

# ROCKHOUNDS HERALD

920 Yorktown Road, Dothan, AL 36301-4372

[www.wiregrassrockhounds.com](http://www.wiregrassrockhounds.com)

**April 2017**

Streak: White

**Diamond**

Mohs: 10

## Words from...

### The President

I think our Annual Gem & Mineral Show was awesome! It looked like most of the folks who came just to look around, ended up buying. We had a very good mixture of vendors. There was a bit of everything available, from fossils to jewelry making supplies. A great big "THANKS" goes to Jeff DeRoche, our Show Chair, for all the hard work he did and to those who helped him with setup & tear down. A special shout out also goes to Ellen & John Webber for running a great silent auction and to Arnie & JoAn Lambert for all the prize donations.

The 2017 SFMS week at William Holland Lapidary School is only 60 days away. It will begin June 11<sup>th</sup>. The class descriptions and registration forms can be seen at <http://sfmsworkshops.com> or <https://www.facebook.com/Southeast-Federation-of-Mineralogical-Societies-317959434999844>. Attending the SFMS week is a great way to meet people from other regional clubs, learn something new and just have a blast.

We had several members of the club head to the Alabama Gold Camp recently. They were planning to stay several days. Haven't heard from them, but I hope they struck a rich vein and will bring their treasures in for Show & Tell this month. Speaking of Show & Tell, please bring in any treasures that you've dug, sluiced or bought since our February meeting. We would all love to see them. Don't forget that I have some AFMS raffle tickets. They are \$5 each and you can see prizes at the AFMS website. If you are interested, catch me at our meeting on April 23rd. Hope to see everyone there.

Pat

## Announcement

**Harrison County Gem & Jewelry Show** – the Harrison County Gem & Mineral Society, our sister club in Biloxi, MS, has made a special request that we help publicize their upcoming show on May 20 – 21. For more information and a coupon for \$1 off the price of admission, go to [gulfportgems.org](http://gulfportgems.org).

## Upcoming Shows

|               |   |              |
|---------------|---|--------------|
| April 22 – 23 | Memphis Archaeological and Geological Society | Memphis, TN  |
| May 12 – 14   | Gem & Mineral Society of Franklin             | Franklin, NC |
| May 12 – 14   | The Georgia Mineral Society                   | Marietta, GA |
| May 20 – 21   | Harrison County Gem & Jewelry Show            | Biloxi, MS   |

## **Show Recap – March 2017 – by Secretary**

The 10th Annual Gem & Mineral Show on March 18th and 19th was a success for all concerned.

Attendance was strong, and on par with last year. Though down slightly, raffle ticket sales were still respectable. Donations were steady and the big earner, as in the past, was the Silent Auction. Straw polls indicate the vendors were once again pleased with their sales and the general logistics of the show organization.

A new arrangement of tables placed the Silent Auction where visitors could more easily see the pieces being offered and the new PA system was a big improvement when it came to notifying winners. John & Ellen Webber get credit for keeping the door prize drawing and the Silent Auction running smoothly. Both put in some long days and were unfailingly sharp and organized. Thank you John & Ellen!

We got very positive feedback on the quality of the door prize items and the kids grab bags. Our Kid Count was up about 15%, or more this year. The amount of time visitors spent shopping was amazing; 2-3 hours was not uncommon, and many visitors came both days.

At the front of the house, visitors were asked how they heard about the show and this year our proximity to the nearby Highland Games appears to have paid off with increased traffic and sales. We had a good amount of repeat visitors who remembered us from prior years. Word of mouth accounted for much of our business. I will be putting a summary together for our next meeting. There are a few surprises and I am sure we will make some changes for the 2018 show.

Thanks to all the club members who gave time and energy to make the show a success. And special thanks to Jeff DeRoche for his hard work and positive energy.

## **Guest Article by Judy Anderson, Silversmith**

### **ARGENTIUM VS. STERLING SILVER**

The new Silver, still quite unexplored...

Argentium--just a bit more expensive, a bit stiffer, but you can fuse it, it holds a polish longer, much less likely to form (or doesn't form) firescale, a nice plus! And they say the color is a little whiter than Sterling Silver. But you should buy & use the solder for Argentium so it'll match.

They always say it has a "touch" of germanium which prevents the firescale, so I don't know if they replaced all of the copper alloy with germanium or just some of it. But technically, it makes the quality .935 instead of .925 like Sterling. And you should get the Argentium stamp plus the .935 quality stamp to mark your work with.

Sterling Silver oxidizes (darkens), but Argentium will also, given more time. Both are a beautiful metal in a finished piece. For balled wire, Argentium behaves just like fine silver with a smooth, perfect finish, whereas Sterling silver gets pitted. You can also fuse Argentium, which opens up lots of possibilities in creating layered pieces.

You can watch a video or two about Argentium on Rio Grande's website. And read more about it on any of the websites or the site screens where you order Argentium sheet, wire, or solder.

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## The Saga of the *Lesedi la Rona* Diamond



The 1,109-carat uncut *Lesedi la Rona* diamond is the largest gem-quality diamond discovered in more than a century and the second-largest diamond ever found. It is exceeded in size only by the 3,106-carat *Cullinan* found in South Africa in 1905; itself cut into over 100 pieces, including nine numbered stones—among them the *Great Star of Africa* (530 carats) which has adorned the Royal Scepter of the British Crown Jewels since 1910.

The size of a tennis ball, the *Lesedi la Rona*, was recovered in Botswana in November 2015 at the Karowe mine operated by the Canada-based firm, Lucara Diamond Corporation. It weighs nearly half a pound (227 grams), measures 65 mm by 56 mm by 40 mm and is believed to be between 2.5 billion and 3 billion years old.

Classed as a Type IIA diamond, it is among the most valued and purest type of diamonds; less than 2% of all gem diamonds are Type IIA. Scientifically speaking, Type IIA stones are almost pure carbon. They contain no significant amount of nitrogen in the crystal lattice (which imparts a yellowish hue) and often show extraordinary optical transparency; both are true of the *Lesedi la Rona*.

### What's in a Name?

Following the diamond's discovery, the CEO of Lucara launched a competition to name the stone – open only to Botswana citizens. In addition to the honor of having their suggestion selected from among all the entries, the winner would take home P25,000 (about \$2,170). After receiving and reviewing over 11,000 entries, an announcement was made in February 2016 that the diamond would be called *Lesedi la Rona* which means “Our Light” in the Tswana language. The winner, Thembani Moithobogi of Mmadikola, said he submitted the name because “the diamond is a pride, light and hope of Botswana”.

## “Our Light” Comes Into the Light

Karowe mine has been a rare source of exceptional diamonds. Although it produces less than 1% of the world’s supply, the mine is recovering more than 50% of the world’s diamonds larger than 100 carats, thanks in large part to Lucara’s use of advanced x-ray technology, known as XRT or X-ray transmission. The system helps ensure large diamonds are not crushed during processing by searching for carbon among the stream of rocks passing on the conveyor. When carbon is detected, a bank of air jets mounted at the end of the conveyor blasts the diamond out of the stream where it tumbles down a chute to the recovery room. Lucara executives confirmed that the *Lesedi la Rona* was recovered using this process. Ironically, of the five XRT machines in use at the site, only one was calibrated to look for diamonds as large as 1,100 carats.

Also ironic, the massive stone tumbled down the chute and sat in the recovery room overnight until a flabbergasted 27-year-old trainee named Tiroyaone Mathaba—who had worked at Lucara for fewer than five months—found it the next morning. He was examining rock and sand produced by the large diamond recovery machine and initially thought it just looked like a large stone. “At first I wanted to scream,” the news report cited Mathaba as saying. “Then I said in a low hoarse voice ‘God, it’s a diamond! It’s a diamond, it’s a big diamond!’”

It was passed up the chain for further examination by geologists and other company executives and eventually deemed to be the second largest diamond ever found.

## A Few More Startling Revelations

Lucara officials have since confirmed that a 374-carat stone recovered the following day was actually a part of the *Lesedi la Rona*, making its original weight just under 1,500 carats before it broke into two pieces. Unfortunately, there is no way to determine when the break occurred or what caused it; was it in placement, was it in blasting, was it in the processing? The official stated, “nobody is going to be able to tell.”

The per-carat price of diamonds rises exponentially with size. That is because large diamonds are rarer than small diamonds. The *Lesedi la Rona* was too large to fit into conventional scanners used to evaluate a stone’s potential worth, so it took months to determine the estimated auction price of \$70 million. In June 2016, *Lesedi la Rona* was insured for \$120 million.

Although weighing less than the famed *Cullinan* in the rough, independent reports indicate that the *Lesedi la Rona* may have the potential to yield the largest D color faceted and polished diamond known in the world. After being called “the greatest prize in diamonds” for nearly a century, the *Great Star of Africa* may soon have to relinquish the title.

## **Bringing the Stone to Market**

For a number of reasons, Lucara opted to take an unusual—some would say, audacious—route to selling the 1,109 carat stone. Large rare diamonds such as this are offered for sale to small groups of sophisticated diamond dealers, known in the trade as *diamantaires*. Instead, a decision was made to offer the *Lesedi la Rona* at public auction held by Sotheby's in London. Not only was it atypical for a diamond miner to auction a raw gem rather than cut the stone, it was unprecedented. No rough even remotely of this scale had ever been offered before at public auction. Mining companies tend to sell their rough production in-house while the auction house is better known for its presentation of fine jewelry and special polished diamonds.

"We're trying to get access to people who may want it as a collector's item," said Lucara CEO and President William Lamb when the decision was announced. "We're looking at people who have the financial resources, but also see the uniqueness, the rarity and the beauty in the stone." He felt the media hype surrounding the stone showed there was justification for a more public process. Lucara wanted to understand whether there was a market for truly exceptional diamonds where they would be purchased as collectables the same as high-value art.

Once the decision was made, the *Lesedi la Rona* hit the road for a world tour. Potential buyers were able to view the stone first in Singapore, then Hong Kong and Dubai. It arrived in New York in early May and traveled to London June 18 where it was on display until being put on the auction block on June 28, 2016.

### **...As the Gravel Dropped**

Bidding opened at \$50 million and struggled from the start. After taking far too long to reach \$52 million, the auctioneer tried to advance the price in increments of \$500,000. At \$61 million, still short of the reserve, the price stalled. When the gavel came down most were stunned, especially Lucara executives. As recently as breakfast the day of the auction, they'd felt confident they had a likely buyer, and further, that there would be a forest of bidding paddles raised throughout the room. Just the month before, Lucara had sold an 813-carat stone for \$63.1 million—the highest price ever paid for a rough diamond. Now here was this even greater jewel, the second-biggest diamond ever found, but it faltered at \$61 million?

### **Hindsight and All That**

Lucara's commission arrangement with Sotheby's meant the stone would have to reach \$150 million for the auctioneer to make decent money. Even at a price of \$100 million they'd make almost nothing. An analyst with BMO Capital Markets put it into perspective by saying, "The result was a disappointing one, and potentially calls into question the sale method chosen."

The historical significance of the stone truly seems to have been missed based on the bids offered. As a result, the format of a public auction will probably not be used any time soon to sell another large rough. The market may have reached a tipping point and demand for large rare stones might just be saturated, or it could simply have been bad timing caused by market instability and recent world events. It could, as some have speculated, be a matter of having riled up the diamond establishment. Some diamantaires reportedly didn't like the prospect of exposing themselves and their process in the open arena of a public auction. They found it undesirable and stated, "It's just not how it's done."

## What Next?

Reportedly Lucara has had a significant number of people continue to show interest in the stone. Less than a month after the auction, Lucara's CEO had an offer for the *Lesedi la Rona* well above the failed auction price. Thus far, however, the company has not yet decided what to do with the stone, but as of January 4, company spokespersons felt it would sell to a private buyer within the first six months of 2017. If not, it was reported they could go a number of routes with the rough diamond, from partnering on the stone to holding a regular tender within the diamond market, or even putting *Lesedi la Rona* on display at a museum.

The company's First Exceptional stone tender scheduled for May 11 was recently announced, but the *Lesedi la Rona* was not mentioned. Whatever may come of the diamond, one cannot deny the finding has been historical and fascinating to follow.

### Sources:

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<https://lucaradiamond.com/diamond-sales-info/tender-dates>

# Annual Show – March 2017

Photos by Pat & Bruce



# Annual Show – March 2017

Photos by Pat & Bruce





# Rock Tumbling for Beginners – Part 2 of 2

## Four Stage Process

Now that you have your tumbler and all the supplies you'll need, let's go into more detail about each of the four stages of rock tumbling.

### Stage 1 - Shaping

As I've mentioned a few times already, the first step of the process is shaping with coarse grit. This will remove the rough edges from your rocks and give them a round shape. To start, fill your barrel about half to two-thirds of the way full. For best results, you should try to use various size rocks. If you don't have enough rocks to fill the barrel, be sure to add your plastic pellets after adding the rocks. You should also add pellets at this stage if your rocks are fragile or have a flat shape.

The next step is to add your coarse grit (about two tbsp per pound of rock) followed by water to nearly the top edge of your rocks. Close the barrel firmly and clean up any water or debris. Not everyone will do this next step, but I like to weigh my barrel before starting the machine. Every tumbler has a maximum weight. It's important to stay under this weight, so you don't wear out the motor.

Put the barrel on the tumbler, plug her in, and get going! I should mention here that tumblers can be noisy so you should probably set up in either your garage or basement – or even a shed if it has electricity.

After a few days, you'll want to check the progress to make sure the edges are being knocked down. Then after your rocks have been tumbling for about a full week, and they are the shape you want them to be, remove your rocks from the barrel and rinse in a clean bucket of water. Note that your time may vary depending on the type of rocks you're tumbling. Harder rocks and rocks with strong angles will take longer to shape than softer, smoother rocks. If your rocks aren't the desired shape after the first week, just put them back in for as long as it takes. Just be sure to check on them every day or so.

At this stage, you'll also want to clean out the barrel with soap and water as you prepare the rocks for stage two of the process. You'll want to make sure all of the coarse grit is cleaned out of the barrel. You want to be 100% sure all of the grit is out of the barrel, so you're not mixing coarse grit with the fine. Some people will even go so far as to use separate sponges for each type of grit when cleaning their barrel.

At all stages of cleaning, don't ever dump your waste products (slurry) down the drain – unless you happen to be a plumber and like repairing pipes. Once clean, it's time to move onto the finer grit.

### Stage 2 - Medium/Fine Grit

Follow the same process as before, again adding pellets if needed. Be sure to clean the pellets good because grit will stick to them. Sometimes it's easier just to use a new batch of pellets.

Stage two (the finer grit) should take about the same amount of time as stage one. What you're

looking for here is to remove any visible scratches/cracks/pits and to create a dull glow on the rocks when they're dry. Since time here will vary, you should check on your rocks every day or so to see how they're progressing.

After another full cleaning, stage three is the pre-polish stage.

### **Stage 3 - Pre-Polish**

The purpose here is to make your rocks silky smooth and start to bring out a bit of luster. This stage should also take about a week, but mileage may vary. One last full cleaning and we're onto the final stage – polish!

### **Stage 4 - Polish**

This stage is going to use a grit that looks like a fine powder. After another week in this stage, your rocks should come out with a bright shine and look absolutely stunning.

During the polish stage, you should consider using some plastic pellets to protect your rocks from hitting each other. There's nothing worse than ruining a batch of rocks after a month of processing!

Finally, there's a bonus stage that's not necessary but can boost the brightness of your rocks – especially with agates and jaspers. It's called burnishing and is considered an additional stage of polish.

## **Burnishing**

Burnishing is a fifth stage of tumbling, but instead of using grit, you're using some form of soap or powdered laundry detergent. This will put even more shine on your rocks, brighten them up, and remove any haze and residue from the slurry. If you're not sure whether the burnish stage will add more brightness to your rocks, a simple test can be done. Take one of your rocks and buff one side with a very soft cloth for 10-20 seconds. If the side you buffed is shinier than the other sides, it will benefit from a burnish stage.

Most people will either use borax or shaved layers of ivory bar soap. Whatever you use, make sure there are no additives in the soap that will harm your rocks. Also be sure to add your plastic pellets for protection. The ratios here are the same as in the grit stages. About two tbsp per pound of rock is recommended. All you need is 24 hours in a rotary tumbling during this stage. But the longer, the better!

*Tip: during both the polish and burnish stage, you may want to batch your rock types. Since you'll mostly be tumbling types of quartz as a beginner, group them all together for these last two stages. Remove all other families of rock.*

So there you have it. The complete process for tumbling rocks in your rotary tumbler. Expect to wait 3-6 weeks on average to complete the entire process.

Remember, patience is a virtue!

Excerpt from *Ultimate Beginners Guide to Rock Tumbling* by Mark Orwig

Source: <https://www.smarterhobby.com/rock-tumbling/>

Permission granted by Mark Orwig, Managing Editor, SmarterHobby.com

# Who What Where When Why How

## April Birthdays

**APR 7 Joe Schings**  
**APR 10 Kurt Pensinger**  
**APR 13 Diane Rodenhizer**  
**APR 14 Jane Whitton**  
**APR 23 Neil Pollan**  
**APR 25 Ken Johnson**  
**APR 27 Bruce Fizzell**  
**APR 29 Elliott Whitton**

## Random Rock Facts

Using color to identify a mineral is both difficult and complicated. It is imperative that you examine a non-weathered portion of the specimen and that you use good light. While color can be a fairly reliable indicator in the opaque and metallic minerals (it is possible to learn the usual colors and the usual exceptions for common minerals), you should never rely on color as your only means of identification in the translucent or transparent minerals.

Source: <http://geology.about.com/>

## Meeting Information

**Time:** 2:00 PM  
**Date:** Fourth Sunday of each month (except June, July and August)  
**Place:** Fellowship Hall – Tabernacle United Methodist Church  
4205 S. Brannon Stand Road  
Dothan, AL

**Website:** [www.wiregrassrockhounds.com](http://www.wiregrassrockhounds.com)

## Objectives

To stimulate interest in lapidary, earth science and, when necessary, other related fields.

To sponsor an educational program within the membership to increase the knowledge of its members in the properties, identifications and evaluations of rocks, minerals, fossils and other related subjects.

To cooperate and aid in the solution of its members' problems encountered in the Club's objectives.

To cooperate with other mineralogical and geological clubs and societies.

To arrange and conduct field trips to facilitate the collection of minerals.

To provide opportunity for exchange and exhibition of specimens and materials.

To conduct its affairs without profit and to refrain from using its assets for pecuniary benefit of any individual or group.

## Classified Ads

**Looking for an item to round out your rock collection?**

**Got a specimen, tool or handicraft for sale or trade?**

**Submit the pertinent details to me by the 10<sup>th</sup> of each month and your inclinations will be made known to the membership in the next bulletin.**

**N. J. Blackwell**  
28 Lakeview Trail, Apt. C  
Daleville, AL 36322  
Phone: 334-503-0308  
Email: [Tfavorite7@aol.com](mailto:Tfavorite7@aol.com)

## Annual Dues

Single \$15  
Family \$20

## Officers

**President – Pat LeDuc**  
334-806-5626

**Vice President – Garry Shirah**  
334-671-4192

**Secretary – Bruce Fizzell**  
334-577-4353

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334-447-3610

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**Show Chair – Jeff DeRoche**  
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**Field Trips Chair – Garry Shirah**  
334-671-4192

**Hospitality Chair – Vacant**

**Club Hostess – Vacant**

**Club Liaison – Garry Shirah**  
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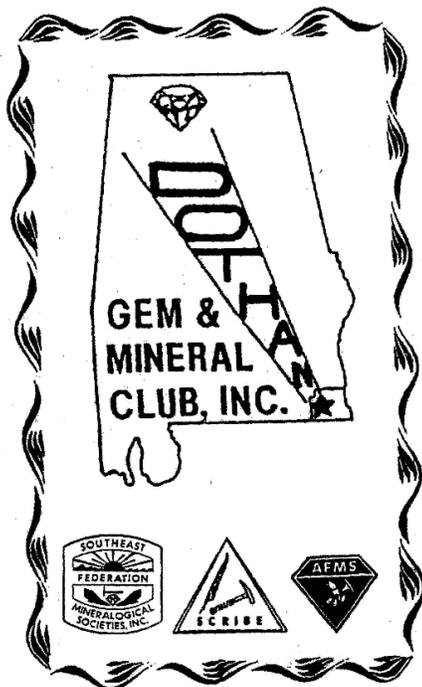
## Refreshments

**APR 23 – Potluck Refreshments**

# ROCKHOUNDS HERALD

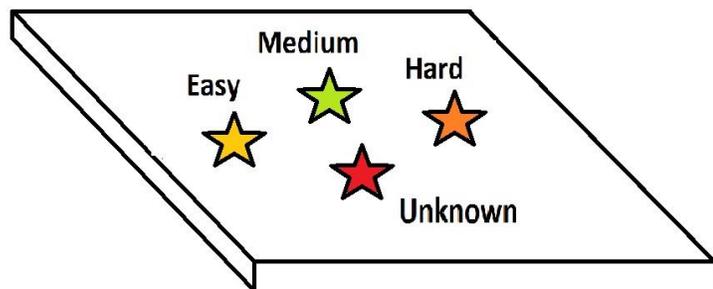
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## Where you might hear...

There are plenty of ways to mark your sheet or wire solders, but suppose you forget and have a couple that you can't identify. The answer is to compare the melting temperature of the unknown with that of a known solder. What I do is take a thick scrap of copper or nickel and arrange several solders on it. Ideally, I have a sample of easy, medium and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.



Source: [www.BradSmithJewelry.com](http://www.BradSmithJewelry.com)  
(See all Brad's jewelry books at [Amazon.com/author/bradfordsmith](http://Amazon.com/author/bradfordsmith))

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