

The Opal Express

Published
monthly by
The
American
Opal
Society

September 2020

Volume 53 Issue 9

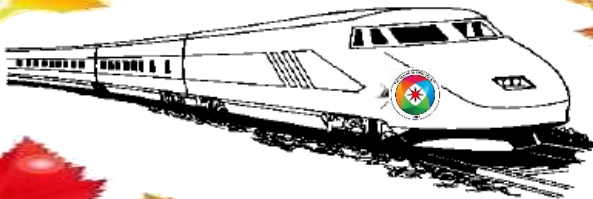


Table of Contents

President's Message	1
Members Only Website Password	1
September General Meeting	1
Welcome	1
Facebook	1
How To Care For Opal	2
Australian "Nessie" Fossils Found	3
Slab Saw Basics	4
Larry's Links	5
Bench Tips	6
Illustrious Opals	7
Upcoming Events	8

President's Message

Greetings Opalholics!

Boy, what a scorcher August turned out to be! I hope everyone managed to stay cool and keep themselves busy, hopefully studying the Illustrious Opals PDF download that Rock & Gems provided (see Page 7).

As mentioned before, plans continue for next year's opal show. If you have ideas about new dealers or displays, or would like to volunteer, please let us know! As soon as the Governor gives California the green light, we will be sending out flyers and postcards.

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: BEntonite (case sensitive).**

-- September General Meeting --

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

Stan McCall, AOS President



Let's give a hardy AOS welcome to our newest members:

Edward Johnson and Robert Macias

Thank you Edward and Robert for joining the American Opal Society!



If you don't already follow us on facebook, you're missing out on some great videos about opal cutting and polishing!

Check us out at:

<https://www.facebook.com/AmericanOpalSociety/>

And don't forget to like our page!

How to Care For Opal Jewelry Advice from a Jeweler, Opal Miner, Opal Cutter and Polisher

by Gary Hocking

Today one of my customers who had bought a \$1,000 opal ring from me told me that her friends had told her to keep her opal ring in a solution of clear mineral oil.

Hmmm! Please don't do that. I have also heard lots of other advice such as keep your opals in water, vinegar, and other solutions. Rub soluble oil on them is another terrible thing that I have heard given as advice.

Some twelve years ago I spent about three months with George Roberts who still cuts and facets gemstones for a living like he has been doing for a very long time. George is a miner and gemologist so he knows what he is talking about when it comes to opals.

When George put an opal in a small ultrasonic machine I was horrified. All that I had heard was that this would surely destroy the opal. George told me that he had never broken one this way.

As a rule I don't tempt fate by doing that anymore but I did some experiments on opals because I wanted to see first hand what would happen when I did.

I got every conceivable solution that I thought people might put opals in and I put them in jars. I put a couple of opals in citric acid, a few more in vinegar, some more in oils, in pickling solutions, numerous solvents such as acetone, then petrol, methylated spirits and the list goes on. I left them there for weeks, months and years and some are still in their solutions.

The result? Nothing happened to the opals! Or, at least on a level that I could perceive.

As an opal miner I can tell you that when you are lucky enough to find opal it is in dry opal dirt, not soggy wet stuff. The mines are generally dry and the temperature is pleasant. The opals have been there like that for millions and millions of years so why should anyone think that they need to be put in oil or some other solution?

As an opal cutter I can tell you what I have been taught to do. In order to cut an opal you need to put it on a stick so that you can hold it to the grinding wheel. We heat the opal up a little and apply hot wax and push the stick and the opal together. After cutting we put the opal in the freezer for a couple of hours so that the wax and the opal contract differently and come apart. In my opinion that is pretty harsh treatment but the opal survives all of this and survives in those horrible solutions that I experimented with.

Here is what my research eventually led me to believe is the best way to care for opal jewelry.

1. Keep it apart from your other jewelry so that it does not get scratched. Abrasion of metal against an opal stone will surely scratch and damage it.
2. Occasionally clean it with a soft brush, perhaps the softest toothbrush in a solution of lukewarm water and very mild detergent. Then rinse and lightly dry with an absorbent cloth but don't rub it dry.
3. If your opals are doublets or inlays then they are held in place with glue so wash them only when necessary.
4. Don't bother putting any solutions on your opals as what ever you use will be absorbed into the stone and may do more harm than good.

But they are reasonably hardy and they can be repaired and re-polished so enjoy them. People say they like being worn. I think that's true as they are exposed to temperatures and conditions that your body is used to and this suits opals as well.

* * * * *

Gary Hocking is an Australian manufacturing jeweler who has his own website:
<http://www.opaljewelryexpress.com> He will make you a beautiful piece of custom opal jewelry. You may copy and distribute this article as long as you keep the bio and a live link to his website. Article Source:
http://EzineArticles.com/?expert=Gary_Hocking

Australian "Nessie" Fossils Found

BBC News
27 July 2006

Australia was once home to ancient reptiles that swam in huge icy lakes, fossil evidence suggests.

The large, carnivorous reptiles lived 115 million years ago, during the age of the dinosaurs, when much of the continent was covered in water.

Fossils of two new species of plesiosaur were discovered near Coober Pedy in South Australia.

Plesiosaurs, famed for their long necks, are said to resemble Scotland's mythical Loch Ness monster.

PLESIOSAURS

A genus of extinct marine reptiles, having a long neck, a small head, a short tail, and four large paddling limbs first appeared at the start of the Jurassic Period, and thrived until 65 million years ago. Lake or sea monster sightings are occasionally explained as plesiosaurs but scientific evidence points to them being extinct

The Australian specimens are described in recent editions of the journals Biology Letters and Paleontology.

One, known as *Umoonasaurus demoscyllus*, was about 2.4m (7.2 ft.) long and had crests on its head, perhaps for display or mating purposes.

"Imagine a compact body with four flippers, a reasonably long neck, small head and short tail, much like a reptilian seal," said the lead author of the two papers, Dr Benjamin Kear of the University of Adelaide.

The other species, *Opallionectes andamookaensis*, grew to about 5 m (16 ft.) in length and had small needle-like teeth.

Treasure trove

Some 30 fossils were discovered at an opal mine near the outback mining town of Coober Pedy.

They are made up of the mineral opal, which filled the spaces left by bones when the original fossil-bearing rock was dissolved away by acidic ground water.

The fossils include several skeletons and a complete skull of *Umoonasaurus*, and a partial skeleton of *Opallionectes*.

They are thought to be of juvenile animals, suggesting the lake was a breeding and nursery ground.

Scientists believe sea-dwelling adults returned to the shallow inland waters to breed and raise their young.

At the time, Australia was much colder, and the inland ocean would have frozen over in places during the winter.

Scientists believe the creatures might have evolved mechanisms to cope with the harsh climate, such as a faster metabolic rate. They were carnivorous, feeding on fish and squid.



Reconstruction of *Umoonasaurus demoscyllus* showing an adult with crest (top) and juvenile (bottom).

From <http://news.bbc.co.uk/1/hi/sci/tech/5220784.stm>

Slab Saw Basics

*by Bruce Mensinger
Shop Chairman
Culver City Rock & Mineral Club
from The Nugget – March 2008*



Slab saws are typically the first tool to use in opening up a chunk of rock. A slab saw is distinguished by having a vise or other clamping and holding fixture built in.

The chop-saw or tile saw design uses a stationary vise; the circular blade is either lowered into the rock or it is on a trolley that moves horizontally. These saws are best for blade sizes up to ten inch diameter or so and for rock that is easy to cut, such as marble, obsidian, calcite, etc. The main reason for these limitations is that blade heating is controlled with water.

For heavy duty sawing (larger sizes, harder rock), oil cooling is necessary for rapid cutting, long blade life, and straight cutting. For this an enclosed saw is best. Oil can be supplied to the blade and in the saw kerf by filling the saw with oil so that the lower part of the blade rim is covered. As the blade rotates it drags oil into the kerf. A better system for longer blade life, faster cutting and straighter flatter cuts is a pump circulated oiling system. In our shop we use oil cooling exclusively and pump circulation for all saws except for the six inch trim saw.

In enclosed saws, the vise moves on rails to feed the clamped rock into the blade edge. The feed motion can be supplied by hand, by a weight and cable over pulley, by a lead screw, or by hydraulic pump/regulator/ cylinder arrangement. Lead screw feed gives the smoothest cut surface and longest blade life when set up correctly. Both the weight system and the hydraulic feed system can make smooth cuts but because they feed inherently unevenly these are likely to produce wavy cut surfaces. Increasing the weight or the hydraulic pressure to increase cutting speed magnifies any adverse effect of blade run out, asymmetry of blade edge and non-uniformity of diamond grit distribution or occlusion. Hand pushed vise feed produces the widest variation in quality of results but usually tends toward more ripples rather than smooth cut surfaces. All slab saw vises have a way to move closer or farther from the plane of the cut. This allows control of the cut position and thus the thickness of the slab produced.

The revelation of this adjustment is often the real ah-ha moment for beginners who are new to rock saws.

The most difficult part of cutting slabs is clamping the rock in the vise. This is often an awkward feeling, frustrating task. At first, it seems so simple: just stick the rock in the vise, turn the clamp screw until the jaws grip the rock and its ready. But, no. The rock is a potato shape so it isn't secure in the vise, or its irregular so when one jaw has a good place to grip the other has only a slope and no grip. Or, the vise pressure is only on one end of the vise jaws so the moving jaw binds without producing a secure hold on the rock. Or one of a hundred other clamping problems arises that you need to solve if a successful cut is your goal. Well, we all struggle with this. But, be happy, this is the only routine task in cutting slabs that needs careful, patient thought and ingenuity. Once the rock is securely held in the vise the rest is a repeating cycle: advance the vise so it cuts where you want, close the cover to contain oil spray, turn on the motor, wait for the cut to finish, turn off the motor, open the cover, remove the cut piece, repeat for additional slabs.

LARRY'S LINKS

AOS member Larry Voorhies was kind enough to email some very interesting and informative links to me and Russ Madsen. We've decided to give Larry a page in the newsletter so we can share these links with everyone. When you have a chance check out these great stories! Thank you Larry for sharing these!

Deep Earth Geology

<https://www.gia.edu/diamonds-reveal-inner-workings-of-earths-mantle>

<https://www.mining.com/origin-of-british-crown-jewels-diamond-revealed/>

Burma's Jadeite History

<https://www.ganoksin.com/article/burmas-jade-mines/>

Burma's Jadeite Ethics (blood jadite)

<https://www.yahoo.com/news/more-bodies-found-myanmar-jade-mine-disaster-092158125.html>

Tanzanite discovery

<https://www.yahoo.com/news/tanzanite-tanzanian-miner-becomes-overnight-183657537.html>

Difficult choice! Australian Opal or Gold nuggets?

<https://www.bbc.com/news/world-australia-53857557>

Welcome Stranger: World's Largest Gold Nugget Remembered

<https://www.bbc.com/news/uk-england-cornwall-47041314>

~ Bench Tips ~

This page will be dedicated to bench tips and techniques from our readers. If you have bench tips you'd like to share, let us know! Bench tips can be anything - metal work, lapidary, wirework - anything creative that you would like to share. Send your tips to: aos.editor.02@gmail.com

RAISING A CABOCHON

by Brad Smith

When a cabochon sits too low in a bezel, the bezel can hide a lot of the stone. The solution is to either sand down the bezel height or boost up the stone. But if you choose to raise it up, the question is what is the best material to use ?

I was taught to use fine sawdust but now think that might be a problem when used in rings. I reason that rings will frequently get wet, which would cause the sawdust to swell in size and push the stone against the bezel. Then when the sawdust dries out, the stone would be a little loose.

In any case, I now prefer to insert a flat sheet to boost up my stones. It can be a scrap of metal or some plastic from product packaging or old credit cards. In either case, just cut a piece to loosely fit into the bezel and drop in the stone (with some dental floss) to check it's height.

TRANSPARENT CABS

by Brad Smith

When bezel setting a transparent cabochon in silver, I usually cut out the back of the bezel to allow background light to show off the colors and patterns in the stone. If this is not possible or appropriate, I worry that the silver bezel will tarnish under the stone and will ruin its brilliance. What to do?

My solution is one extra step before setting the stone. I place a piece of thin silver Mylar plastic under the stone to act as a mirror that will never tarnish. Mylar is readily available in craft and gift wrap stores, or in a pinch from a party balloon supplier. You may even want to experiment with using colored or patterned Mylar (i.e. diffraction pattern) under some stones.

Work Smarter & Be More Productive with Brad's "How To"
Jewelry Books on [Amazon.com/author/bradfordsmith](https://www.amazon.com/author/bradfordsmith)

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

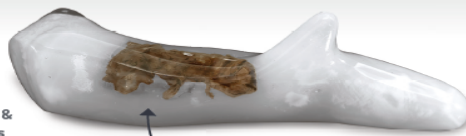
**23 SPONSOR PROFILE - Connecting With a Legend
in Lapidary: Kingsley North, Inc.**

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

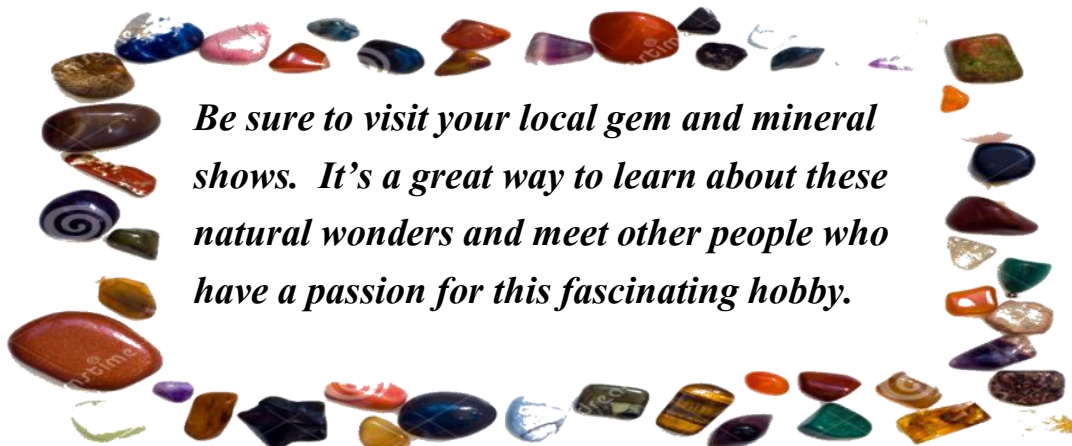
Fallbrook Gem and Mineral Society
123 W Alvarado St
Hours: 9-4
Contact: Michelle Shearer; 760-805-2184
Email: info@fgms.org
Website: www.fgms.org

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.

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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 9

— 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 September**



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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