
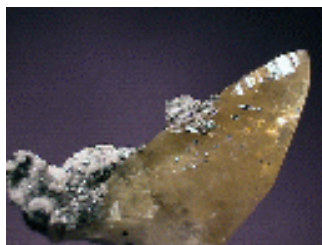
**March 9 - 11, 2007**, 19th Annual Aiken-Augusta Gem, Mineral and Fossil Show. Julian Smith Casino - 2200 Broad St. - Augusta, GA. Admission \$3 Adults / children under 16 free with an adult Exhibits - Demonstrations - Educational Resources. Email contact: [wkkw@bellsouth.net](mailto:wkkw@bellsouth.net)  
<http://www.homestead.com/aikengms>

**March 16-18, 2007**, 30th Annual Valley and Ridge Gem and Mineral Show. Presented by the Rome Georgia Mineral Society on Friday-Sunday March 16-18, 2007. Fri-Sat 10-6, Sun 1-5. Chapel Hill United Methodist Church, Rome GA - Directions: From the Rome Bypass (GA Loop 1), turn East on to Kingston Rd. (Hwy 293), drive a few hundred yards and turn right into the show at Chapel Hill United Methodist Church. The mineral show will be in the gym past the parking lot. For Show Information: Tim Biggart, Show Chair 706.232. 7143 \* [tbiggart@berry.edu](mailto:tbiggart@berry.edu).

**April 28-29, 2007**, Memphis, TN. Mid-America Mineral, Fossil, Jewelry Show Memphis Archaeological and Geological Society. Sat. April 28 9-6, Sun. April 29 10-5 Pipkin Building, Midsouth Fairgrounds, corner of Central and E. Parkway Admission \$3, 12 & Under \$1, scouts in uniform free. Over 35 dealers, exhibitors, speakers and demonstrations. ROCKZONE for kids with gem dig, "Rocks Around the Clock", displays, section managed by the kids/parents with proceeds to MAGS junior's program Grab bags, hourly door prizes, grand door prizes Show Chair- James Butcko 901-743-0058 email [rockclub@earthlink.net](mailto:rockclub@earthlink.net) web site [www.memphisgeology.org](http://www.memphisgeology.org)



## The Mineral CALCITE



- **Chemistry:** CaCO<sub>3</sub>, Calcium Carbonate
- **Class:** Carbonates
- **Group:** Calcite
- **Uses:** In cements and mortars, production of lime, limestone is used in the steel industry; glass industry, ornamental stone, chemical and optical uses and as mineral specimens.

Calcite, which gets its name from "*chalis*" the Greek word for lime, is a most amazing and yet, most common mineral. It is one of the most common minerals on the face of the Earth, comprising about 4% by weight of the Earth's crust and is formed in many different geological environments. Calcite can form rocks of considerable mass and constitutes a significant part of all three major rock classification types. It forms oolitic, fossiliferous and massive limestones in sedimentary environments and even serves as the cements for many sandstones and shales. Limestone becomes marble from the heat and pressure of metamorphic events. Calcite is even a major component in the igneous rock called carbonatite and forms the major portion of many hydrothermal veins. Some of these rock types are composed of better than 99% calcite. Why would a collector be interested in such a common mineral? Because of its extraordinary diversity and beauty!

(continued)

## PHYSICAL CHARACTERISTICS OF CALCITE:

- **Color** is extremely variable but generally white or colorless or with light shades of yellow, orange, blue, pink, red, brown, green, black and gray. Occasionally iridescent.
- **Luster** is vitreous to resinous to dull in massive forms.
- **Transparency:** Crystals are transparent to translucent.
- **Crystal System** is trigonal; bar  $3 2/m$
- **Crystal Habits** are extremely variable with almost any trigonal form possible. Common among calcite crystals are the scalenohedron, rhombohedron, hexagonal prism, and pinacoid. Combinations of these and over three hundred other forms can make a multitude of crystal shapes, but always trigonal or pseudo-hexagonal. **Twinning** is often seen and results in crystals with blocky chevrons, right angled prisms, heart shapes or dipyrarnidal shapes. A notch in the middle of a doubly terminated scalenohedron is a sure sign of a twinned crystal. lamellar twinning also seen resulting in striated cleavage surfaces. Pseudomorphs after many minerals are known, but easily identified as calcite. Also massive, fibrous, concretionary, stalactitic, nodular, oolitic, stellate, dendritic, granular, layered, etc. etc.
- **Cleavage** is perfect in three directions, forming rhombohedrons.
- **Fracture** is conchoidal.
- **Hardness** is 3 (only on the basal pinacoidal faces, calcite has a hardness of less than 2.5 and can be scratched by a fingernail).
- **Specific Gravity** is approximately 2.7 (average)
- **Streak** is white.
- **Other Characteristics:** refractive indices of 1.49 and 1.66 causing a significant double refraction effect (when a clear crystal is placed on a single line, two lines can then be observed), effervesces easily with dilute acids and may be **fluorescent**, **phosphorescent**, **thermoluminescence** and **triboluminescent**.
- **Associated Minerals** are numerous but include these classic associations: **Fluorite**, **quartz**, **barite**, **sphalerite**, **galena**, **celestite**, **sulfur**, **gold**, **copper**, **emerald**, **apatite**, **biotite**, **zeolites**, several metal **sulfides**, other **carbonates** and **borates** and many other minerals.
- **Notable Occurrences** include Pugh Quarry, Ohio; Rosiclare, Illinois; **Franklin, New Jersey**; Elmwood, Tennessee; Brush Creek and other Missouri, Wisconsin, Kansas and Oklahoma localities, USA; Andreasburg, Harz Mountains and Saxony, Germany; Brazil; Guanajuato, **Mexico**; **Cornwall**, Durham and Lancashire, England; Bombay area of India; Eskifjord, Iceland; many African localities as well as others around the world with their own unique varieties.
- **Best Field Indicators** are crystal habit, reaction to acid, abundance, hardness, double refraction and especially cleavage.

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## Birthstones: Choosing a Gem for You

Most gem scholars agree that the tradition of birthstones arose from the Breastplate of Aaron: a ceremonial religious garment set with twelve gemstones that represented the twelve tribes of Israel and also corresponded with the twelve signs of the zodiac and the twelve months of the year.

Because ancient people did not always classify gemstones by mineral species like we do, there is some debate about which gemstones were set in the breastplate and why. Because of this, different cultures around the world have developed different birth stone lists. The modern day list that we know is only the most recent list: some older lists still exist. Some also argue that the proper way to assign gemstones is according to astrological sign and not month. It is thought that it is more fun to choose the gemstone that speaks to you from all the possibilities. It is really hard to keep track of the entire list. There is actually an International Colored Gemstone Association. Additional information may be obtained by going to the following web site: [www.gemstone.org/gem-o-rama/gem-o-rama\\_birth.html](http://www.gemstone.org/gem-o-rama/gem-o-rama_birth.html)



### General Information

The purpose of the Golden Nugget is to inform members of news about gems and minerals along with news about club, state, and regional activities of interest to our members. Most important, the Golden Nugget provides a way for each of us to share information about projects and to pass on tips that will help others enjoy our hobby. Unless members are willing to contribute, the *Golden Nugget* cannot meet this latter purpose.

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Meetings of the Montgomery Gem & Mineral Society are held every 2<sup>nd</sup> Thursday of the month at 7:00 p.m. at the Mureal Crump Adult Center, 1735 Highland Avenue, Montgomery, AL. The annual gem show replaces the December meeting. Anyone interested in gems and minerals is invited to attend. Field trips, workshops, and classes are held at various locations. These are announced at monthly meetings. Membership dues are \$12.00 for individuals and \$18.00 for families residing in the same household.

The Montgomery Gem & Mineral Society is a member of the Southeast Federation of Mineralogical Societies, Inc. and the American Federation of Mineralogical Societies, Inc.

In accordance with Title 17 U.S.C. section 107, this material is distributed without profit or payment to those who have expressed a prior interest in receiving this information.



### Club Officers



President:	Frank Rowell - 277-7023
1st V. President:	Laura Hirst - 590-6946
2nd V. President:	David Sherrod - 285-5537
Secretary:	Mary Lou M <sup>c</sup> Hugh - 272-1817
Treasurer:	Iris M <sup>c</sup> Gehee - 262-7275
Directors:	Harold Glover - 285-3501
	Terry Fetzer - 271-6849

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