

The Opal Express

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Table of Contents

President's Message	1
Members Only Website Password	1
October General Meeting	1
Intro to Opal: Featuring Opals of Australia	1
Opal Lecture Series by Pete Goetz	2
Fossil Shell Impressions in Kilkenny Marble	3
Opal Fossils	5
Illustrious Opals	7
Upcoming Events	8

President's Message

Greetings Opalholics!

Happy Halloween! I hope all of you are still doing well and keeping busy. Halloween this year will definitely be different, but if you choose to celebrate, please do so with COVID safety procedures in mind.

Hopefully you had a chance to listen to Pete Goetz's opal lecture on Sunday, September 27th. This was the first in a series of three. For info on how to register for the next two lectures, please see page 2 of this newsletter.

As always, please stay safe, healthy and keep busy!

Stan McCall
AOS President
Custom Creative Gem Cutting

Member area access is available only to members in good standing. Any other entry is unauthorized.

USER NAME: member
PASSWORD: Freeform27 (case sensitive)

-- October General Meeting --

Due to the on-going pandemic stay-at-home order, we are not planning on a General Meeting for October.

Stan McCall, AOS President

Intro to Opal: Featuring Opals of Australia
at Muzeo.org
presented by
Pete Goetz and Russ Madsen

Pete Goetz gave a ZOOM presentation at the Anaheim Muzeo on Sunday, September 27, 2020. Pete's topic, "Intro to Opal Featuring Opals of Australia", was very well received. Russ Madsen provided supporting comments during the talk and monitored questions from attendees in the virtual audience.

Pete touched on the origins of the word Opal, brought viewers forward through the centuries and right into the structure of opal with electron microscopy. Attendees were treated to a collection of informative and beautiful opal images and helpful scientific scans and graphs while Pete spoke. Highlights of the session included explanations of the word opal, how diffraction interference and dispersion contribute to play of color, the geology of the Australian Great Artesian Basin featuring how it is the Earth's primary source of precious opal plus comments about some primary opal mining areas in the region including the famous underground houses in Coober Pedy.

This was the first presentation in a three part series by the Opal Society via Muzeo's program to bring art and artistry about the gemstone opal to the public. Next two events are Sunday, October 4th and Sunday, October 11th starting at 1:00 p.m. (PST)

Please see page two of this newsletter for info on how to register. If you missed one, the talks are available at the Muzeo Facebook page (click Events).



The American Opal Society
Proudly presents
An opal lecture series
by
Pete Goetz

The Muzeo Historical Museum in Anaheim will be hosting AOS Speaker Pete Goetz on the following dates for his lectures on opals:

October 4, 2020: Opal of the Americas
1:00 p.m. to 3:00 p.m.

Please register to attend a ZOOM session of this lecture:

https://zoom.us/meeting/register/tJcqdoisrzkqHd3u4rGjcANsbO-QEv_x9a9S

After you register, Muzeo will send you an email with further information for the lecture.

October 11, 2020: Purchasing Opal: Store and Internet
1:00 p.m. to 3:00 p.m.

Please register to attend a ZOOM session of this lecture:

<https://zoom.us/meeting/register/tJEkdeCvri8uHtTeyM6xRDZEgKjUpYIQPGnc>

After you register, Muzeo will send you an email with further information for the lecture.

***** Mark your calendars for the above dates! *****

Fossil Impressions in Kilkenny Marble

by Stephen and Mary Aracic



Note the white shell fossils embedded in the black limestone.

Besides digging for gem black opal in Outback Lightning Ridge, and aided by my wife, Mary, having written books about Australia's famous gemstone, there is nothing I like better than a visit to Kilkenny in Southern Ireland.

Besides digging for gem black opal in Outback Lightning Ridge, and aided by my wife, Mary, having written books about Australia's famous gemstone, there is nothing I like better than a visit to Kilkenny in Southern Ireland.

For not only is it the place that Mary comes from but it is an interesting place to be. For instance, there's Kilkenny Castle, Kilkenny Design Centre and Kilkenny Brewery for avid drinkers. Then there's St. Canice's Cathedral, where you can say a few prayers after you've admired the walls of Medieval history, which are made of pillars of pink sandstone and local limestone known as Kilkenny Marble.

It is this marble that is so important as it is a gem in its own right for the shall fossils embedded therein. There's many a home that is graced with a Kilkenny Marble fireplace, all aglow with welcoming warmth.

The historical city of Kilkenny sits neatly beside a kink in the river Nore that flows gently beneath an ancient stone bridge within sight and splendour of Kilkenny Castle.

Much is said about the architectural buildings that Kilkenny is famous for. Most of which are constructed of the distinctive local black limestone known as Kilkenny Marble.

Much is said about the architectural buildings that Kilkenny is famous for. Most of which are constructed of the distinctive local black limestone known as Kilkenny Marble.

But what is least known is that the beautiful marble is embedded with fossilised shells, big and small. I must say it took me ages to notice such a detailed phenomenon with head in the air gazing at stunning buildings or architectural beauty. That is until one day in the pouring rain I shocked Mary out of her boots and nearly caused a pedestrian collision. For there we were, head bent beneath an umbrella, with no option but watch where we were going. Suddenly the white blotches on the rather wet pavement resembled seashells. I couldn't believe it and neither could Mary, who'd walked the same pavement in her youth not noticing them.

Upon closer inspection, it was exciting to spot fairly large sized fossilised seashells in the walls of buildings, especially the Court House. Also of interest was the marble bar in High Street. It is named after the local limestone which becomes black when polished.

Some of the well-known pubs in town feature mahogany and marble bar counters of such elegance that it is a pleasure to be there.

Not far from Kilkenny, along the Dublin Road, lies the quaint little village of Gowran, also of important significance for its historical ruins, which are the scene of many happy wedding photos. And of course famous for Gowran Park Races.

Not far from Kilkenny, along the Dublin Road, lies the quaint little village of Gowran, also of important significance for its historical ruins, which are the scene of many happy wedding photos. And of course famous for Gowran Park Races. It is also within walking distance from Mary's family home.

So it was early one morning that I ventured forth to the Village Centre, called "The Green". My interest took me into Harding's Fireplace store.

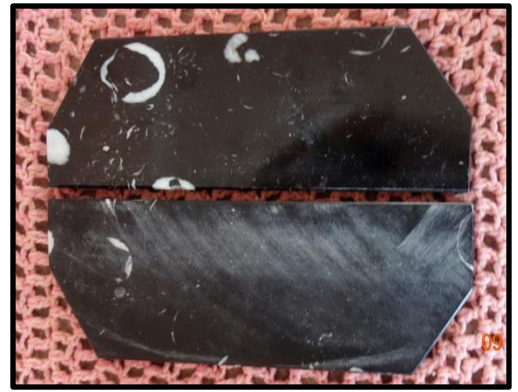
I wanted to talk to the owner about Kilkenny black marble. Having introduced myself, Jim Harding in turn was extremely interested in opal mining at Lightning Ridge and the fact that fossils of prehistoric significance were also found there and preserved for prosperity.

I was delighted when Jim offered to take me to this black marble quarry some distance from Gowran where he excavates choice pieces from a deeper level especially suitable for decorative carvings. I picked up a piece of rock to examine the fossilised shells within and was so intrigued by it that Jim suggested we take it to his shop where he'd cut and polish it into suitable pieces to take back to Australia. Having carefully wrapped it in bubble wrap, Jim knew I'd treasured it.

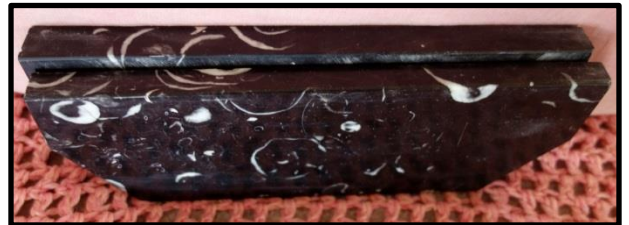
However coming through Customs, my suitcase became the subject of a thorough search. I was asked to identify the bubble wrapped parcel by two Customs Officers. Of course I proudly declared it to be pieces of Kilkenny Marble and was ushered through with no trouble.

They now sit neatly displayed on a table in my home at Lightning Ridge. It didn't take long for Joan Milton of "Metal, Stone & Glass" magazine to notice them when on a visit to Lightning Ridge with her husband Stephen.

Such was their interest in the white markings in the polished black marble that Mary and I thought we'd share this phenomenon with avid readers of Metal, Stone & Glass and The American Opal Society, hoping you all enjoy it.



Polishing makes the limestone turn black. Notice how pretty the fossilised shells look in the black limestone.



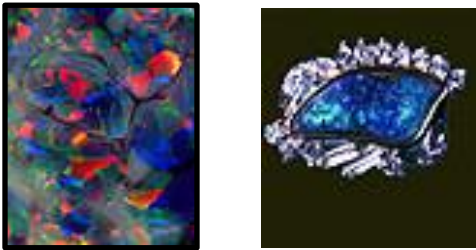
As Editor of The Opal Express, I want to thank Stephen and Mary Aracic for their generosity in sharing their stories with us. This is what the American Opal Society is all about - sharing our love of gemstones with the world. Thank you Stephen and Mary!

Opal Fossils

What are opal fossils? Where are black opal fossils found? What does opalized mean?

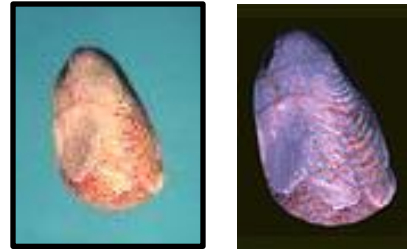
Lightning Ridge – Black Opal Fossils

Only one place on Earth produces black opal fossils - Lightning Ridge in northern New South Wales, Australia. Lightning Ridge is the only opal field in Australia with fossils of diverse land-living organisms - pinecones and platypuses, microscopic protozoans and gigantic dinosaurs. The fossils are usually exact replicas of plant, shell or bone material, and at times they are comprised of gem quality black opal, which is as valuable as diamonds and more beautiful.



Black opal fossils which may be found at Lightning Ridge include remnants of ancient plants, mussels, snails, crustaceans, fish, turtles, plesiosaurs, crocodiles, pterosaurs, dinosaurs, birds, and mammals. 110 million years ago the supercontinent Gondwana was a wilderness of forests of pines, ferns and palms separated by tracts of shallow sea. Dinosaurs and their relatives dominated this landscape, as well as our rare and tiny mammal ancestors. Near the edge of this ancient continent, fragments of the remains of these animals accumulated in the sands of the inland sea. Today deposits at Lightning Ridge in northern New South Wales yield some of the rarest, most beautiful and precious fossils in the world.

Lightning Ridge fossils are three-dimensional replicas of ancient organic objects, transposed into non-precious potch or precious opal. In those that are pseudomorphs, the silica has filled a simple cavity or void, like jelly in a mould, so that only the basic shape and perhaps the surface texture is preserved. However, many specimens are replacement fossils, in which intricate internal structures have been preserved by chemical alternation before the cavity was filled by the silica solution.



Most specimens at the Ridge are a combination of pseudomorph and replacement fossils. Although the transformation to silica has destroyed biomolecular evidence, marrow tissue, blood vessels, capillaries and nerve channels may be perfectly preserved. If the potch is transparent, these features are clearly visible below the surface in opalized bones. A surprising aspect is the opalization of delicate materials like leaves and even dinosaur skin. Many pieces resemble coprolites, reptilian armour scutes or heavy scales; very occasionally, bone specimens seem to show remnants of tendons or cartilage.

This outstanding quality of preservation is partly because the opal-dirt is extremely fine-grained and an ideal casting medium. Kaolinite, smectite, and illite produce the putty-like properties of the opal clay, the smectite making it plastic and malleable.

Most opal fossils found at the Ridge consist of potch (colourless opal), therefore any fossils with colour are rare and valuable. Many fossils are damaged by machinery during excavation, as pick and shovel based operations are giving way to machine-driven excavations. Removing fossil specimens can be a delicate operation, and colourless fossil specimens are largely ignored by miners searching for colour.

South Australian Fossils

The opal fossils of South Australia are both jewels of science and beautiful gems. The Eromanga Sea that covered the interior of Australia 100-120 million years ago was rich in marine life. Ichthyosaurs, plesiosaurs, fish, sharks, ammonites and belemnites swam in the open water. Slow-moving and sedentary animals, such as starfish, crinoids, cockles, mussels, snails and tube-worms lived on the seafloor.

Only those bones and shells that became trapped in seafloor sediment had a chance of becoming fossils. Some were replaced by clear silica, and others by precious opal.



Project manager for Lightning Ridge Opal and Fossil Centre Jenni Brammall with a model of muttaburrasaurus, a dinosaur known from opalized fossils.

One area which yields a vast resource of opal fossils is Moon Plain, approximately 35 km from Coober Pedy in South Australia's outback. Once part of a vast inland sea which covered most of Australia, Moon Plain once teemed with marine life, but is now a wonderland for palaeontologists. South Australia has the best cold water cretaceous marine deposits in the world, and it is difficult to imagine the extreme freezing temperatures of millions of years ago compared with today's scorching heat.

Sources:
"Black Opal Fossils of Lightning Ridge", Elizabeth & Robert Smith, Kangaroo Press, 1999.
Origin Energy Fossil Gallery
<http://www.samuseum.sa.gov.au/fossils/>
Australian Museum Online -
<http://www.amonline.net.au>
From <http://www.opalsdownunder.com.au>

Did You Know?

Opalized fossils include vegetation or wood from the boulder opal fields and opalized clam shells from Coober Pedy . Opalized fossils also include sea shells, teeth, and even Opalized belemnites (squid)· Opalized shells with good colour and small amounts of potch are hard to find· Many are worth more if they are left natural and unpolished·

Source: <https://www.opalauctions.com>

ISSUE
No. 2

Illustrious OPALS

LIMITED-EDITION SERIES FROM THE PUBLISHERS OF Rock&Gem

“Fossil Bee in Opal” Phenomenon Defies Understanding



10 TIPS FOR
CARING
FOR OPALS

Opals 101
PROFOUND
PATTERNS



**WIN AN OPAL
PRIZE PACK!**
Details inside...

Welcome to the second issue of *Illustrious Opals*!

We hope you enjoyed what you read in *Illustrious Opals* #1, and if you haven't yet read it, we recommend you visit the *Rock & Gem* website and click on the Library navigation tab at the top, to access the first issue.

As we've mentioned in past communications, as part of the *Illustrious Opals* series, we're giving away 4 total Opal Prize Packs! Each prize pack contains items provided by our sponsors and more. All you have to do is register your email address at our site to receive access, and notifications when future issues of *Illustrious Opals* are available.

Contents

**03 “FOSSIL BEE IN OPAL”
DEFIES UNDERSTANDING**

By Craig C. Kissick, director of Nature & Science division, for Heritage Auctions

07 WORKING WITH OPAL

By Bob Rush, Bench Tips columnist, Rock & Gem

**09 SPONSOR PROFILE - Getting to Know the
Mind Behind The Arkenstone: Dr. Rob Lavinsky**

By Antoinette Rahn, Managing Editor, Rock & Gem

13 OPAL 101: Pronounced Patterns

15 OPAL AT AUCTION

17 A PASSION FOR CARING FOR AND CARVING OPALS

By Helen Serras-Herman, The Road Report columnist and regular contributor, Rock & Gem

**23 SPONSOR PROFILE - Connecting With a Legend
in Lapidary: Kingsley North, Inc.**

By Antoinette Rahn, Managing Editor, Rock & Gem

27 8 INTRIGUING FACTS ABOUT OPALS

29 OPAL SHOWCASE

Featuring images of opal and opal-related specimens and items provided by the sponsors



An extremely rare specimen of fossilized bee in “jelly” opal from the Pliocene/Miocene Genteng Formations, Java, Indonesia. Heritage Auctions, www.ha.com

This is an interactive issue, simply click on the title of the article to go directly to that page OR use the Adobe Bookmark function on the left of the document to select the page you want.

UPCOMING EVENTS

Reader: If your organization has an opal or rockhound-related event, please email particulars to info@opalsociety.org. Upcoming Event listings will be included at the discretion of The Opal Express editor as space and scheduling permit.

October 10 – 11; TRONA, CA

Searles Lake Gem and Mineral Society
13337 Main St., Trona
Gem-O-Rama Hours: Sat 7:30 am – 5 pm,
Sun 7:30 am – 3 pm
Contact: Jim & Bonnie Fairchild, (760) 372-5356
email: slgms@iwwisp.com
Web site:
<http://www1.iwwisp.com/tronagemclub/>

October 10-11; GRASS VALLEY, CA

Nevada County Gem and Mineral Society
Nevada County Fairgrounds,
11228 McCourtney Road, Grass Valley, CA 95945
Sat 10 am – 5 pm, Sun 10 am – 4 pm
2020 Earth's Treasurers Show:
Dinosaurs Rule – Come see a life size T-Rex skull, plus other fossil displays.
25+ vendors, gold panning activity, lapidary demonstrations, kids crystal dig, a Kids Korner with lots of educational activities, as well as 30 exhibitors. Lazy Dog ice cream, Top Dog hot dog cart, and our 16-1 Mine 1/4 ounce of gold raffle.
Website: <http://www.ncgms.org>

October 11: FALLBROOK, CA

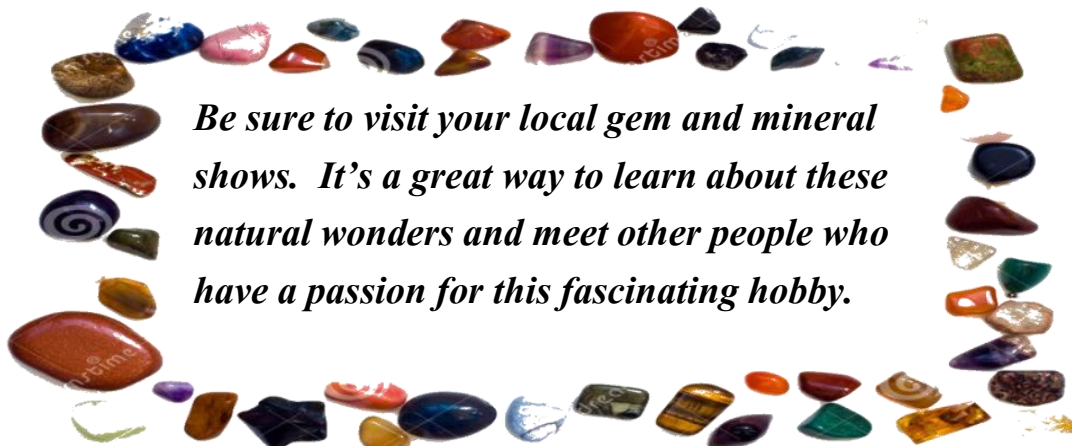
Fallbrook Gem and Mineral Society
123 W Alvarado St
Hours: 9-4
Contact: Michelle Shearer; 760-805-2184
Email: info@fgms.org
Website: www.fgms.org

October 17 – WOODLAND HILLS, CA

Woodland Hills Rock Chippers
First United Methodist Church
22700 Sherman Way, West Hills CA 91303
Hours: 10 am-5 pm
Free Admission and Parking
Silent auction, gold panning, rocks, books, findings, minerals, opals and more
www.rockchippers.org

November 14 – 15: YUBA CITY, CA

Sutter Buttes Gem & Mineral Society
Yuba-Sutter Fairgrounds
442 Franklin Hall, Yuba City, CA 95991
Hours: Sat. 10 am – 5 pm, Sun. 10 am – 4 pm
Contact: (916) 677-6696, horita@comcast.net
Show web site: <http://sutterbuttesgemmin.org>
29th Annual Festival of Gems & Minerals:
Raffle, silent auction, kids table, door prizes, exhibits and 14 dealers.



Be sure to visit your local gem and mineral shows. It's a great way to learn about these natural wonders and meet other people who have a passion for this fascinating hobby.

American Opal Society Membership Application

FILL IN APPLICABLE INFORMATION		DUES / FEES	AMOUNT PAID
DUES:	RENEWING MEMBERS	\$35.00	
SELECT ONE	NEW MEMBERS	\$45.00	
INTERNATIONAL MEMBERSHIP FEE (All addresses <u>outside</u> of USA)		\$15.00	
PRINTED NEWSLETTER FEE (Paper copy postal mailed instead of PDF file by e-mail)		\$10.00	
ADDITIONAL BADGES (Your first badge is <u>free</u> when joining)		\$15.00	
TOTAL PAID DUES plus International, Print or Badge Fees if Applicable:			

Please make check or money order payable to "American Opal Society". Mail payment and application to:

American Opal Society: PO Box 4875, Garden Grove, CA 92842-4875

An optional quicker method of payment is via the internet. To pay via PayPal, please visit the membership page on our website at http://opalsociety.org/aos_application_by_web.htm to complete the form and make your PayPal payment. You may pay with a credit card or via PayPal account. The transaction is completely secure and the AOS never sees your credit card number. The AOS PayPal account is membership@opalsociety.org.

NAME	
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ADDRESS	APT # or PO BOX
CITY	STATE
ZIP OR POSTAL CODE	COUNTRY (IF OUTSIDE USA)
PHONE - Home ()	PHONE - Business ()
E-MAIL	
WEBSITE	
OCCUPATION	HOBBIES and INTERESTS

NAME BADGE ORDER FORM:

PLEASE PRINT NAME AS YOU WISH IT TO APPEAR ON YOUR BADGE using up to two (2) lines of text for your name, nickname, or name of your opal related business.

MEMBERSHIP ROSTER: The AOS publishes a membership roster once per year in its newsletter, The Opal Express. Your name will be included. Please check what additional personal information you listed for other members. If it is different from the information above, please note that on the application.

☐ Address ☐ Phone-landline ☐ Phone-cell ☐ E-mail ☐ Website

Please sign here: _____

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Are Your Dues Due Now?

PLEASE CHECK YOUR ADDRESS LABEL OR NEWSLETTER E-MAIL.

There will be a date that shows the current month/year of your membership. If the date is older than the current date, your dues are overdue.

A Renewal Grace Period of two months will be provided. Please note, that as the system is set up, if your renewal is not received you will be AUTOMATICALLY dropped from membership thereafter. It is your responsibility to assure your dues are current.

Thank you.

The Editor

(revised 11/27/19)

The Opal Express

American Opal Society
P.O. Box 4875
Garden Grove, CA 92842-4875

Volume 53, Issue 10

— GENERAL MEETINGS —

4th Wednesday of the Month
7:00 p.m. - 9:00 p.m.

Anaheim Community Center
250 E. Center Street
Anaheim, CA 92805



TO:



**No General Meeting
for October**



General Meeting Location at:

Anaheim Downtown Community Center

**250 E. Center Street
Anaheim, CA 92805**

Due to the uncertainty of the COVID-19 pandemic and Governor Newsom's stay-at-home mandate, we are cancelling Board Meetings and General Meetings. If we find that using Zoom is a feasible alternative for our meetings, we will let members know the details.

American Opal Society

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Facebook: <https://www.facebook.com/AmericanOpalSociety>
Pinterest: <https://www.pinterest.com/opalsociety>
YouTube: https://www.youtube.com/channel/UCegTIH1IEyO7y8wdqvRfyUA?view_as=subscriber

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