



San Diego Mineral & Gem Society, Inc.
A Non-Profit Educational and Scientific Organization

THE PEGMATITE

APRIL 2017

SDMG

General Meeting

Monday, April 24, 2017

Shirley Leeson, Chair

7pm SDMG bldg

Public Welcome!

THE PROGRAM THIS MONTH is really special. Our own **Anne Schafer** is going to take us all on an adventure to the Montana Gem Mountain Sapphire Mine in Philipsburg, Montana.

This adventure is on my bucket list, and I hope you will join me on Monday evening, April 24th, when **Anne** gets us all excited about Montana Sapphires. For details and pictures to pique your interest on what promises to be a great presentation, see page 3.

SDMG

56th ANNUAL BARBEQUE

Saturday, April 29, 2017

10:00am – 4:00pm, Balboa Park

Lawn at SW corner of

Park Blvd. & President's Way

JOIN YOUR FRIENDS for our Annual Spring Barbeque on the green. Mark your calendar – it's early this year! You can bring your own picnic lunch or buy a ticket for the catered fare. Most important, to ensure it will be another great event, we are calling for Volunteers – yes, we mean **YOU!**

For details about how to sign up, activities, and times, see page 4.

Official bulletin of the San Diego Mineral and Gem Society, Inc.

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American Federation of Mineralogical Societies
American Lands Access Association

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The mission of the San Diego Mineral and Gem Society, Inc., is to disseminate knowledge of mineralogy and earth sciences; to encourage the study of these subjects; to conduct classes in mineralogy and lapidary arts; to conduct field trips for the collection and study of specimens; to encourage interest in mineralogy and lapidary arts among young people; and to procure and maintain a collection related to the earth sciences and lapidary arts.



PRESIDENT'S MESSAGE

April 2017

by Shirley Leeson

sdmgpresident@sdmg.org

I have several major items to discuss with you this month. First, I am happy to report that our 83rd Annual Banquet was a rollicking good time and a big success. Donna Beers put together a great program and worked out all the logistics of hosting the event at a new venue. This year, 90 attendees showed up to celebrate their club. This event underscored how worthwhile it is to attend your Society Events. It is a reminder of the many reasons you have to be proud of SDMG, and it provides an opportunity to get to know the other members of the Society. We have such a diverse and interesting group of people who are called Rockhounds. Read my review and see some pictures of the Banquet courtesy of Jim Parrish on pg 6.

Looking forward, April is a very busy month, with lots of exciting activities planned. Our 56th ANNUAL BARBECUE has been moved from May to April 29th, it's the same location as last year – the lawn in Balboa Park at Park Blvd. & President's Way (across from the Naval Hospital). Mark your calendar. This is always a fun event for everyone, especially families with children. The Barbecue Pit is catering the event again this year. The menu has changed slightly: we'll still have the sliced barbecue beef they are famous for, but there will also be chicken instead of ham this year. The price remains the same at \$15. for adults and \$7.50 for kids under 12. Where in San Diego can you get this great price? (Thanks for keeping the price the same as last year.) You will need a card table or picnic table and chairs or blankets for yourselves at lunchtime. Please see more details about the BARBECUE on pg 5.

Ivan Herring's tremendous books on *Mines of the American West* are available in paperback on Amazon, see the index on pg 27. His books are a treasure trove of incredibly useful and interesting information.

Sapphire seems to be the gem for April. The gem theme for this year's 14th Annual Sinkankas Symposium is Sapphire. The day-long event is hosted by GSSD and GIA and will be held at GIA world headquarters, in Carlsbad on Saturday, April 8th. The venue and the speakers are great, so it did not take long for event tickets to sell out. If you are not going, you will be able to buy the symposium volume directly from the printer by mid-month. See pg 10 for details. One of the speakers will be Richard Hughes, who operates a gem trade laboratory in Bangkok, Thailand dedicated to (what else?) Sapphire, Ruby, and Spinel. Hughes' magnum opus on Ruby & Sapphire was published earlier this year, and at 816 pages and weighing more than 10 lbs., it is no exaggeration to say that it is the definitive reference on the gem varieties of corundum. Our own Honorary Life Member Bill Larson, president of Pala International, reviewed the book in the January Pala newsletter. He kindly allowed us to reproduce it here, see pg 17. This book is brimming with useful information. It is a must-have reference disguised as a gorgeous coffee table art book.

In keeping with the Sapphire theme, our editor Lisbet Thoresen, reviewed another must-have reference on Ruby, Sapphire & Spinel. This book is authored by the renowned collector of ancient gems, Derek J. Content. Lisbet was thrilled about this book. She tells me it fills a great void in the literature on ancient gems. Her review is found on pg 20. Again, thanks to Bill Larson for allowing us to reproduce the review from the original posting in the Pala Gems February newsletter.

On the last Monday in April – the 24th – our very own Anne Schafer will be the featured speaker at the General Meeting. Topic? Montana Sapphires. She has great pictures from a fee-digging expedition she and Wayne embarked upon a few years back. If you don't have summer plans yet, you might want to consider putting Philipsburg, Montana on your list. This promises to be a great talk, see more details on pgs. 1 and 3.

continued on next pg ...

There's lots of public lands news updates in this month's bulletin. Read Lisbet's report on pg. 11 summarizing what happened at the February DAC meeting held in Barstow. Apparently, that was one heck of a meeting. Thanks to all the Rockhounds who showed up. Big changes are in the works that will affect Rockhounds. I am happy to close on a bright note – it

looks like California might be getting it's very own state dinosaur. Read about that on pg. 15. And finally, don't forget that the deadline for Fair entries is Friday, April 28th. Read about it on pg. 10. Don't miss your chance to show off your talents to the million and a half or so visitors who will attend the Fair in June and July (through the 4th).

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The **Montana Gem Mountain Sapphire Mine** is 76 miles southeast of Missoula by car. It is located between Hamilton and Philipsburg on Highway 38. **Anne** and **Wayne** first visited the mine in 2004, and they have been back several times since. This is a fee site – you buy a bucket of sapphire gravel and wash it in a trough and keep what you find.

Access is seasonal. The mine opens the weekend before Memorial Day, May 24th 2017, and closes September 2nd. It is open four days a week and closed Sunday, Monday, Tuesday, and all Holidays. Hours are 9:30am to 5:30pm. Reservations are recommended.



Water worn sapphire crystals.



Above left: The Montana Gem Mountain Sapphire mine, Philipsburg, MT.

Above right: Cut sapphires from the mine.

Please bring something for the refreshment table, homemade items and fruit are among the most sought after goodies. Coffee and punch will be provided by our able Refreshment Chair, **Andy Anderson**.

Bring money for our special door prizes – it's always fun. Plan to spend your evening with us, you won't regret it!



Above: Water worn sapphire crystals screened from stream gravel. All photos: W. Moorhead.

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SDMG's 56th Annual Barbeque Silent Auction & Ugly Rock Contest

Doug Peeler, Chairman

Saturday, April 29, 2017

10am to 4pm

Park Blvd & Presidents Way Lawn
Balboa Park



THE ANNUAL BARBEQUE will be in the usual spot at Park Blvd & Presidents Way Lawn (back lawn at SW corner, next to 163 onramp.) Parking is Free.

GREAT DOOR PRIZES

and more SELLERS TABLES than ever !!

All attendees are welcome to bring up to 15 rock-related items to sell at silent auction tables with 10% of final sale price donated to the club. Must bring your own table to sell items, with a \$15 donation to the club.

We need Volunteers! Contact **Doug Peeler** at admin@sdmg.org.

LUNCH CATERED BY THE BARBECUE PIT

Menu includes sliced beef and chicken (instead of the usual ham!), cole slaw, beans, potato salad and dinner roll, followed by cookies and brownies.

MEAL TICKET INFO

- **Cost:** \$15.00 adults, \$7.50 kids 12 & under
Water and soda available for purchase separately for \$1 each.
- **When:** Meal tickets on sale now – must be purchased in advance.
- **Where:** Buy tickets at the **SDMG Banquet** (March 18), monthly meetings, the **Village Silversmiths**, some class instructors

OR send a check payable to **SDMG** in a stamped, self-addressed envelope:

Anne Schafer

8473 Hydra Lane, San Diego, CA 92126-1854

Attendees are welcome to bring their own lunch.

Note: The Park may be very busy on Saturday, April 29, so plan to arrive early – carpool, bike in, or get dropped off / picked up afterward.

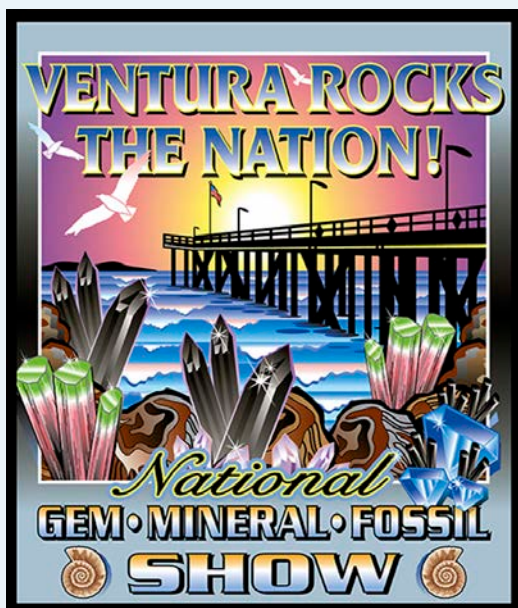
UGLY ROCK CONTEST!

YOUR MISSION is to find a really **Ugly Rock** – they are out there, but they are hiding, so look hard at your rock piles and in your yard. They are there, but you must find them and enter them. The **Mimic Rock** is more specialized, it must look like something you can identify, and you have to put a name on it. And finally, the **Embellished Rock**. It's like dressing up your pet, only it's a rock and doesn't move or shake (it may, because it's embarrassed). And the really hard part is picking a name for your rock.

We have a picture taken at a previous barbeque of an award-winner in the **Embellishment** category – this may help you. **There are BIG prizes:** First place in each category is \$10. Second place is \$5., and Third place is \$1, and finally, pictures of you and your First Place Rock to be immortalized in the May Bulletin. If that isn't an incentive, then what is? See you at the Barbeque, with your Ugly Rocks.



SAVE THE DATE!
Ventura Gem & Mineral Society
 set to host the
2017 CFMS-AFMS Show
June 9 – 11, 2017



SDMG Library

SDMG Bldg.
 Andy Anderson

Hours: 4 to 6 pm, Wednesdays
Reference use only, no lending.

Access the catalog online at:
<https://cloud.collectorz.com/sdmgmerklib/books>

Who may use the Library?

Membership is not required to view the catalog, but only **SDMG** members may come in and use the reference library.

We Need Volunteer Assistant Librarians.

Members willing to volunteer in the Library will enable us to extend the hours of access.

Contact Andy:
aanderson@sdmg.org
 if you can help out.

School Closure Schedule 2017

Closure date	Description
Sat, April 29	BBQ shutdown, one day.
Sat, July 1 – Sun, July 9	Fourth of July shutdown, one week.
Mon, July 10 – Fri, Sept. 1	Optional Summer Class Period, two months. (Instructors must notify School Director if you plan to hold summer classes.)
Sat, Sept. 2 – Sun, Sept. 10	Labor Day shutdown, one week.
Mon, Sept. 11	Fall classes begin.
Fri, Sat & Sun, Nov. 3, 4, 5	Gem Diego Show shutdown, three days. (Everyone's help is needed with your club's show.)
Thu, Nov. 23 – Sun, Nov. 26	Thanksgiving shutdown, four days. Reopens Mon, Nov. 27.
Mon, Dec. 18, 2017 – Mon, Jan. 1, 2018	Christmas and New Year's shutdown, two weeks.
Tue, Jan. 2, 2018	Classes begin.



JUNIOR DIVISION NEWS

Sponsored by
 Lois Lukasky
 and Marvin Dillard

Hello from the Juniors!

WE ARE CONTINUING WORK on new projects for the **Juniors'** display case at the San **Diego County Fair**. It opens Friday, June 2nd.

On Friday, May 12th, the **Juniors** will host the **Mineral Division Meeting**, and they will have a selling table at the **Annual Spring Barbeque**, which will be held on April 29th. In June, we will have a break before summer classes begin. The summer schedule will be posted in the May and June bulletins.

Paul Williams
 Junior Div. Chair pro tem

83rd SDMG Annual Banquet – in Review –

by Shirley Leeson

KUDOS TO DONNA BEERS for putting together the best **SDMG BIRTHDAY BANQUET** in many years. She single-handedly did a whole lot of behind-the-scenes activities such as wrestling with the various contracts, which was a real challenge. **Donna**, and her crew, **Dave Smith**, **Jennifer Stapp** and **Jamie Tollefson** worked all day getting everything ready. The table settings with floral arrangements were done by **Jill Williamson**. **Donna** and her team sold 90 tickets for the event – wow!

The Soledad Club, which overlooks Pacific Beach, the Pacific Ocean, and Mission Valley was a great venue. The weather was sublime, and the view was spectacular, from the glow of fading daylight at sunset to the valley's twinkling lights in the evening. The food was great. As an added bonus, we had toe tapping country music courtesy of **SDMG** member **Lee Bennett** and his band **Kemosabe**. They played some great standards like **Patsy Cline's** "Crazy," and **Simon King** joined them to sing along on one of my favorite songs – thanks so much.

Our Annual Banquet honors our Past Presidents, Life Members and Honorary Members. We also asked our Lapidary Instructors to stand and be recognized. **Lois Lukasky** was acknowledged for her decades of dedicated service to the Society and for chairing the **Junior Division**. **Anne Schafer** made remarks on club history, and **Donna Beers** and **Luann Benton** presided over the Raffle drawing. With all the activities



Top: Cutting the cake at the 83rd Anniversary celebration.

Middle: Lee Bennett and his band Kemosabe play favorite country standards for an appreciative audience.

Bottom: Jennifer Stapp and Jill Williamson enjoy a relaxing evening after weeks of working hard to help put on the Banquet.

Left: Lois Luskasy accepts a plaque from President Shirley Leeson for her decades of service to SDMG.

Photos: Jim Parrish.



Luann Benton and Banquet Chair call the winners of the Raffle drawing. Photo: Jim Parrish.

going on, I bet you didn't have time to look at the pictures of earlier banquets, but never fear, they have been placed in a three-ring binder for you to enjoy. I even found the 1982 banquet pictures at **Tom Ham's Lighthouse** on the bay, and there was a picture of **Wayne Leicht**, who was the featured speaker.

In 2017, we came full circle, with **Wayne** slated to make a presentation on Gold. **Dona and Wayne Leicht** are **SDMG** Honorary Members. They have been longtime supporters of our club. They battled

snarling traffic to attend our event with their guests, and everyone was delighted that they were there. Indeed, the great turnout at this year's Banquet was in no small part due to **Wayne's** much anticipated presentation on Gold (I always love GOLD stories with pictures).

It got off to a bumpy start when the projector froze, but our own **Jim Parrish** came to our rescue with a back-up projector. Unfazed while Jim wrangled with the technical difficulties, **Wayne** just carried on and began telling the story of how he got started dealing in native gold specimens. It all began with a childhood fascination that inspired an abiding passion which became a successful business. **Kristalle**, which is based in Laguna Beach, has been a thriving business since it was established in 1971. The name **Kristalle** is synonymous with high quality and is known the world over.

Wayne spoke about his experiences handling several famous collections. The beautiful slides by **Harold and Erica Van Pelt** provided a stunning pictorial odyssey of some of the world's most significant and beautiful native gold specimens that have passed through his hands. His entire talk conveyed his fondness for many of the people and the circumstances related to the collections he has handled. An especially intriguing anecdote was the early career-making opportunity he

got to negotiate the purchase of the collection of **Charles Crespi**, a banker in Calaveras County. **Crespi** had assembled one of the most famous and most important private collections of native California native gold specimens. **Wayne** described the interplay of the personalities who controlled the **Crespi** estate. It was a fascinating tale woven into the historical setting of the storied gold mines and other colorful characters of California's Gold Country. Thanks so much to **Wayne** for a riveting presentation. Read a great article on gold on the Kristalle Web site at: <https://kristalle.com/california-gold/>.



Native gold weighing 15 oz. (4.5 x 2.6 x 1.4 cm) from the Eagle's Nest Mine, Placer County, CA. Courtesy of Kristalle.



Wayne Leicht making his presentation on gold to a rapt audience. Photo: Jim Parrish.



Rusty Kovola and Dona Leicht enjoying the repartee. Photo: Jim Parrish.



Wayne Leicht and Roberta McCarty smile for the roaming paparazzi. Photo: Jim Parrish.

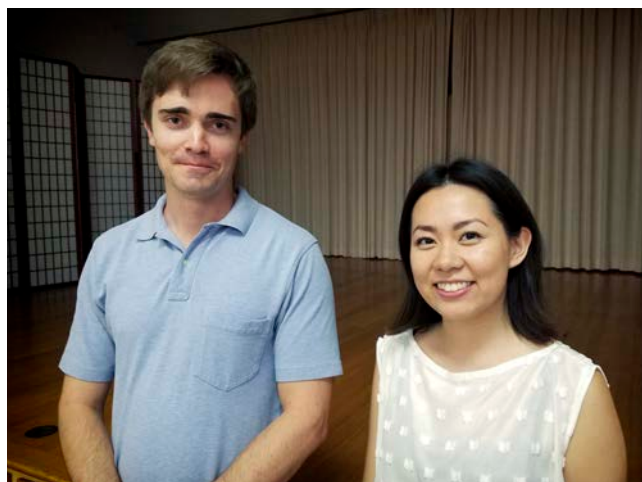
We were bowled over by **Dona** and **Wayne Leicht** in more ways than one. Just as the scholarships were about to be awarded **Dona** came to the stage and presented **Shirley Leeson** a check designated to supplement **SDMG's Scholarship Fund**. She spoke with great feeling about the importance of education in the earth sciences and lapidary arts and she related

how much she and **Wayne** admired **SDMG's** longtime commitment to supporting educational values. **SDMG** is deeply grateful for the extraordinarily generous sentiments **Dona** expressed and the contribution she and **Wayne** made to the fund. We are so fortunate for the **Leichts'** abiding support of our club and our community.

One of the most important activities of our Society is to support our young people. **SDMG** established the **Scholarship Fund** in 1986 to advance educational and scientific objectives related to earth sciences and the lapidary and metal arts. Each year two scholarships are presented at the Annual Banquet. They are named for longtime Rockhound community boosters and **SDMG** members **Carmelita** and **Bern Swarts**, who established a scholarship in 1999, and **William Tirk**, who established a scholarship in 2007. Scholarship recipients are nominated by the Department Heads of the Geological Sciences and the Jewelry/Metalsmithing College of Fine Arts. The successful candidate must be enrolled full time in junior, senior or graduate studies, maintain a 3.0 or higher grade point average, and major in subjects related to earth sciences or lapidary arts.

In 2017, **Misaki Sano** was the recipient of the **William Tirk Scholarship** (Jewelry/Metalsmithing) and **Scott Knapp** was the recipient of the **Carmelita**

and **Bern Swarts Scholarship** (Geology). Congratulations to **Misaki** and **Scott**. Read their biographical statements below and read more about the **Scholarship Fund** on the **SDMG** Web site at: <http://www.sdmg.org/sdmg-public/resources/scholarship-fund/>.



Scott Knapp

Carmelita and Bern Swarts Scholarship

My name is Scott Knapp, I'm 25 and a junior at SDSU. I'm majoring in geology with an emphasis in geophysics and minoring in physics. My path through college- and science in general- has been a winding one, but I believe it is leading to some sort of tangible, fruitful destination. I was initially introduced to geology at community college and was drawn to the broad scope and scale of its explanatory powers. It seems to me to address one of the fundamental sets of questions, those that seek to understand the earth and all the processes that shape it. I plan on attending grad school after completing my B.S., but my exact topic of study is still up in the air. Recently, the topic of climate change has drawn much of my attention. I am beginning work with the Climate Informatics Lab at SDSU, which uses mathematical modeling and statistical methods to address climate change data. Overall I'm just trying to learn as much as I can about all the areas that interest me, and I hope I can synthesize this knowledge into something useful and interesting in the future.

Misaki Sano

William Tirk Scholarship

I was born and raised in Japan, and moved to California for school. I received a Bachelor degree in business, worked in the Business field for about 2 years, but I wanted to create something with my hand so decided to go back to art school. That's how I ended up in the fine arts and jewelry making. After earning a BFA from California College of the Arts in San Francisco and working as an assistant for established artists, I decided to go further with my education. That is how I ended up being an MFA candidate for SDSU Jewelry/Metal program. I am planning to do more materials exploration with the scholarship money, and it will be very helpful for me to create new works.



The Fourteenth Annual Sinkankas Symposium – Sapphire

Saturday, April 8, 2017

www.sinkankassymposium.net

The 2017 event is sold out. If you aren't attending but would like to obtain a copy of the symposium volume, it can be ordered directly from the print house beginning in mid-April. US addresses only (sorry, no orders accepted for delivery to international addresses). Check the Web site for updates/ordering information.

The 136-page volume is full color throughout, soft cover, perfect-bound. Author contributions:

Richard Hughes – Sapphire Around the World 10

Nathan Renfro – The Microworld of Sapphires 18

George Harlow – Syenite-Hosted Sapphires – What's Going On 22

Glenn Lehrer – The Art and Science of Faceting and Carving Sapphire 34

John Emmett – All the Colors of Corundum 48

William "Skip" Simmons – Mineralogy and Crystallography of Sapphire 70

Lisbet Thoresen – Archaeogemology of Sapphire 74

Carl Larson – Sapphires from a Collector's Viewpoint 92

Shane McClure – Sapphire Treatments and Their Detection 98

Edward Boehm – Sapphire Origin Determination: Past and Present 102

Richard Hughes – Sapphire Bibliography 108



SAN DIEGO COUNTY FAIR GEMS, MINERALS & JEWELRY DEPT.

Hey, time's runnin' out, pardner! That there deadline of Friday, April 28th, is loomin' on the horizon. Round up your minerals, fossils, fancy jewelry (hand-made, of course, by yourself), cut stones, carvings, and such. Then get yourself online and enter 'em all in the Fair!

There is plenty of prize money to be had by the winners. (Could even be you!) Check out the entry information online, to see the list of special trophies and top prize money on offer.

Hot tip: Don't wait till the last day to enter; the Fair website can get bogged down worse than a fat cow in a swamp, if you know what I mean.

Want to know *where* you should be *when*, and *what* you should be doing? Read on!

THE SCHEDULE:

Entry brochures: [Download PDF \(sdfair.com\)](http://sdfair.com)

Online entry: sdiego.fairmanager.com

Entry deadline: Fri, April 28, at 11:59 pm

Entry delivery: Sat & Sun, May 27-28, 9 am to 6 pm

First day of Fair: Fri, June 2, 4 to 11 pm

Exhibitor

Appreciation: Wed, June 7, 6 to 9 pm

Last day of Fair: Tue, July 4.

Exhibit pickup: Thu, July 6, 9 am to 8 pm

Got questions? We have answers! Contact:
Anne Schafer, Gems & Mineral Coordinator
Rich Yarbrough, Assistant Coordinator
sdfair@sdmg.org

DAC winter meeting report: Mojave Trails NM, PRPA & DRECP

April 2, 2017

by Lisbet Thoresen

*Representative of Public Lands for SDMG
Chair, PLAC-South, CFMS*

THE DESERT DISTRICT ADVISORY COUNCIL (DAC) convened in Barstow on February 25th in a day-long meeting that marked significant transitions in **BLM** personnel and in the council itself. The agenda featured presentations on key land use plans and proposed regulations that will affect hobby collecting on public lands. Fossils were a recurring theme carried over from the previous day's field tour – an entire day devoted to visiting some of Southern California's most famous fossil localities: Amboy Crater, Marble Mountains, and Pisgah Crater. All three are now within the boundaries of the **Mojave Trails National Monument (MTNM)**. A brief overview is posted on BLM's Facebook page (see short URL: <https://goo.gl/BuUXIM>). The article features photos that captured a beautiful day.

A main feature of both the Field Tour and the **DAC** meeting agenda was the **Paleontological Resources Protection Act of 2009 (PRPA)**. As most **CFMS** members are aware, on February 6, the comment period concluded on a Proposed Rule under the **PRPA**. More than 460 comment letters were submitted, including a detailed letter written by **Karol McQueary**, president of the **Southern California Paleontological Society (SCPS)**. Her letter incorporated input from **Andrew Hoekstra**, Paleontology Resources Specialist, **CFMS**; **Linda McCall**, president, **North Carolina Fossil Club**; **Mike Nelson**, PLAC Chair, **RMFMS**; and **Lisbet Thoresen**, PLAC-South Chair, **CFMS**. The letter addressed problematic language in the proposed rule. The application of both its general intent and detailed specifications exposes hobby collecting of fossils, minerals, and rocks on federal lands to potentially onerous constraint or curtailment. Given the scope of **PRPA's** authority and the far-reaching impact of implementing its regulations,

the **SCPS** letter garnered a lot of support. It was submitted by **Karol McQueary** with 64 signatures of officers representing gem-mineral, lapidary and fossil clubs from throughout the United States, **AFMS** and five of its seven regional federations, including **CFMS**, several other non-profit organizations, and several credentialed professionals.

The **BLM's** fossil-focussed agenda for the February Field Tour and **DAC** meeting was a welcome nod to the Rockhound-Fossil community's input on the proposed Rule under **PRPA**.

The key DAC meeting agenda of particular interest to Rockhounds included the **PRPA**, **MTNM**, **Desert Renewable Energy Conservation Plan (DRECP)**, and Disturbance Caps. Damage caused by OHVs during the **King of the Hammers** event (February 3-11, 2017) elicited spirited and extended discussion initiated by Council member **Billy Mitchell**, who represents Ranching and Grazing. Conversely, the



Left to right: Mike Ahrens, Needles BLM Field Office Manager; Kyle Sullivan, Mojave Trails National Monument Manager; Randy Banis, Desert Advisory Council Chairman and Beth Ransel, California Desert District Manager at the unveiling of the new Amboy Crater National Natural Landmark sign during a field trip through the Mojave Trails National Monument on February 24, 2017. Photo: Steve Razo, BLM.

desert tortoise relocation program received scant mention, despite being both controversial and enormously ambitious – 1500 tortoises are slated to be relocated onto **BLM** land (see: <https://www.blm.gov/press-release/update-blms-record-decision-tortoise-relocation-public-lands>). A few members of the public managed to enter a few choice words into the record.

A condensed overview and observations on the three primary topics covered at the **DAC** meeting – **PRPA**, **MTNM**, and **DRECP** is given below.

I. PRPA

BLM has few paleontological specialists, so **Phil Gensler** from the Santa Fe, New Mexico field office was tapped to come and make a presentation. **Lisbet Thoresen** took the opportunity to give him a copy of the **SCPS** comment letter on the **PRPA** letter and spent time reviewing it with him. The letter was also entered into the record as part of comments delivered by **Lisbet Thoresen** and other Rockhound advocates, including **Marcia Goetz**, **Ruth Hidalgo**, **Sam Merk**, and **Ofelia Warthen**. The number of signatories (64) to the letter was recited aloud to impress upon everyone present that the Rockhound community is a consequential Stakeholder whose opinion on the **PRPA's** rule matters. Chairman **Randy Banis** asked **Thoresen** to show the 10 pages of signatures appended to the 6-page letter to impress upon the Council members and **BLM** staffers that our community rallied together in huge numbers out of concern about parts of the Proposed **PRPA** rule. (Thank you, Randy Banis.)

II. MTNM – Management Plan

Kyle Sullivan came from Colorado to take on management of the **MTNM**. At this point in time, the Stakeholders are much more familiar than he with the traditional uses of public lands in the Southern California desert and the accommodations made in deference to renewable energy projects which disadvantage Stakeholders. It is now a sobering realization that overlaying management plans, travel plans (e.g., **WEMO**), and land use amendments (**DRECP**) cannot be reconciled to produce a management plan for **MTNM** within three years of the national monument proclamation. Despite the federal mandate that a plan should be published within three

years of a proclamation, it is not a binding rule. **Sam Merk**, representing rockhounds, reminded the Council that 23 years have passed and Red Rock Canyon still has no management plan. She beseeched the **BLM** not to allow **MTNM** to languish. No one at **BLM** is going on record saying that the federally mandated deadline will slip, but unofficially, five years is looking like an optimistic goal.

In the meantime, a subgroup to the **DAC** for **MTNM** has been created. Applications are being accepted through April 10, 2017 (see: <https://www.blm.gov/sites/blm.gov/files/get-involved-rac-california-desert-district-mojave-trails-subgroup-application.pdf>). The successful candidates will be announced at the June **DAC** meeting. Only then can the management planning process really begin. A Rockhound advocate needs to be on that sub-group.

Unofficially, one of the new **DAC** members confided to **Lisbet Thoresen** that the **MTNM** Management Plan is being observed from Sacramento and Washington D.C. as the beta model for **BLM** administration of public lands under the **National Monument** designation. **MTNM** could have been brought into the **National Park Service**. Instead, the **MTNM** administered by **BLM** will test the efficacy of making accommodations traditionally disallowed, especially under administration by agencies other than **BLM** (i.e., **National Park Service** and **U.S. Forest Service**, **Fish and Wildlife**).

MTNM needs to be successful under **BLM** administration, not only for **BLM** and local special interest groups, but also because, if done well, it will be a blueprint replicated elsewhere in the United States. A bad process or a bad outcome for **MTNM** could portend the end of accommodations that otherwise might be contemplated for **BLM** management of other **National Monuments** in the future. This Management Planning Process needs to go well, and Rockhound need to engage in a full court press.

III. DRECP – Transitioning to Implementation (100 Day Plan)

Russell Scofield relocated to Southern California from the **BLM** office in Sacramento last year to oversee implementation of the **Desert Renewable Energy Conservation Plan (DRECP)** with the local counties. He announced the drafting of the First 100

Days Plan at the **DAC** meeting held in Riverside in October 2016. The Plan is a schedule of actionable items, then priorities, budget, and scoping. He assured the **DAC** members and the public that the Plan would be developed in consultation with Stakeholders, including recreation groups. Omitting Rockhounds from the recreation groups he cited, several Rockhound advocates who self-identified as Stakeholders proffered comment, speaking about Rockhounding values and asking to be consulted during the planning and implementation process.

The initial draft version of the First 100 Day Plan was presented at the February 25th meeting in Barstow. A hard copy of the 51/4-page document was distributed to the **DAC** members but not to the public at the time the presentation was made. (It was emailed to the attendees who requested it on February 27th.) It has been uploaded to the **SDMG** website at (short url: <https://goo.gl/mfxls6>). Rockhounds are encouraged to circulate it – as of April 1st, it appears that it still has not been posted to the **BLM** Web site.

During his presentation, **Mr. Scofield** reiterated his commitment to public engagement, saying that the First 100 Day Plan had been developed in consultation with Stakeholders. The hard copy document included a list of solar project permit petitions, which **Mr. Scofield** did not reference in his oral presentation.

Critical comments were made by both **DAC** members and the public. First, upon reviewing the document just made available to the Council members, **Leslie Barrett** cautioned **Mr. Scofield** on the importance of public engagement and transparency throughout the process,

admonishing him to make documents available for public review in advance of the **DAC-BLM** meetings. **Mr. Barrett** cautioned that the **DRECP** team could not expect to enlist public trust late in a process that did not include their input or consultation from the beginning. Perusing the hard copy of the draft, **DAC** chairman **Randy Banis** alerted Rockhounds in the audience to the list of solar project applicants petitioning for permits to build in **Development Focus Areas (DFAs)** that encroached into known Rockhounding localities (see Fig. 1 below).

The comments by **Mr. Banis** and **Mr. Barrett** prompted **Lisbet Thoresen** to comment that no one at **CFMS** had been consulted on the First 100 Days Plan despite **Thoresen** having reached out to **Mr. Scofield** in October. **Thoresen** also called attention to the explicit assurance made by **DRECP** Program Manager **Vicki Campbell** in a conference call on September 13, 2016 that **DFAs** were changed in the final **Record of Decision (ROD)** where they intruded Rockhounding localities. **Ms. Campbell** said that the changes were made in response to numerous detailed comment letters submitted to the **DRECP**

BLM California Solar Applications within the DRECP

Field Office	Project Name	Applicant Name	Project Type	Application Received	Capacity (MW)	BLM Acres	Geographic Location
Palm Springs	Palen/Maverick	Palen Solar 1, LLC (EDF)	Photovoltaic	3/13/2007	500	4,200	Desert Center area in Riverside East Solar Energy Zone - DFA
Palm Springs	Desert Quartzite	First Solar	Photovoltaic	9/27/2007	300	4,998	Blythe area in Riverside East Solar Energy Zone -DFA
Palm Springs	Crimson Solar	BrightSource	Photovoltaic	5/12/2009	450	4,000	Palo Verde Mesa, Riverside East Solar Energy Zone - DFA
Palm Springs	Jupiter	SunEdison	Photovoltaic	7/6/2015	250	1,800	Riverside East Solar Energy Zone - DFA
Ridgecrest	Camino	Aurora Solar, LLC	Photovoltaic	11/10/2015	40	670	Kern County - DFA
Ridgecrest	North of Kramer	First Solar	Photovoltaic	3/3/2016	440	3,913	San Bernardino County, north of Kramer Junction - DFA
Palm Springs	Io Solar	First Solar	Photovoltaic	5/23/2016	400	2,800	Riverside East Solar Energy Zone - DFA
Barstow	Oro Grande	Celtic Energy Corp	Photovoltaic	5/23/2016	100	1,058	Western San Bernardino County - DFA
Barstow	Lucerne Valley	Celtic Energy Corp	Photovoltaic	5/23/2016	40	516	Western San Bernardino County, near Hwy 247 - DFA
Palm Springs	SunPower	SunPower	Photovoltaic	7/16/2016	400	2,000	East of Desert Center, Riverside East Solar Energy Zone - DFA
Total:	10 applications				2,920	25,955	

Fig 1. Table from the BLM Draft DRECP: Transitioning to Implementation (2/24/2017).

(the comment period closed on February 23, 2015).

Needless to say, the **DRECP** implementation process is not off to a confidence-inspiring start. A **DRECP** subgroup to **DAC** was formally approved at the February meeting and applications may be found on the BLM Web site at: <https://www.blm.gov/sites/blm.gov/files/get-involved-rac-california-desert-district-drecp-subgroup-application.pdf>. Clearly, a Rockhound advocate needs to be on the **DRECP** subgroup advising the **DAC**. The deadline for applications is April 17, 2017.

Stay current with **News.bytes**

The BLM California newsletter

Editor's Note: The BLM's website, including the online newsletter, News.bytes, is undergoing long term maintenance. This overhaul has been going on since the Fall of 2016. These are important and useful resources.

Email BLM and tell them that getting their resources back online should be a high priority:

<https://blmca.sites.usa.gov/contact-us/>

Comment Period closes on proposed NCL Withdrawal

THANKS TO RUTH HIDALGO, who drafted a comment letter on the proposed public lands withdrawal from location and entry under US mining laws. The comment period closed on March 28th. **Ms. Hidalgo's** letter was written on behalf of the **Sierra Pelona Rock Club**, whose members always turn out for **BLM** meetings and Field Tours.

Ruth invested a tremendous amount of time identifying areas in the Proposed Withdrawal that appear to conflict with rock and mineral collecting areas. It was a challenge, because the maps provided by **BLM** were practically unusable references for trying to determine where the overlaps existed. Of particular concern was a possible encroachment into or immediately adjacent to **Hauser Beds**, which is subject to an MOU signed only last May 2016.

In the light of the executive order signed recently which recinds the proposed regulations covering mining on public lands, it is not at all clear whether or not comment letters are moot or provide a measure of insurance by going on record in case the proposed regulation is revived or modified at a later time.

Despite the time constraints, several clubs were able to reach out to their boards to obtain

Notice of Proposed Withdrawal; California Desert Conservation Area and Notice of Intent To Prepare an Environmental Impact Statement; California

The Bureau of Land Management (BLM) petitioned the Assistant Secretary of the Interior for Land and Minerals Management to withdraw 1,337,904 million acres of California Desert National Conservation Lands from location and entry under the United States mining laws for a period of 20 years, subject to valid existing rights. All of the lands (unless otherwise subject to an existing withdrawal) will remain open to the public land laws, leasing under the mineral and geothermal leasing laws, and disposal under the mineral material sales laws. The lands are located in the California Desert Conservation Area.

Source: <https://www.federalregister.gov/d/2016-31231>.

a quorum and approve signing onto the letter. Ruth Hidalgo appreciated very much having the support and signatures of **Doug True** for the **American Lands Access Association** and **Ye Olde Timers Club**; **Jim Betz** for the **Antelope Valley Gem and Mineral Society**; and **Shirley Leeson** for **San Diego Mineral & Gem Society**.

The final comment letter can be viewed on the SDMG Web site at our short URL: <https://goo.gl/qBDoXw>.

A Dinosaur for California!

by Karol McQueary

President, Southern California Paleontological Society (SCPS)

CALIFORNIA, like all states, has many symbols – the state tree (redwood), state marine fish (Garibaldi), state fossil (*Smilodon fatalis*), and even a state insect (the dogface butterfly), just to name a few. But now, thanks to an enterprising law student's idea two years ago, it looks like California will also have an official state dinosaur. This dino, *Augustynolophus morrisoni*, is a crested hadrosaur, an herbivore about 26 feet in length, and is only found in California. It dates to the late Maastrichtian Age, thus placing it as one of the last known dinosaurs before the K-T extinction. Only two specimens have been uncovered, both in the Moreno formation of the Panoche Hills of Fresno County, roughly in the geographical center of the state.



Augustynolophus, reproduced courtesy of @augustynolophus.

The two specimens, excavated from 1939 to 1940 by a team from the California Institute of Technology (Caltech), were thought to belong to the *Saurolophus* genus, but recent in-depth study of the fossils revealed that the cranial structure was quite unlike the other *Saurolophus* dinosaurs. A paper co-authored in 2014 by **Albert Prieto-Márquez, Johathan R. Wagner, Phil R. Bell, and Luis M. Chiappe** (currently VP of Research and Collections and Director of the Dinosaur Institute at the **Natural History Museum of Los Angeles**) amended the taxonomy and provided a new name for the dinosaur, one honoring both a patron and supporter of the field of paleontology at **NHM** and other institutions, **Gretchen Augustyn**, and paleontologist **Dr. William J. Morris**.

A bill to designate this dinosaur as an official symbol of the state is currently going through the legislative process in Sacramento. This bill, AB 1540, authored by Assemblymember Richard Bloom of the 50th Assembly District, passed through Assembly

committee and will now be taken to the Assembly floor for a vote. From there it will go through the same process in the State Senate and then on to Governor Jerry Brown for signature. The Southern California Paleontological Society is joining the effort as a co-sponsor, and society members will be appearing before the State Senate to speak for passage of this bill. Because one of the stated purposes of this bill is to increase children's interest in science, SCPS is asking its young members for their support in writing letters, petitions and posters in support of AB 1540. These will be presented at the Senate hearing later in April.

The effort to designate *Augustynolophus morrisoni* as an official California state dinosaur is gaining momentum. It is a piece of bright news in an otherwise news-weary time, and we have every expectation that this will soon be a part of California history. Stay tuned for the final outcome!

This article is reproduced by permission courtesy of Karol McQueary.

Editor's note: **Karol McQueary** alerted us to Assembly Bill 1540 introduced by California Assemblymember **Richard Bloom**. All California gem-mineral-fossil clubs are invited to endorse the bill. While our club may have been a little biased in favor of nominating the nodosaur (from San Diego) for state dinosaur, the board of **San Diego Mineral & Gem Society** has voted to sponsor the bill in support of *augustynolophus*. If your club would like to support the bill, please act immediately and email **Karol McQueary** at: socalpaleo@yahoo.com. You can also show your support by following [@augustynolophus](https://twitter.com/augustynolophus) on Twitter at: twitter.com/augustynolophus. Spread the word!

Augustynolophus and other California dinosaurs

by Andrew Hoekstra

Paleontological Resources Specialist, CFMS

AUGUSTYNOLOPHUS is an appropriate candidate for state dinosaur. Another good candidate might be the **anklyosaur**, or possibly a **nodosaur**, which was discovered in Carlsbad. As the first **Anklyosaurid** discovered west of the Rocky Mountains, **nodosaur** is significant for establishing a connection between coastal and interior faunas. It has also been designated as a new genus and species, and it is unique to California. Apparently, the **San Diego Natural History Museum** has some of the bones and a life-size reconstruction on display (I have never been there).

Augustynolophus morrisi is on display at the **LA County Museum**. "State dinosaur" status can be useful in education for teaching about ancient California's paleogeography, geological history, and life of the past.

Almost all of the few dinosaur remains that have been found in California are **hadrosaurs** (duck-billed dinosaurs). Most of these isolated bones have not been identified as a specific

species. *Augustynolophus morrisi* is the exception, since the specimens discovered are more than a few isolated bones. It was originally assigned to "**Saurolophus**," but in 2014, it was described as a new genus and species (based upon the anatomy of the crest). There are few dinosaur fossils in the state, because the area was mostly under water. The western United States was then the continent of Laramidia, bordered on the east by a sea running from the Gulf of Mexico to the Arctic that split North America in two. Off the west coast of Laramidia during much of this time, in what is now California, were islands. The dinosaur remains found in our state are thought to represent carcasses washed out to sea (some California dinosaur bones are encrusted with marine creatures such as oysters). Marine reptile fossils are more abundant in California than dinosaurs. There is a dinosaur track site in the Southern California desert, but it dates from a much earlier time (170 MYA).

Learn more...

https://www.researchgate.net/figure/264826222_fig1_Figure-1-Skeleton-of-a-referred-specimen-of-Augustynolophus-morrisi-LACMCIT-2852-a-gustynolophus-morrisi-LACMCIT-2852-a
or short URL: <https://goo.gl/hcmXzV>

https://www.researchgate.net/publication/264826222_The_late-surviving_%27duck-billed%27_dinosaur_Augustynolophus_from_the_upper_Maastrichtian_of_western_North_America_and_crest_evolution_in_Saurolophini or short URL: <https://goo.gl/K5IW1i>

Ruby & Sapphire: A Gemologist's Guide

by Richard W. Hughes, Wimon Manorotkul and E. Billie Hughes

Reviewed by Bill Larson
President of Pala International

RICHARD W. HUGHES' NEWEST BOOK on ruby and sapphire is a fifth volume authored or edited by Hughes beginning with *Corundum* published in 1990 followed by *Ruby & Sapphire* (1997); *The Book of Ruby and Sapphire*, edited by Hughes (2012); *Ruby & Sapphire: A Collector's Guide* (2014); and culminating in this 816-page crown jewel.

With *Ruby & Sapphire: A Gemologist's Guide* Hughes has enlightened all interested collectors and gemologists. Various plates and stories, all worthy of repeating, appear again from the first edition, but the plethora of new material is overwhelming and excellent: some from newly discovered antiquarian references, to new treatments, and of course new localities. This book covers the world of ruby and sapphire.

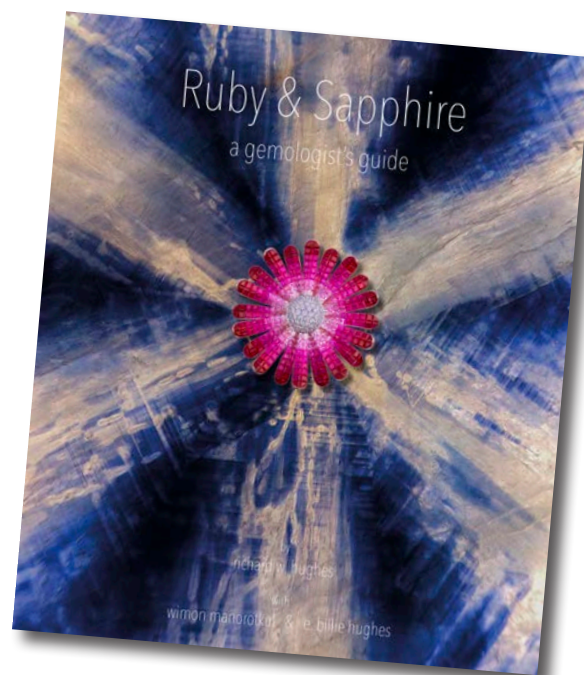
In this guide Hughes approaches his subject in 12 chapters with the help of several world experts including Lisbet Thoresen, John Emmett, and John Koivula, among many others. I believe that most everything anyone could hope to learn regarding ruby and sapphire is covered beautifully in this volume. The table of contents fills three pages on all things ruby and sapphire.

The photos, maps, and illustrations that accompany each chapter are carefully selected, being exquisite examples of rough and cut gems, as well as world class locality images, many by the book's three authors who have visited numerous important localities personally. Each chapter has a topic-specific bibliography.

There are several sections of very tasteful ads to help defer the enormous costs of producing this magnificent book. Fortunately, most feature superb examples of ruby and sapphire to delight the eyes.

The only slight criticism I have is, at 10.14 lbs., the book is hard to hold for comfortable reading. I hope the book is revered enough that a second edition of two volumes could be printed.

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Ruby & Sapphire is an exceptional work that any gem collector, gemologist, layman or connoisseur will treasure.

Specifications

Ruby & Sapphire: A Gemologist's Guide

Authors/Editors: Richard W. Hughes, Wimon Manorotkul and E. Billie Hughes

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Dimensions: 9 3/4" × 11 7/8" × 2 3/8"

Format: Hard cover.

Retail price: US \$200.

Shipping: \$85.00 (Thailand to most US addresses)

Contact: richard@lotusgemology.com

Richard Hughes will be a speaker at the Sinkankas Symposium, held at GIA in Carlsbad on April 8, 2017.

Reserve a copy of the book for pick-up and save on shipping cost – cash only, no checks or credit cards. (Note: on-site registration at the sold-out event is not available, and parking reservations are an absolute MUST.)



Above. Rhapsody in blue. Natural sapphire crystal; 12 x 7 x 10 mm; Kataragama, Sri Lanka. Photo: Mia Dixon/Pala International; specimen: William Larson collection.

Top right. Superb examples of rough (18 mm) and cut (11.67 ct) sapphires. From Chapter 10, Judging Quality: A Connoisseur's Guide. Photo: Robert Weldon; specimens: William Larson collection.

Left. Treasures of the Earth. From the book's introductory pictorial: Natural rubies and sapphires from around the world, including Madagascar, Myanmar, Pakistan, Sri Lanka and Tanzania. Crystals range from 14–25 mm in size; cut stones from 2.72–15.20 ct. Photo: Robert Weldon; specimens: William Larson collection.

WORLD SOURCES OF RUBY & SAPPHIRE

Figure 12.61. Map of Malawi, showing the location of Chimwadindu Hill.

Malawi

Malawi is a landlocked country in eastern Central Africa. Part of the western shore of Lake Malawi (a.k.a. Nyasa; African third largest lake), this is a geographically diverse land of great beauty, featuring savanna, jungle and volcanic peaks. Originally settled by Basuto tribes in the 16th century A.D., Malawi was united as a kingdom in 1580, with borders extending far beyond the present, but by 1700 had broken up into smaller fiefdoms. By the 1800s, Nkhosale, on the shores of Lake Malawi, had become Malawi's largest town, centered around the Swahili-Arab jewelry and slave trade.

The famous British explorer David Livingstone reached Nkhosale in 1859, and his reports resulted in the establishment of Christian missions. As was typical of the colonial period, European explorers began Christian missionaries, then European soldiers for "defense" of the same. By 1890, the area was declared a British protectorate, assuming the name of Nyasaland in 1907. In what is sometimes referred to as the "This White Line," this expanse of over 94,000 km² and a million people was administered by ten European civilians, two military officers, 70 Sikh soldiers and 85 porters from Zanzibar. It achieved independence from Britain in 1964.

Malawi is dominated by the Great Rift Valley, a geologic slash running some 6,000 km (3,700 mi) from Syria in the north, through the Dead Sea, to Mozambique/Zambesi River in the south. This rift zone bisects Lake Malawi; the tectonic processes, which are absorbing East Africa from the rest of the continent, have created one of the most highly mineralized zones on Earth. And, one might add, one of the most beautiful countries – Malawi.

Chimwadindu Hill

Bloomfield (1958) was the first to report gem-quality corundum from Malawi. The occurrence is the Chimwadindu Hill area of Malawi, some 50 miles (80 km) south of Lake Nyasa, about 5 km from the Mozambique border and some 250 km south of the capital of Lilongwe. Both ruby and fancy-colored sapphires occur in situ. This is in an epidioritic amphibolite, embedded in a coarse aggregate of hornblende crystals, which is itself enclosed in a fine-grained granular matrix of epidote and plagioclase. Most stones are yellow, green or blue, with many parti-colored sapphires found (Rindland, 1969).

Chimwadindu Hill lies in Malawi's Kark Range, at 1,525 m. From this locality come blue, green, yellow and orange (including padparadscha) sapphires, as well as ruby. Many of the sapphires are pale in color and thus are heated, but the ruby requires no treatment. The largest ruby said to be produced is 15 ct.

Another locality, Mwanza, is said to produce corundum, but little gem material.

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Bark, H., and Pines, S. (1990) New sources for gemstones, rubies and sapphires. *G&J*, Gemstone, April, p. 7, 1991.

CHAPTER 12

Figure 12.62. Mining for ruby and sapphire at Malawi's Chimwadindu Hill mine. Photo: E. Bille Hughes, 2013.

The deposit is worked primarily in the April to October dry season. I first came across Malawi's corundum about 1983, when an Indian company was offering stones at the Tucson Gem Show. I brought a few of various colors, normally adding this land to my bucket list of places for a future visit. Later, in 2002, I met a British man, David Hargreaves, in London, who had obtained a lease to work the mine. Sadly, things did not work out as expected for Hargreaves.

In August of 2013, some thirty years after first setting eyes on the stone from Chimwadindu Hill, I was finally able to pay a visit with my daughter, Billie. The mine at the time was being run by Abdul Mahomed, who had put in a modern washing plant and aims to bring Malawi to the attention of gem lovers around the world.

Another locality, Mwanza, is said to produce corundum, but little gem material.

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Bark, H., and Pines, S. (1988) Rubies worth coming from Malawi. *Gems & Jewels*, Vol. 1, pp. 121–122, 1991.

Bark, H., and Pines, S. (1990) New sources for gemstones, rubies and sapphires. *G&J*, Gemstone, April, p. 7, 1991.

Chapter 12, World Sources, occupies pp. 430–707, literally taking the reader from A(fghanistan) to Z(imbabwe). Well-known localities are discussed, as well as more unfamiliar ones such as the deposits of Malawi (shown above).

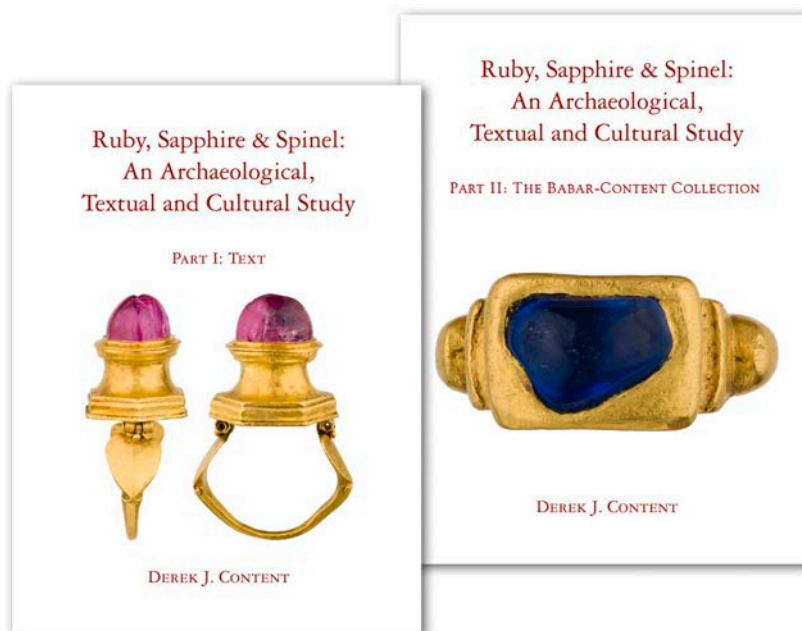
Ruby, Sapphire & Spinel: an Archaeological, Textual and Cultural Study

by Derek J. Content

Reviewed by Lisbet Thoresen

DEREK CONTENT has been described as a “connoisseur-collector in the classical mode.”[1] It is fair to say that he has pushed the envelope on that characterization. As a collector and dealer specializing in ancient to medieval glyptic (gem carving) and jewelry, he is perhaps best known for his collection of ancient Roman cameos.[2] He has always ventured further afield of the mainstream of western ancient gem studies. His acute attention to the particular, to the specific – cameo carving, for example – has always been focused in relation to historical and cultural context that extends beyond the traditional boundaries of the classical world.[3]

The acquisitive impetus that set Mr. Content traveling for many decades, especially to India and Southeast Asia, gave him direct exposure to present-day lapidary industries in different parts of the world. It provided awareness of the lineage of gem art and jewelry making dating back to antiquity. His travels have informed his uniquely qualified perspective on the possible connections linking gem sources with gem carving and workshop locales. His travels also provided opportunities to develop an immersive familiarity with ancient/historical literature written about gems and their sources. The synthesis of knowledge and experience accrued over a



Covers. *Left*, two views of a gold finger ring (44.9 x 28.3 x 18.8 mm) set with a high-domed ruby cabochon bearing two engravings: a.) an “Indus River dolphin” and b.) a monogram associated with the Greek king Menander I Soter (150–130 BCE). Eastern Hellenistic, ca. 2nd century BCE. No. 2.

Right, gold finger ring (26.6 x 26.3 x 11.75 mm) set with an irregularly-shaped cabochon, a dark blue sapphire. Gupta or Hephthalite, 4th–6th century CE. No. 21. Photos by Gonzalo Salcedo.

long career spanning more than four decades is like no other and is reflected in the pages of his most recent publication, *Ruby, Sapphire & Spinel: An Archaeological, Textual and Cultural Study*.

Taking its two parts in reverse order, *Ruby, Sapphire & Spinel, Part II*, is a catalogue of a special category of glyptic from the collection of Riaz Babar and Derek

- 1.) Weideger, Paula. (2006, Sept. 30) Portable sculpture and other gems. Financial Times. Retrieved from <http://www.ft.com/cms/s/0/37aad9f6-5020-11db-9d85-0000779e2340.html> or short URL: <https://goo.gl/YtQ9cr>
- 2.) Henig, Martin. (1990) Content Family Collection of Ancient Cameos (Oxford: Ashmolean Museum), 135 pp.
- 3.) Content, Derek J. (1990) Thoughts on Portable Sculpture in Precious Stone. In: Henig 1990 (see note 3).



Finger ring (2 views). Gold ring set with its original sapphire intaglio, engraved with a peacock facing front and its tail feathers open. Wt. 8 g; 26.2 x 21.1 x 11.3 cm. Sasanian, ca. 5th–6th century AD. D. Content, *Ruby, Sapphire & Spinel: An Archaeological, Textual and Cultural Study. Part II: The Babar-Content Collection* (Turnhout 2016), 238–241 pls [unnumbered] no. 35. Photos: Gonzalo Salcedo.



Finger ring (2 views). Heavy gold ring set with its original cabochon gems, one blue sapphire and two rubies. Java, 9th–10th century. Wt. 14.9 g; 22.1 x 24.6 x 15.8 mm. D. Content, *Ruby, Sapphire & Spinel: An Archaeological, Textual and Cultural Study. Part II: The Babar-Content Collection* (Turnhout 2016), 94–95 pls [unnumbered] no. 32. Photos: Gonzalo Salcedo.

Content, which is beautifully photographed by Gonzalo Salcedo. The collection is remarkable for the gem materials presented. Sapphire was never a common gemstone in the ancient world, but ruby and spinel were exceedingly rare. There are a handful of published examples. Mr. Content's book now fills some glaring gaps in the putative ancient gemstone repertoire. It is not that so many examples are added – ruby, and especially spinel, were extremely rare until a relatively late date – but he qualifies the cultural setting of their occurrences very specifically.

The Babar-Content collection is remarkable also for the cultures represented and the lapidary and jewelry techniques exemplifying them. I cannot think of another published collection remotely similar for its range. Indeed, this collection catalogue and discussion

(Part I) fill several significant gaps in ancient/historical gem studies. Most important, it tethers the western cultures of the classical world to the rest of the *oikoumenē* (known world) in antiquity.

The geo-cultural range represented by this collection of 99 catalogue entries (a mixture of single and group items) provides a bridge between epochs and across cultures. It covers gem carving in the ancient classical world (Greece and Rome) and Europe through 1650 and into the modern era through the 20th century. The geo-cultural benchmarks between antiquity and modern times are represented by glyptic produced in the Islamic world, India and Sri Lanka, China, and the countries of Southeast Asia – Vietnam, Cambodia, Thailand, and Burma.

The Babar-Content collection provides an important reference for cultural preferences in gem carving specific to different periods and places of manufacture. It includes fashioned, unengraved gems mounted in finger rings or other jewelry; some gems bearing inscriptions; intaglios; cameos; and faceted stones. The collection reflects varying degrees of cross-cultural diffusion of artistic forms, while the gold jewelry settings show highly distinctive, regional developments. The persistence of localized or vernacular differences over time, especially in the metal work, is both intriguing and instructive.

Antiquarians and students interested in the history of glyptic, particularly gem engraving in western cultures, and archaeologists specialized in the ancient gem trade, will find that Part I of this two-volume set provides illuminating discussion with much useful information not found anywhere else. No doubt, it will be a first introduction for many ancient gem scholars to a literary terra incognita beyond the familiar firmament of classical texts such as *On Stones*, by Theophrastos and *Natural History*, by Pliny the Elder. Together, the two complementary volumes are an indispensable reference in any library.

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Brooch. Gold, diamond and ruby sarpech (brooch), once belonging to the Maharaja of Patiala. The jewel is set with 133 diamonds, 15 Burmese rubies and one large natural pearl (23.5 mm). Date of manufacture ca. 1920s to 1930s. Wt. 85.5 g; 13.8 cm l. D. Content, *Ruby, Sapphire & Spinel: An Archaeological, Textual and Cultural Study. Part II: The Babar-Content Collection* (Turnhout 2016), 238–241 pls [unnumbered] no. 93. Photo: Gonzalo Salcedo.

Specifications

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Photographs: Gonzalo Salcedo

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Contact/orders: info@brepols.net

Website: http://www.brepols.net/Pages/ShowProduct.aspx?prod_id=IS-9782503568089-1

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APRIL

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Hours: 10:00am – 4:00pm daily

Admission & Parking: Free.

Contact: Ray Pearce, 760-726-7570

or raysrocks@cox.net

Huge open-air event in a pretty setting. Rain or shine, come shop for unique and handcrafted items, jewelry, rocks, gems, minerals, rough, cabs, slabs, beads, books, and tools. Kid World Fun Zone on Saturday. Raffle on Sunday with over 50 prizes plus a Grand Prize. Demonstrations and great food.

14-16 DENVER, CO

Colorado Mineral & Fossil Show

Venue: Crown Plaza Denver Airport Convention Center, 15500 E 40th Ave., Denver, 80239

Hours: Fri & Sat 9am – 6pm, Sun 10am – 5pm

Admission & Parking: Free

Contact: Sandra Gonzales,

rockygems@comcast.net

Web: www.rockygems.com

22-23 THOUSAND OAKS, CA

Conejo Gem & Mineral Club

Venue: Borchard Park Community Center

190 Reino Road at Borchard Road, Thousand Oaks, CA 91320

Hours: Sat & Sun 10-5

Admission: Free

Contact: Robert Sankovich 805-494-7734

or rmsorca@roadrunner

Web: www.cgamc.org

Gems, lapidary, minerals and fossil exhibits; dealers selling beads, geodes, jewelry, books, crystals, fossils, and tools. Demonstrations and youth activities.

Vista Gem & Mineral Society 2017 Show

April 7 – 9, 2017

Antique Gas & Steam Engine Museum

2040 N. Santa Fe Ave.

Vista, CA 92083

Fabulous vendors

in a fabulous rustic setting

If you've never been to a VGMS show at the Antique Gas & Steam Engine Museum, you gotta see it – it's a hidden treasure (see details at left)



JOHN E. GARSOW ***gems & minerals***

April 14-16, 2017

Colorado Mineral & Fossil Show

Denver

Crown Plaza Denver Airport Convention Center

Facet Rough • Cabbing Rough

Jewelry • Mineral Specimens

www.johngarsow.com

29–30 LANCASTER, CA**Antelope Valley Gem & Mineral Society
Annual Show**

Venue: Lancaster High School
44701 32nd Street West, Lancaster, CA 93536

Hours: 10:00am – 5:00pm daily

Admission & Parking: Free.

Website: avgem.weebly.com

Dozens of Vendors from all over the Western States will have everything from diamonds to agates and jewelry to books for sale and on display. Silent Auction running all day, both days, plus a Raffle. Hamburgers, hot dogs. Come and spend some time with us as we celebrate the world of Rocks!

MAY**5–7 YUCAIPA, CA****Yucaipa Valley Gem & Mineral Society
Yucaipa Music & Arts Festival**

Venue: Adams St. & Yucaipa Blvd.

Hours: Fri 6:00–9:00pm;

Sat 11:00am – 10:00pm; Sun noon – 6:00pm

Admission and Parking: Free. Public welcome.

Contact: Lee Peterson, 909-794-0731

or res09ayd@verizon.net

Web: www.yvgms.org

Top quality dealers offering awesome deals on unique and rare gems, minerals, fossils, jewelry, beads, and more. Raffle with wonderful Prizes from the society and its members, including \$1,000 First Prize! Silent Auction, educational, hands-on activities, and demonstrations.

**6–7 ANAHEIM, CA – 56th Annual Gem, Mineral
& Jewelry Show**

Sponsor: Searchers Gem & Mineral Society

Venue: Brookhurst Community Center
2271 W. Crescent Ave., Anaheim, CA 92801

Hours: Sat 9:00am – 5:00pm;

Sun 10:00am – 4:30pm

Admission & Parking: Free. Public welcome.

Contact: Margaret Hogarth, 909-815-3045

or Hogarth.m@gmail.com

Website: www.searchersrocks.org

Rocks, gems, minerals, fossils, beads, rough, slabs, vendors, gold panning, silent auction, hobby supplies, vintage stones, door prizes, gemstones, grab bags, tools, equipment and

exhibits. Lapidary supplies and demonstrations. Lunch, snacks and drinks are available.

6–7 JACKSON, CA**Amador County Gem & Mineral Society
Gem & Craft Fair at the Kennedy Mine**

12594 Kennedy Mine Rd (off Hwys 49/88)

Hours: 10:00am – 4:00pm daily

Admission: Free.

Parking: \$2.00.

Contact: Gaylene Lichty, 209-245-5388

or mountaingirl@volcano.net

Website: www.amadorgemandmineral.org

(website info may not be current)

see: www.visitjacksonca.com

Rocks, Slabs, Hand Crafted jewelry, Beads, Gemstones and other hand crafted items.

6–7 RENO, NV**Reno Gem & Mineral Society
51st Annual Jackpot of Gems Show**

Reno-Sparks Livestock Event Center;
1350 N. Wells Ave., Reno, NV 89512

Hours: Sat 10:00am – 5:00pm;

Sun 10:00am – 4:00pm

Admission: Adults \$6.00; Seniors/Students \$4,
Kids Free.

Parking: Free.

Contact: Daniel Ellis, 775-229-4420

or sailondan55@aol.com

Web: www.renorockhounds.com

Fifty club member displays; hourly door prizes, and over 25 dealers bringing beautiful gems from all over the world. More than a dozen demonstrations on jewelry making.

19–21 SANTA ANA, CA**West Coast Gem & Mineral Show (Spring)**

Venue: Holiday Inn, Orange County Airport
2726 S. Grand Ave., Santa Ana, CA 92705

Hours: Fri and Sat 10:00am – 6:00pm;

Sun 10:00am – 5:00pm

Admission & Parking: Free. Public welcome.

Dealer List: www.mzexpos.com/dealer-list

Web: www.mzexpos.com

80 dealers, wholesale and retail.

WEST COAST – SPRING GEM & MINERAL SHOW



*Grape Agate
Sulawesi, Indonesia
Photo by Jeff Scovil©*

May 19 - 20 -21, 2017
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Holiday Inn - Orange County Airport
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Paperback Versions Now Available:
Mines of the American West
by Ivan Herring

Due to numerous requests, the *Mines Ghost Towns and Legends of the American West* series of e-books are being made available as paperback, hard copies. The author has started with books on Southern California, as the author has received the greatest number of requests for this area. At the end of February 2017, the books listed below were available from Amazon as paperback editions. (Note: These books are a bit more expensive than the e-books, the difference being primarily to help offset printing costs.)

1. Mines of the American West, Los Angeles County, California, Vol. 1 (Avail. 2/15/2017)
2. Mines of the American West, San Diego County, California, Vol. 1 (Avail. 2/21/2017)
3. Mines of the American West, Imperial County, California, Vol. 1 (Avail. 2/24/2017)
4. Mines of the American West, Ventura County, California, Vol. 1 (Avail. 2/25/2017)

Mines Ghost Towns and Legends of the American West: currently available in E-Book (Kindle) format. Hard Copy versions of others (than those above); will be developed if demand warrants.

1. Mines of the American West, Orange County, California, Vol. 1 (Avail. 10/2016)
2. Mines of the American West, Imperial County, California, Vol. 1 (Avail. 9/2016)
3. Mines of the American West, Ventura County, California, Vol. 1 (Avail. 4/2016)
4. Mines of the American West, San Diego County, California, Vol. 1 (Avail. 11/2015)
5. Mines of the American West, Los Angeles County, California, Vol. 1 (Avail. 7/2015)
6. Mines of the American West, San Mateo and San Francisco, California, Vol. 1 (Avail. 8/2015)
7. Mines of the American West, Navajo County, Arizona, Vol. 1 (Avail. 5/2015)
8. Mines of the American West, Apache County, Arizona, Vol. 1 (Avail. 4/2015)
9. Mines of the American West, Santa Cruz County, Arizona, Vol. 1 (Avail. 1/2015)
10. Mines of the American West, Greenlee County, Arizona, Vol. 1 (Avail. 11/2014)
11. Mines of the American West, Graham County, Arizona, Vol. 1 (Avail. 10/2014)
12. Mines of the American West, Cochise County, Arizona, Vol. 1 (Avail. 8/2014)
13. Mines of the American West, Gila County, Arizona, Vol. 1 (Avail. 3/2014)
14. Mines of the American West, La Paz County, Arizona, Vol. 1 (Avail. 11/2013)
15. Mines of the American West, Yuma County, Vol. 1 (Avail. 8/2013)
16. Mines of the American West, Pima County, Arizona, Vol. 1 (Avail. 7/2013)
17. Mines of the American West, Pinal County, Arizona, Vol. 1 (Avail. 1/2013)
18. Mines of the American West, Mohave County, Arizona, Vol. 1 (Avail. 6/2012)
19. Mines of the American West, Riverside County, California, Vol. 1 (Avail. 4/2012)
20. Mines of the American West, Millard County, Utah, Vol. 1 (Avail. 3/2012)
21. Mines of the American West, Maricopa County, Arizona, Vol. 1 (Avail. 2/2012)
22. Mines of the American West, Calaveras County, California, Vol. 1 (Avail. 1/2012)
23. Mines of the American West, San Bernardino County, California, Vol. 1 (Avail. 11/2011)

cont'd...

24. Mines, Ghost Towns and Legends of the American West, Yavapai County, Arizona, Vol. 1 (Avail. 10/2011)
25. Mines, Ghost Towns and Legends of the American West, Eureka County, Nevada, Vol. 1 (Avail. 9/2011)
26. Mines, Ghost Towns and Legends of the American West, Nye County, Nevada, Vol. 1 (Avail. 9/2011)

The next book of this series will be on Kern County, California. Anticipated completion sometime in the summer of 2017, as it will be an especially large book.

Lost Mines and Treasure Tales series: based on newspaper interviews, articles and stories from the 1850–1920 timeframe. The premise was to get the earliest possible information on these “lost mine” stories before the passage of time has had a chance to “massage” the facts. Books, in E-book format only.

1. Lost Mines and Treasure Tales of California, Vol. 1 (Avail. 5/2015)
2. Lost Mines and Treasure Tales of Arizona, Vol. 1 (Avail. 1/2015)
3. Lost Mines and Treasure Tales of Western North America, Vol. 1 (Avail. 1/2014)
4. The Lost Adams Mine, Vol. 1 (Avail. 1/2014)

Note: The author is currently working on updated versions of these books, which will be larger, include more stories and background, and will be made available in print form.

Good Guys, Bad Guys and “Maybes” series: dedicated to some of the more colorful characters of the Western United States, many of whom were famous or infamous in their time but are hardly memories today. These are stories taken directly from newspapers of the day, then consolidated and sequenced to depict their lives, or at least the interesting parts. An example is the first book in the series, about Roy Gardner, probably the most famous outlaw you have never heard of. Books, in E-book format only.

1. Roy Gardner: Train Robber, Escape Artist, “Nice Guy,” Vol. 1 (Avail. 1/2015)

Musings from the Frontier series: compilation of interesting stories that the author found while doing research for the series on ***Mines, Ghost Towns and Legends of the American West***. The stories reflect another, simpler time in American History and often reflect values and attitudes that society today seems to have forgotten. Books, in E-book format only.

1. Roy Gardner: Train Robber, Escape Artist, “Nice Guy,” Vol. 1 (Avail. 1/2015)

Riches Beneath Your Feet series: individual minerals and/or mineral groups are currently available in E-Book (Kindle) format. Books, in E-book format only.

1. Atypical Exploration Processes: Unusual Ways and Places to Find Precious Metals, Vol. 1 (Avail. 9/2016)
2. The Potential for Platinum Group Metals in California, Vol. 1 (Avail. 1/2012)

SDMG BOARD MEETING HIGHLIGHTS**March 20, 2017**

In attendance: President Shirley Leeson and Board members Andy Anderson, Donna Beers, Rocio Bergum, Tim Bickford, Bob Hancock, John Kruzel, Lois Lukasky, Jim Parrish, Doug Peeler, Ellen Riceman, Anne Schafer, Dave Smith, Jennifer Stapp and Paul Williams. A quorum was present. **Excused:** Garry Cannon, Wayne Moorhead, Sally Parrish and Dee Smith. **Guest:** Letty Evans.

President: Shirley Leeson congratulated Donna Beers and the Banquet Committee on a job well done. Shirley requested assistance obtaining a program for the April General Meeting.

Treasurer: Anne Schafer reported receipts of \$7,332.41 and disbursements of \$8,378.05 between Feb. 20, 2017, and Mar. 20, 2017, resulting in a loss of \$1,045.64 for the period. The Society is still up \$6,114.75 for the year.

Mineral Division: Garry Cannon reported that the Mineral Division will host the Juniors' meeting on May 12. Lois Lukasky will solicit door prizes for that meeting.

Membership: Total membership as of this date is 736, including 27 honorary and life members, as well as 48 Junior members.

Juniors: Paul Williams will resume teaching the Juniors' Saturday class on March 25. Tim Bickford has agreed to teach once a month. Other qualified cab teachers are urged to assist.

School Director: Wayne Moorhead reported that two new ZAM felt wheels were installed on the polishing arbor. A new slab saw pump was installed on the 24" saw. A new oil gutter was installed on the 18" slab saw. Expanding drum wheels were not holding the sandpaper, so the pulleys were changed to speed them up to 1700 rpm, problem solved. There will be no classes held on Saturday, April 29, the day of the BBQ.

Building Superintendent: Wayne Moorhead and Tim Bickford will look into rekeying the SDMG Building next month.

Donations: Wayne and Dona Leicht donated \$500 to the Scholarship Fund. Jim Rogers donated used equipment, rough rock and slabs. Gerry Alvarado donated stone holders and other items to the faceting class.

Historian: Shirley Leeson has placed photos from previous SDMG Banquets in a binder for viewing.

City Liaison: Jim Parrish spoke with Marie Wiggins in Park and Recreation. A new door repairman has been hired; she and the repairman will come see the east Museum door March 21. An offer to make partial payment for a new door was turned down by the City.

Librarian: Jackie Leverone has volunteered to assist with the Library, keeping it open on Wednesdays, from 9 a.m. to 3 p.m.

Museum Curator: The new UV lights for the Fluorescent Mineral Display have been ordered.

Banquet: Paid attendance was 86, plus 4 comps for the two scholarship recipients and their guests. The raffle of the amethyst grand prize raised at least \$498. The catering expense was \$2,178.00 plus \$350 tip.

Outreach: SDMG intern Conner Tisdale, with mentor Anne Schafer, visited the Heritage of the Americas Museum and the San Diego Natural History Museum, as well as the Himalaya mine dig at Lake Henshaw last week.

New Business: Motion carried unanimously to support nomination of Lisbet Thoresen to two Desert Advisory Committee (DAC) sub-groups: Mojave Trails National Monument and Desert Renewable energy Conservation Plan (DRECP). Shirley Leeson to write letter on behalf of Society, in support of Lisbet Thoresen's nomination.

Motion carried unanimously to change Janet Kaye Marsters' membership designation from "Honorary" to "Life." Shirley Leeson to write letter notifying Janet of the change.

Shirley Leeson showed sample SDMG badge designs to the Board members; a design similar to the current badge design was selected. Board members may order a pin-back badge for \$5.50 or a magnetic-back badge for \$8.00. Tax and shipping will be added to the cost. Badge ordering information will be made available to the membership in the near future.

(Any member may attend Board meetings. The next one is April 17, 2017, at 7 pm in the SDMG Building.)



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Membership Information:

Interested in minerals, fossils, lapidary, gems,
or handcrafted jewelry? We are, too!

Adults (18 and older): \$30.00

Second adult, same address: \$10.00

Junior (under 18): \$10.00

Membership application forms
are available on-line at www.sdmg.org,

and at the Village Silversmiths Shop
in the SDMG Building,

or by contacting the SDMG Membership Secretary
membership@sdmg.org

or by writing to her at:

San Diego Mineral & Gem Society
attn: Angela Cannon

P.O. Box 710783
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Please allow up to 3 weeks for processing your application

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Pin badge is \$5 and magnet is \$8

Make check payable to: **Rockyfir**

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Call (775) 830-5797

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Website:

www.highdesertgemsandminerals.com/

WEBSITES

SDMG:

www.sdmg.org

CFMS:

www.cfmsinc.org

AFMS:

www.amfed.org

PUBLIC LANDS:

www.amlands.org

BLM:

www.ca.blm.gov

BOB'S ROCK SHOP:

www.rockhounds.com

MUSEUMS:

www.sdnhm.org

www.nhm.org

www.amnh.org

www.mnh.si.edu

www.gia.edu



CLASS SCHEDULE – 2017

REGISTRATION IS REQUIRED BEFORE ALL CLASSES.

Email school@sdmg.org for class availability before attending any class to find out when the class starts and ends, if special materials are required and whether you qualify to attend. Fee is \$5.00 per class; it is usually easier for instructors if payment is made for a full month; cash or checks only, please. **Classes are open to members only** and students must read and follow the **School Rules** available in the classroom and at:

<http://www.sdmg.org/class-schedule/school-rules.pdf>

CABOCHONS	Tue	6 – 9pm	Tim Bickford
	Wed	9 – 11:30am	Jim Claypool
	Wed	12:30 – 3:00pm	Jim Claypool
	Wed	7 – 9pm	Andy Anderson
	Thu	7 – 9pm	Jon Evans
FACETING	Tue	noon – 3pm	Elbert McCune
	Tue	7 – 9pm	Jerod Schneider
	Wed	9am – noon	Bob Hancock
	Wed	noon – 3pm	Donna Beers
	Wed	7 – 9pm	Elbert McCune
	Thu	7 – 9pm	Bill Brisebois
BEG. SILVER FAB.	Tue	6 – 9pm	Stephanie Griffin
	Thu	9am – noon	Denny Turner
	Thu	1 – 4pm	Denny Turner
BEG. METALS FAB.	Sun	5 – 8pm	Andy Anderson
INT. METALS FAB.	Sat	4 – 7pm	Andy Anderson
SILVER FABRICATION	Tue	9 – 11am	Lois Lukasky
	Tue	noon – 3pm	Lois Lukasky
	Wed	7 – 9pm	Al Fuente
	Thu	7 – 9pm	Ellen Riceman
	Fri	9:30am – noon	Dee Smith
	Fri	12:30 – 3:00pm	Dee Smith
ADV. SILVER FAB.	Wed	9am – 3pm	Denny Turner
ADVANCED METALS	Wed	9am – 3pm	Jackie Leverone
CASTING	Mon	1:30 – 7:00pm	Rocio Bergum
	Tue	9am – 2pm	Dave Smith
	Fri	5 – 7pm	Rich Yarbrough
STONE SETTING	Mon	by appointment	Miguel Asmar
ROCK CARVING	Mon	9am – 1pm	Jan Kunsu
SPHERE MAKING	Sat	1 – 3:30pm	Paul Williams
JUNIORS	Sat	10am – 1pm	Lois Lukasky

Thomas M. Schneider Quality Gemstones



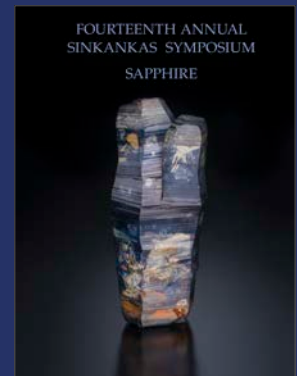
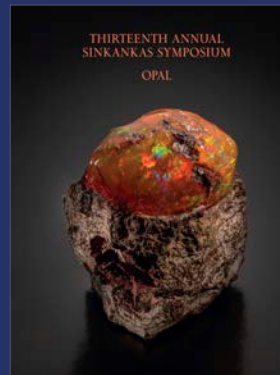
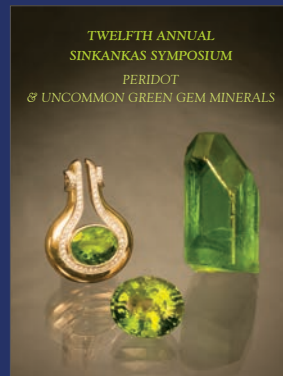
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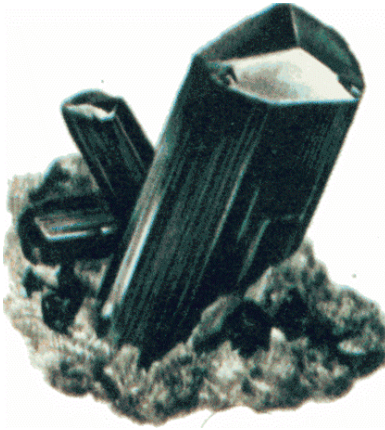
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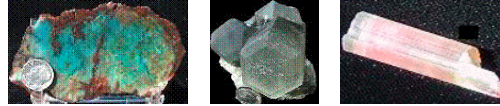
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THE PEGMATITE – APRIL 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3 GSSD Mtg 7pm, SDMG Bldg	4	5	6	7 VGMS Tailgate, Vista 10am – 4pm begin	8
9 VGMS Tailgate, Vista end	10	11	12	13	14	15
16	17 Show Committee Mtg. 6pm SDMG Board Mtg 7pm, SDMG Bldg	18	19	20	21	22
23	24 SDMG General Mtg 7pm, SDMG Bldg	25	26	27	28 SD Fair Deadline for entries 11:59pm PST	29 SDMG Annual BBQ 10am – 4pm Balboa Park
30	1	2	3	4	5	6