

The Opal Express

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



Member

Member



Volume #32 Issue #08 August 2000

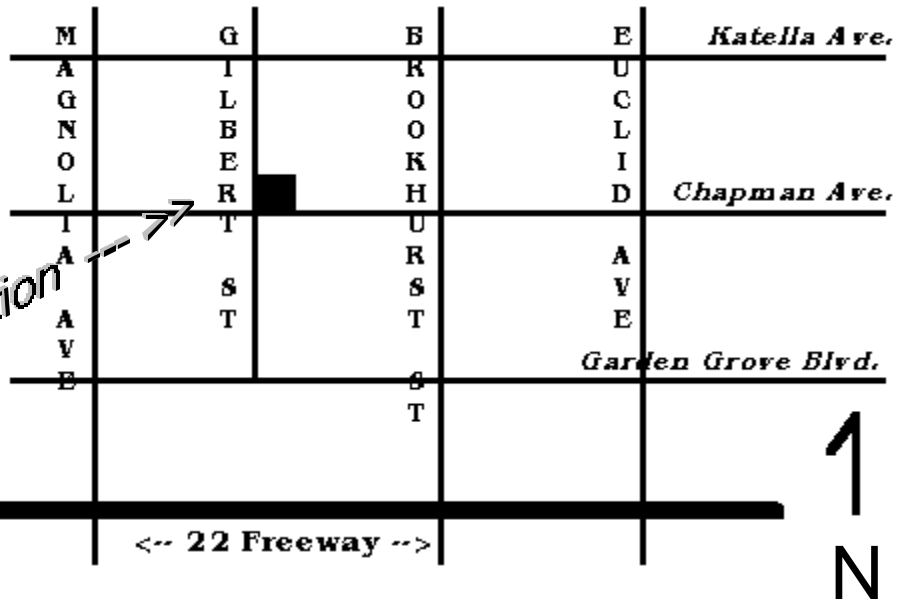
**General meeting Thursday
 August 10th 7PM**

TO:

GENERAL MEETINGS —
 2nd Thursday 7:00-9:00 PM
 Garden Grove Civic Women's Club
 9501 Chapman Ave.
 (NE corner of Gilbert & Chapman)
 Garden Grove, CA

MEETING ACTIVITIES
 Opal Cutting Advice Guest Speakers
 Slide Shows Videos Other Activities

Meeting Location →



American Opal Society Officers

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American Opal Society website		http://www.opalsociety.org	

Fluorescent Opal

By Doug Mitchell

There are more sorts of opal than many people realize that have a different sort of "fire", fluorescence in ultraviolet light (UV).

Red, orange, yellow, green, and blue glows have all been found in natural opals under UV, and phosphorescence (afterglow) is sometimes observed as well. In a few cases, several fluorescent colors may be found in the same opal specimen.

Blue Fluorescent Opal

I have precious white opals from Mintabie in Australia that fluoresce a fairly bright blue-white under either longwave or shortwave UV, with a fairly pronounced phosphorescence following UV exposure. I have seen specimens of precious opal from Coober Pedy, Australia, with the same behavior. I have seen hyalite opal deposits from several Californian locales with a similar fluorescence, and I have been told of several other occurrences. Lightning Ridge, Australia, is also reported to produce opals with this sort of fluorescence.

Green Fluorescent Opal

Another common fluorescence in opals is a saturated yellowish green color that suggests the cause is trace uranium impurities. This is generally strong under shortwave UV, only sometimes apparent with longwave UV, and is not prone to phosphorescence.

The opals of Virgin Valley, Nevada, are well known among fluorescent mineral collectors as a strong example of this green glow. While some precious opals show this, semiprecious and common opals are apt to glow even brighter. Common opal from the Kee Kay Claim near Kramer Junction, California, also glows a similar bright green.

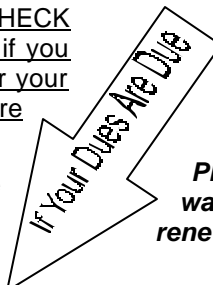
I have some precious or near-precious opal from Opal Butte, Oregon, that fluoresces yellow-green, not quite as bright as the Virgin Valley stuff, but still quite impressive. One trip report suggested perhaps 15-20% of Opal Butte opals fluoresced.

Hyalite opal deposits with this green fluorescence are quite common from a great many sites in the southwestern U.S., often in combination with other fluorescent minerals (some pieces from the

(Continued on page 3)

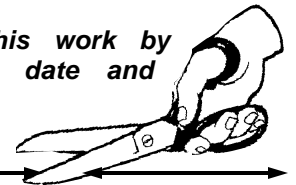
Are Your Dues Due Now? PLEASE CHECK YOUR ADDRESS LABEL or the membership roster if you are listed. If your label shows the current month/year your dues are DUE NOW. If the date is older, your dues are **OVERDUE**.

Renewal Grace Period of two months will be provided. If your dues are due now you will receive two additional issues of the newsletter. Please note



however that as the system is now 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.

Please help us make this work by watching your expiration date and renewing promptly. Thanks!



DUES RENEWAL FORM

(membership renewal form rev. 1/1/98) d:\ameropal\news\forms\dues_due.pub



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

Thank you for continuing to support your American Opal Society!!

Make check or money order payable to: American Opal Society, Inc.
Please mail payment and renewal form to the club address at left.

DUES RENEWAL RATES (select one)**

- 1) **LOCAL AREA member \$26.00**
(addresses in Los Angeles, Orange, & Riverside counties)
- 2) **CALIFORNIA & USA \$20.00**
(all addresses outside local area counties)
- 3) **FOREIGN \$30.00**
(all addresses outside USA)

**** \$5 SENIOR DISCOUNT = Age 65 or over <deduct \$5.00 from above>**

DEALER LIST: Yes, include my name/address on a list provided to Opal Dealers selling at the most recent Opal Show...

(if yes, please sign or initial here) _____ date _____

without your signature here you will not be included in the dealer info list

MEMBERSHIP ROSTER: Yes, include my name and/or address and/or phone information in a published AOS membership directory... [Please circle any of these —> **NAME/ ADDRESS/ PHONE** if you prefer a partial listing.]

(if yes please sign or initial here) _____ date _____

without your signature here you will not be included in the member roster

NAME: _____

ADDRESS: _____ APT #: or PO BOX: _____

CITY: _____ STATE: _____ ZIP: _____

COUNTRY (IF OUTSIDE U.S.) _____

TELEPHONE: Home (_____) _____ : Business (_____) _____

FAX (_____) _____

Please indicate any name or mailing address changes

NAME BADGE ORDER FORM: (OPTIONAL)

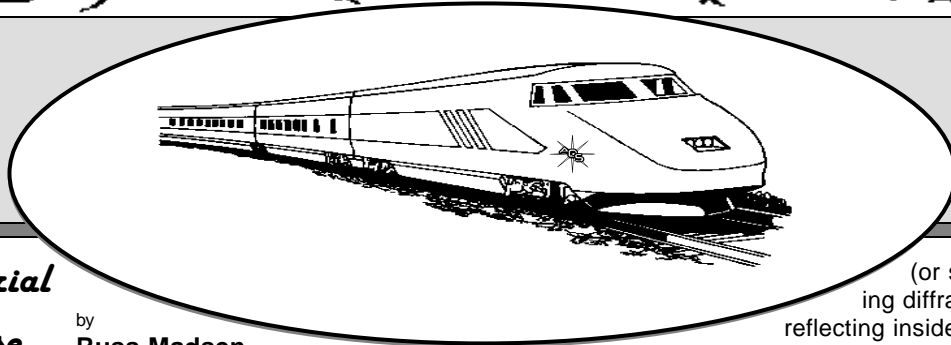
Number of badges ordered _____
(\$5.00 EACH - includes engraving)
PLEASE PRINT NAME AS YOU WISH IT TO APPEAR ON YOUR BADGE using up to two (2) lines of text for your name, nickname or name of your opal related business.

The Opal Express

AUGUST 2000

Published monthly by the American Opal Society

Volume 32, Issue 8



Editorial

License by Russ Madsen

This month in lieu of Carol's president's message I am writing an article that I didn't expect would ever be needed in the year 2000.

The subject? What causes color play in opal.

I was quite surprised to read an article in the April issue of **Rock & Gem** which utterly misstated the physical properties of opal which are responsible for color play. And if that weren't enough, yet another article appearing more recently – in the August issue – again of **R&G**, repeats the error in a completely different way.

What DOES cause color play? In the words of Paul Downing, Ph. D., with whom I spoke recently on this subject, **"It is the regular lattice structure of the silica spheres inside opal that causes color play."** I also spoke with John Sinkankas and a representative of the GIA. Both concurred – as have a myriad of other opal experts I have contacted including Len Cram.

This states precisely what science has been saying about color play in opal since electron microscopy unveiled the structure of the Queen of Gems over 30 years ago. While **R&G's** coverage of opal is certainly appreciated, it is quite troublesome to have articles published in a national magazine - each sharing completely erroneous statements about color play presented as fact.

In an article entitled *"Cat's Eye Opal"* appearing on Pg. 28 of the April, 2000 issue of **R&G**, the first writer hoped to foster interest in cat's eye phenomena in opal. Let's hope this comes to fruition, although I will mention in passing that expert opal cutters I have spoken with state that cutting an opal to produce an "eye" effect is possible - even likely - if the rough exhibits well-layered sheets of color play. But cutting for the "eye" effect is usually not desirable because doing so typically orients the best color play on edge. In any event the writer states, *"...Let's explore the reason for the fire and play of color in opals. Long ago, it was established that the presence of water in opal is responsible for the fire and play of color. As light penetrates an opal and reflects back it encounters the water molecules in the gem. A rainbow is created by sunlight passing through the water in the sky. So too, the play of color in an opal is created when the water molecules in the body of the opal split the light into its spectral colors..."* Wrong! This is not to say water doesn't have a role in opal's appearance

(or structure), because it does; but light being diffracted in an opal is not the same as light reflecting inside raindrops at all. Water does not cause color play. A diffraction grating does.

The second article, *Nevada's Opalized Wood*, appears on Pg 54 in the August **R&G** and reads in pertinent part, *"...The opal's characteristic brilliant display of colors results from the formation of minute fissures in the stone as it hardens, and the deposition of additional opal in the fissures. The indices of refraction of the original stone and the additional deposits are frequently different and result in light interference. This causes the play of various colors..."* Wrong again. Even if it's true that cracks form and fill as described (disputable), this does not explain diffraction and color play at all.

Misinformation in both articles and it is the year 2000! Put simply, **what causes color play is diffraction of white light.** The orderly arrangement of silica spheres in opal forms a diffraction grating and as light passes through this structure it is separated into its spectral hues; these reflect back and we see glorious color play. In the case of contra luz opal, light is diffracted as it passes through the grating.

I am presently awaiting and hope to soon have permission to print in these pages electron microscope studies showing the internal structure of opal. If one examines such images with an understanding of the light phenomenon known as diffraction, the cause of opal's color play is readily evident. It is neither water, nor minute fractures. In the meantime there are several published articles presenting opal's structure, among them, the April 1976 issue of **Scientific American** article, *"OPAL"*. ☼



DATES TO REMEMBER

General Meeting

Aug 10th 7PM

Board Meeting

Aug 6th 7PM

Opal & Gem Show

Nov 4th & 5th

Work Shop Information...

The LOCATION for the Opal Society workshop is the lapidary classroom at Walker Jr High School, 8132 Walker St., La Palma, CA 90623

Drive to the far back of the school to the Lapidary Arts classroom.

Only AOS members may use the equipment and workshop. You will be required to sign a release form as well.

Workshop Schedule on Page 5 shows dates/times and appointment instructions. ☼

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Fluorescent Opal (cont.)

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Princess Pat mine in California, for example, show five colors under UV: green hyalite opal, blue-white scheelite, yellow scheelite, orange caliche, and red calcite).

The hyalite opal from Spruce Pine, North Carolina is another classic among fluorescent mineral collectors, one of our best crowd-pleasers. Some specimens from there are quite large and show a particularly bright example of this green glow, one of the brightest mineral fluorescences to be measured. In some cases this is accompanied by bright orange-red fluorescing calcite.

At various shows from various locales I have seen some particularly pretty colorless and very transparent hyalite opal "fingers" that glow bright green very attractively. Opal may not form crystals, but this is the next best thing.

Yellow, Orange, and Red Fluorescent Opal

Opals fluorescing in colors other than blues and greens seem markedly less common.

There is common opal with a bright yellow fluorescence, strongest under longwave UV, from Manhattan Mine (also called the One Shot Mine), Napa County, California, and reportedly also near Ukiah in Mendocino County, California.

I have a common opal specimen from a volcanic ridge near Murietta Hot Springs, Riverside County, California with alternating layers of orange and yellow fluorescence under longwave UV, with some layers glowing green instead in shortwave UV. A similar layered fluorescence has been described in common white-and-pink opals from the Spencer Opal Mine, near Spencer, Idaho (the orange glow there may be replaced by more of a red color). Not all of the opals from that mine glow -- the non-precious opal regions close to the precious opal are said to be the best prospects for fluorescence.

Other fluorescent opal locations from Manuel Robbins' book "Fluorescence: Gems and Minerals Under Ultraviolet Light" (many of which offer only spots of green-glowing hyalite) include Ramsey mine (AZ), Finch mine (AZ), Crestmore quarry (CA), Burnsville (NC), Hyalite Mt. (MT), Coaldale (NV), Tombstone (AZ), and Shadow Mts. (CA). This is not an exhaustive list by a long shot!

Not all opal fluorescences are natural. There are definite cases where a cutting oil has entered a specimen and created an unnatural opal fluorescence. But there are too many cases of unworked opals showing many different colors of fluorescence to blame oils for more than a fraction of cases. Soaking a fluorescing opal overnight in an organic solvent such as acetone (a common nail polish remover) is likely to reduce or eliminate a fluorescence if the glow is created by oil additives. ✨



Name Badges...

Price per badge is \$5 which includes the badge itself and engraving of up to two lines of text: one line for your first and last name and, if you wish, a second line for nickname or if applicable, your opal related business name. These engraving options give members flexibility to include many types of identification.

Please allow 3 to 4 weeks for completion of engraving. ✨

An American Opalcoholic in Paradise Part 3

By Margaret Malm

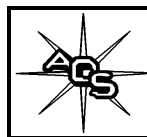
Sigh. Time to, regretfully, leave Yowah and head for the coast and the end of the trip. Our little caravan steamed out of Yowah early in the morning; Michael in the lead, since he has a 'roo bar on his "Ute" (a 'roo bar is just like the "Bull Bars" you see on some of the pickup trucks in the western US); the rest of us following in our van --- two leaders, six happy but saddened (to have to leave) participants --- and a kangaroo in a laundry bag! ... a little Joey named "Outback". I told you last time about how Outback came to be with us. Since this was, admittedly, a bit off subject, I don't want to take up more space (and probably bore most of you) with word of his fate. But when I get home I will write a little story about it on my computer, and if you are interested just send me an e-mail some time after about June 5 and I'll send you a copy.

Our first day's journey was back to Lightning Ridge. We made several stops, one of which was at a farm where they grow dates and make date wine. As we pulled in there, we saw some familiar-looking (OPAL!) rocks sitting outside, and a few Ooh!s and Ahh!s were heard. Then Dick's measured sepulchral tones were heard from the back of the van, like the Voice of Doom: "We don't need any more!", which really cracked us up; we were all struggling under the weight of lots of "trophies", and wondering how we were going to cope with the airlines' weight allowances. We stopped at a park and saw a Koala high up in a tree; almost invisible. We pulled into Lightning Ridge late, as when the shadows get long you have to travel quite slowly to avoid a serious encounter with the 'roos, who become active from then until around 9:00 the next morning. Most people try to be home by about 5pm, and travel at night only when it is very urgent.

We stayed there overnight and then headed on coastward. The real "Outback", now very green and pretty because of all the rains, soon began to look a bit more civilized. Big cotton fields and the occasional cotton gin. Large "Stations" which seemed to be growing more cattle than sheep. And as we neared the coast, big fields of sugar cane; and they also grow Macadamias and avocados. Would you believe avocados 6 for \$1? And that's about 60 cents, our money.

Then on to Inverell, a sapphire-mining area. Marilyn was especially interested in going there, as she is a faceter and wanted to find some good faceting rough. And we had planned on doing a couple of hours of screening ourselves. However, we found that was no longer possible. The local rockhounds (their club is right next to the tourist center) were all off at a big show at Lismore. But it seems that there are several problems. First, the (public) "fossicking" areas are all played out; and all the good places are in the hands of a

(Continued on page 4)



PLEASE NOTE!!! The American Opal Society assumes no responsibility for injury or damage due to accidents or carelessness. Members and guests assume all risks during club activities.

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Editor---Russ Madsen

Please address all inquiries to:

The Opal Express,

P.O. Box 4875, Garden Grove, CA 92842-4875

E-mail 76550.1366@compuserve.com

(Deadline for items: 15th of the month prior to each issue)

ITEMIZATION

ITEM: NEW PO BOX REMINDER our new PO Box is open for mailings — American Opal Society, Inc., P.O. Box 4875, Garden Grove, CA 92842-4875. Once again, we are keeping the former box for a few months, too. ❁

ITEM: Aug 4 - 6 CFMS Gold & Gem Show, hosted by Valley Prospectors, Riverside Convention Center, Riverside, CA

Take the 91 Freeway to Riverside and exit at University Ave. Proceed west a few blocks and turn right following the signs to the Riverside Convention Center.

Remember this is THE major annual statewide California Federation of Mineralogical Societies show. Many, many dealer booths, great display cases, seminars, and other activities await you! Don't miss it! ❁

ITEM: Guidelines for submission of articles for the newsletter: Opal Dealers and cutters, opal miners and collectors — if you have any items to share with fellow opalholics, please send them along.

If you have written an article or other item about opal which you would like to present for consideration as material to be included in the *Opal Express*, please forward it by email or surface mail to the address shown in the publication information box on Page 3.

Your work can be as finished as a completed article, spell checked, grammar checked, and ready for publication or as simple as notes scribbled on a napkin. I will gladly work with anyone in any way I can to prepare a final composition. If you would like help please ask. Nothing which is being developed jointly or rewritten etc. will be published in final form without the author's approval.

Authors, please be aware that material submitted to the *Opal Express* is published with the following copyright considerations. First, the **Opal Society** is a non-profit 501c(3) educational organization and no compensation is paid to authors for articles. We do send a copy of the issue in which your article appears, so please provide a mailing address.

As stated in the publication information box on Page 3, for any items appearing in the *Opal Express*, unless otherwise reserved, **rights of reprint are granted summarily to the gem and rockhound community for non-commercial use only.** If you wish to reserve all reprint permission for your work you must do so in writing at the time of submitting your material. Beyond non-commercial reprint permission, authors retain all other publication rights.

Deadline for submitting articles is the 15th of the month prior to publication. That means your material must be in my hands by the 15th. Please don't wait until the 15th to send something. While I will make every effort, I cannot guarantee your article will be published in the current month in such a case. Thank you for understanding. ❁

ITEM: Anglic Gemcutter, a monthly magazine "Of, For & About Gemcutters Interests; may our Global Tribe prosper". (503) 632-4826 Ph/FAX/Mess. information; DISCOVER/ Visa/MC accepted by telephone/FAX/letter. Editor Rick Ford, mAgi@bctonline.com ❁

ITEM: Wanted to buy (for club workshop):

Used faceting machines and Genies, any condition. Please contact Ken Reed of the DeLand, Florida Gem & Mineral Club. (phone) (904) 851-0992 days/(904)738-4879 evenings, (email) kr1113@aol.com, (snailmail) 1113 Cass St. DeLand, FL 32720. ❁

ITEM: CFMS Earth Science Studies at Camp Paradise Sept 10-17, 2000. Space is still available. For information, please contact



An American Opalhollic (cont.)

(Continued from page 3)

large corporation and closed. And the miners have sort of gone on strike. Seems the buyers (usually, that is) were demanding to pick and choose only the best sapphires, rather than buying them in lots as is the usual practice (necessary in order to be able to also sell the less good ones); so the miners had gone back to farming until they could find buyers who were willing to buy in lots.

There were, however, several places there, including the Visitor Center, that had some very nice faceted ones (although not the yellow ones Marilyn wanted); most were multis, and some nice blues. I bought a few that had especially nice sparkle, as I'm not all that particular as to color.

The Gem Centre also had a little rough (as well as faceted stones), and Marilyn was able to find some rough that suited her needs. She and Dick also bought a large bag of gravel to screen.

Then up over the Great Dividing Range and down to Grafton and the coastal area. Stopped there for the night; I felt right at home, as there is a ghost town named Grafton only a few miles from where I live in Silver Reef.

We stopped in Ballina for petrol, etc, and I went into Ballina Opals and Gems. They had some very nice triplets (the first I'd found; you don't often find doublets or triplets anywhere in Australia). The lady in the store was a rockhound, and very interested to hear about LapDigest and said she was going to subscribe. Welcome, "Rockhound", if you are reading this!

We stopped in the coastal resort town of Byron for lunch and a look-around. There was an opal shop that Barbara had suggested we visit; it is owned by a miner she knows from Lightning Ridge, and we were able to get some idea how the price skyrockets as you get away from the field. Looked like a factor of at least 10 times. Remember that I told you about June digging out a bit of potch in the mine at Lightning Ridge that turned out to be a \$2000.00 red-on-black opal, that she then bought from them? She had been carrying it next to her heart in her 27-pocketed vest. She was persuaded to bring it out and show it to Tony (the miner); he looked at it carefully, said "beautiful!" and "very well cut, but cut rather expensive" and then -- offered her \$15,000.00 for it! Nothing like that to put you into a real cold sweat! (She didn't sell it). We continued on to the resort town of "Surfers Paradise" south of Brisbane. We had a little time to explore - Dick and Marilyn found a faucet near the beach, up on a little platform, I found a piece of bark from a tree for a trough and they sluiced their sapphire gravel there. They found several sapphires, but Marilyn said they all would have to be "treated", and weren't really worth the cost of that.

Then on to Brisbane, and the end of our "tour". Ron came around and helped us all with advice on our customs declarations. We all flew down to Sydney to spend a couple of days, and go our separate ways. I'm now up at a friend's home in Mt. Isa, where the largest underground lead mine in Australia (and possibly the world??) is located. I will also make a writeup, when I get home, about this mine and the area; available to anyone interested by sending me an e-mail sometime after June 5.

And I will send you one more report, including the visit with Len Cram I

What's happening???

Calendar of Upcoming Events
Dates and Locations of Shows

Aug 4 - 6 CFMS Gold & Gem Show,
hosted by Valley Prospectors, Riverside
Convention Center, Riverside, CA

Sept 16 10AM-6PM Sept 17 10AM-5PM Santa
Lucia Rockhounds, Pioneer Park & Museum,

Sept 16-17 10AM-5PM Sequoia Gem & Min
Society, Redwood City Recreation Dept.,
Community Activities Bldg., 1400 Roosevelt Ave.,

Sept 23 10AM-6PM Sept 24 10AM-5PM Carmel
Valley Gem & Min Society, Monterey
Fairgrounds, 204 Fairgrounds Rd., Monterey, CA

Sept 23 10AM-6PM Sept 24 10AM-4PM Delvers
Gem & Min Society, Women's Club of Downey,

Sept 30 Oct 1 10AM-5PM Vista Gem & Min
Society, Bregles Terrace Community Recreation

**Oct 4 - 15 Fri & Sat 10AM-11PM, other days
10AM-10PM** Fresno Gem & Min Society, Fresno
County Fair, Fresno County Fairgrounds, 1121
Chance Ave., Fresno, CA

Oct 14 8AM-5PM Oct 15 8AM-4PM Searles Lake
Gem & Min Society, Trona Lapidary & Show
Bldg., 13337 Main St, Trona, CA

Oct 9 - 10 9AM-5PM Victor Valley Gem & Min
Club, San Bernardino County Fairgrounds, 14800

✱ **Nov 4 10AM-7PM Nov 5 10AM-4PM** ✱

AOS Opal & Gem Show

Quality Hotel 616 Convention Way,
Anaheim, CA

Workshop schedule

Be sure to check here for workshop schedule updates. The dates listed below are those available to the AOS in our WORKSHOP AT WALKER Jr HIGH SCHOOL. The shop can be opened to members on Wednesday nights. **Please continue to contact Stan McCall by calling him at Gems & Opals (714) 827-5680 if you plan to attend a shop session.**

August 2000

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 2000

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

= Available Workshop dates

 = General Meeting date

WORKSHOP RULES

Please see calendar above for monthly shop schedule.

- ⇒ 1) Shop may only be used by AOS members.
- ⇒ 2) Shop users must sign liability waiver.
- ⇒ 3) Shop users must sign in. Shop supervisor will maintain sign-in list and collect usage fees.
- ⇒ 4) Shop usage fees: effective immediately...SHOP USAGE FEE IS \$3 PER SESSION.
- ⇒ 5) To assist us in scheduling, shop sessions need to be reserved in advance. Please contact Stan McCall or any member of the board of directors to reserve shop time.

(the following appears in the August, 2000 CFMS Newsletter)

Important Notice Regarding the article "How to Survive a Heart Attack When Alone."

Hundreds of people around the country have been receiving an e-mail message entitled "How to Survive a Heart Attack When Alone." This article recommends a procedure to survive a heart attack in which the victim is advised to repeatedly cough at regular intervals until help arrives.

The source of information for this article was attributed to Via Health Rochester General Hospital. This article is being propagated on the Internet as individuals send it to friends and acquaintances - and then those recipients of the memo send it to their friends and acquaintances, and so on.

We can find no record that an article even resembling this was produced by Rochester General Hospital within the last 20 years. Furthermore, the medical information listed in the article can not be verified by current medical literature and is in no way condoned by this hospital's medical staff. Also, both The Mended Hearts, Inc., a support organization for heart patients, and the American Heart Association have said that this information should not be forwarded.

Please help us combat the proliferation of this misinformation. We ask that you please send this email to anyone who sent you the article, and please ask them to do the same.

Sincerely, Kevin Kane Public Relations
ViaHealth Rochester General Hospital
(716-922-4055)

Things you can do if you think you are having a heart attack, as suggested by our medical staff. Stop all physical activity and sit and rest. Contact your physician's office immediately to report symptoms and receive further instruction. If there is any delay in contacting your physician, and your pain persists, call 911 and proceed immediately by ambulance to the nearest hospital for evaluation and treatment. If you have known coronary artery disease and experience chest pain, sit and rest, place one nitroglycerin under your tongue and then call your physician's office. Wait 5 minutes and take another nitroglycerin if you still have chest pain. Follow your physician's instructions.

If there is any delay in receiving instructions and you have taken three nitroglycerin tablets five minutes apart and still have chest pain, call 911 and proceed immediately by ambulance to the nearest hospital for evaluation and treatment. If you have no contraindication to using aspirin, chew and swallow one 325-mg. aspirin while you are waiting for the ambulance.

For reporters: Other information on this issue can be gathered from Darla Bonham Executive Director, The Mended Hearts, Inc. email to: dbonham@heart.org.

Heart and other health related information is available on our website at www.viahealth.org. ViaHealth is a family of health care providers that includes Rochester General Hospital, The Genesee Hospital, ViaHealth of Wayne (Newark and Myers Hospitals), a Behavioral Health Network of mental health and substance abuse services, and the Continuing Care Network which includes Independent Living for Seniors, Hill Haven, ViaHealth Home Care and ViaHealth Home Care II. In addition, ViaHealth is affiliated with Kirkhaven and Clifton Springs Hospital.

Please read our *Copyright, Disclaimer and Privacy Policy*. ❁

The McCondra Report

By Barbara McCondra

Rediscover Opals in Australia

By Stephen and Mary Aracic

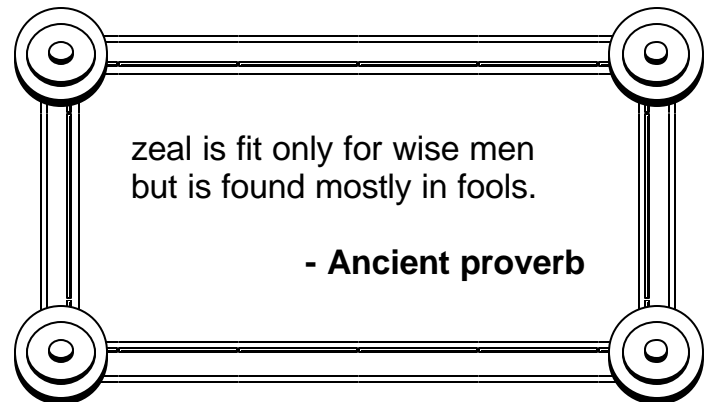
(A revision of *Discover Opals Before & Beyond 2000 with Surface Indications*)

Book Review by Barbara McCondra

This 415 page informative narrative on the finding and mining of opals in Australia is much, much more. The half page photo of the authors sharing a cuppa underground in their mine says a great deal about the quality of the book's photos. As I thumbed through, innumerable photos of places, people and terrain, struck me with their composition, color, and the statement made. A picture is worth a thousand words if it is the right picture. The photos in this book are a pictorial journal of the life and times of mining in the Outback of Australia and a peek into the two authors' relationship with opal and each other. Stephen and his wife Mary knew what scenes told the story best and snapped the camera with all the emotion, empathy, and appreciation that their many years of mining opal brought them. The reader travels with Stephen and Mary as they visit so many of the opal producing areas of Australia. Stephen analyzes the topography in relation to the prospecting for opal and discusses some of the area's history. Again, the pictures share so much. You can nearly smell the smoke in the enclosed space of an underground mine as a miner lights the fuse in a Coober Pedy photo. Stephen told me that he stopped counting photos at the 1100 mark. The earlier edition had only 352 pages and about 500 photos.

This edition has lots more pages and includes many more photos and new information than its predecessor and is available in both softcover and hardback.

The book can be ordered through Stephan and Mary at PO Box 143 Lightning Ridge, N.S.W. 2834 Australia ❁



Safety Report

by Cathy Gaber

Hot, Hot, Hot

If, in spite of your best precautions, you or your companions develop symptoms of heat related illness, these are the symptoms to watch for and the suggestions to recovery. Ample fluids are key.

Heat cramps in the arms, legs or stomach, which are due to loss of electrolytes, can be caused by heavy sweating.

Recommendations: replenish body fluids with water and electrolyte rich drinks; avoid salt, caffeine and alcohol which exacerbate dehydration; and rest.

Heat exhaustion is caused when an insufficient level of body fluid causes the surface blood vessels to collapse while trying to expand to help cool off the body. Symptoms include weakness, anxiousness, dizziness, loss of coordination, sweating and possible loss of consciousness.

Recommendations: Move to a cooler, shadier spot; lie down and elevate the feet to help restore blood volume; loosen clothing; place a wet cloth on the forehead; and drink electrolyte replacing drinks.

Heat stroke, the most serious of these conditions, is caused when the body is depleted of water and salt, and body temperature rises to 103 degrees or higher. Other symptoms include a lack of sweat; hot, red, dry skin; a rapid pulse; difficulty breathing; and constricted pupils.

Recommendations: call 911; cool off the victim as fast as possible by immersion in cool water, swaddling in wet cloths, dousing with cool water, or by applying ice. ❄

More on Desert Safety

(from an item dated 07-04-00 on LA Rocks)

Safety and Rockhounding

All of this talk about safety in the desert reminds me to share with you that the AFMS website at <http://amfed.org/rockhoun.htm> has an online, updated version of their Safety Manual. There are also numerous indexed safety articles, apparently from their newsletters.

Additionally, AFMS has an updated version of the Rockhound Code of Ethics, as well as the following ditty:

You Might Be a Rockhound If...

- You think road cuts are built as tourist attractions
- You describe your vacations by the rocks you brought home.
- The rockpile in your garage is over your head.
- You find rocks when you empty your pockets at night.
- You went to a rock festival and you hate music.
- The polished slab on your bola tie is six inches in diameter.
- The bookshelves in your home hold more rocks than books; and the books that are there are about rocks.
- On a trip to Europe, you're the only member of the group who spends their time looking at cathedral walls through a pocket magnifier.
- You purchase things like drywall compound just to have another nice bucket to carry rocks in.
- The club you belong to uses rocks for centerpieces for the annual Christmas dinner.
- The first thing you pack for your vacation is a chisel and a ham-

mer.

- You spend hours and hours in the ugliest room in your house.
- You bought the ugliest boots available cause they were water-proof.
- You know what findings are for.
- You watch the scenery in movies instead of the actors.
- Your company asks you not to bring any more rocks to the office until they have time to reinforce the floor.
- You examine individual rocks in driveway gravel.
- Your wife knows you are down in the basement sorting rocks but can't quite find you nor does she remember that pretty wall down there.
- The local university's geology department asks permission to hold a field trip - in your back yard.
- The city sends you a letter informing you a landfill permit is required to put any more rocks in the back yard.
- You can debate for hours on the differences between spectrolite and labradorite.
- You shouted "Obsidian!" to a theater full of moviegoers while watching the Shawshank Redemption.
- Your children have names like Rocky, Jewel, and Beryl.
- You get excited when you find a hardware store with 16 pound sledgehammers and 5-foot long pry bars.
- You debate for months on Internet about whether vibratory or drum tumblers are the best.
- You can't remember the last time your car still fit in the garage.
- You have a two-car garage and your 4WD pickup has to sit in the driveway.
- You've spent more than ten dollars on a rock.
- You still think pet rocks are a pretty neat idea.

Safety
in the
Desert.
...Ample
fluids are
key...

- You have amethyst in your aquarium.
- You associate the word "hard" with a value on the Mohs scale instead of "work".
- You know the location of every rock shop within a 100-mile radius of your home.
- You're retired and still thinking of adding another room to your house.
- You're planning on using a pick and shovel while you're on vacation.
- Your spelling checker has a vocabulary that includes the words "polymorph" and "pseudomorph".
- You know where Tsumeb is.
- You associate the word "saw" with diamonds instead of "wood".
- You begin wondering what a set of the Mineralogical Record is worth.
- You decide not to get married because you'd rather keep the rock.
- You make a backpack for your dog.
- You've spent more than ten dollars for a book about rocks.
- You have mineralogical database software on your computer.
- You send your family on ahead into MacDonald's so you can check the gravel in the flowerbeds.
- You have 137 empty squeeze syrup bottles washed and ready to use as squeeze bottles on the next field trip.

THIS LIST WAS WRITTEN BY MEMBERS OF THE GEMEDITORS E MAIL SWAP GROUP. Contributors included Mel Albright, Richard Busch, Betty Commean, Dan Imel, Bob Keller, and Paul Kline

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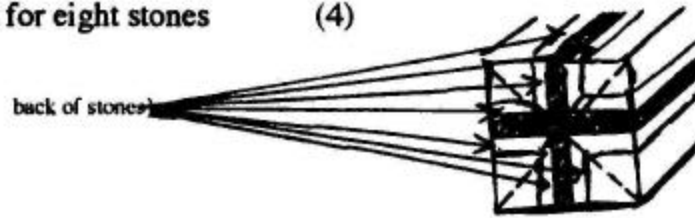
For more surefire signs that you are a rockhound visit:
Bob's Rockshop Surefire Signs Contest,

Rock On, Joan Macomber ❄

(4)--might be able to split for eight stones

(4)

back of stones)



- **NOTE:**

Sawing uses lots of water. If the water is circulating in a sump, empty it and the resulting debris often. OR, you could hook up a drain hose to an old paint bucket and empty that as needed.

STEP 3 SPLITS

When boulder opal is split the following outcomes are possible

- opal seam is damaged and opal is not usable
- opal seam is damaged but some opal is useable
- opal seam does not go 360° around the whole stone therefore the material does not split cleanly but instead cleaves or breaks in unexpected places.
- opal seam splits cleanly - two sides are not mirror images
- opal seam splits cleanly - two sides are mirror images, nice

WHEN SPLITS WORK - MOST OF THE TIME

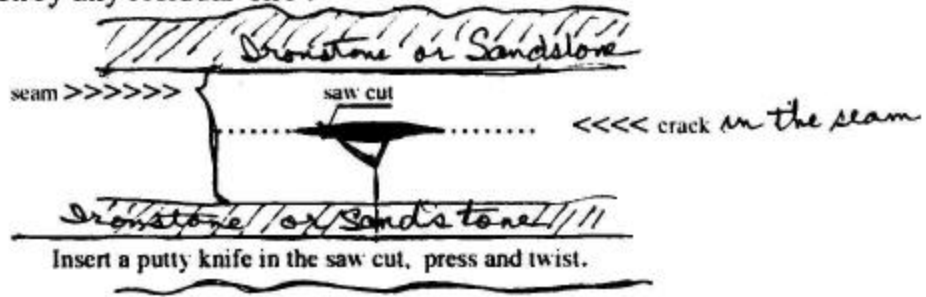
- the opal vein goes around the stone 360°
- there is a natural crack in the opal seam
- part of the opal seam is at least 3/32nds thick
at least 1/4 inch of sandstone or ironstone is on either side of the opal seam

NOT ALL BOULDER WILL SPLIT CLEANLY

THE PROCESS

- **BEFORE SPLITTING** - look at the opal seam,
- is there a natural crack in it? If so, then this is a place to begin considering a split.
- Does the seam go completely around the stone?
- Is there at least 1/4 of an inch of sandstone or ironstone on either side of the seam?

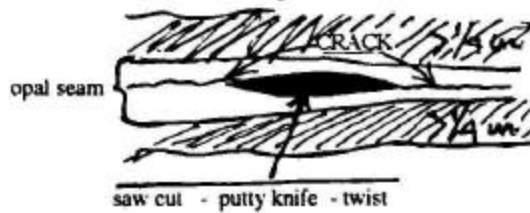
With the saw blade, make a cut, 1/8th of an inch deep at the crack or at a place in the seam where you will not destroy any residual fire.



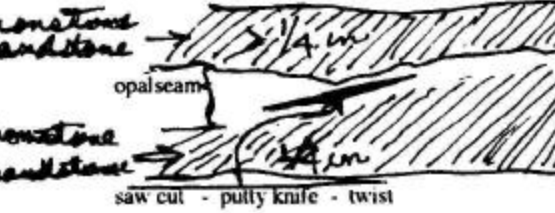
The result should be some kind of split.
The process is easy but fraught with uncertainty.

Note the diagrams below may clarify cutting problems or challenges

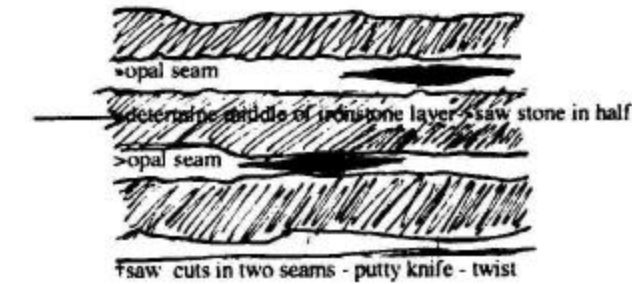
(1) SPLITopal seam w/ crack



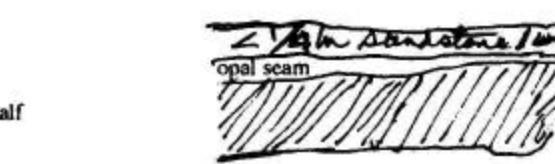
(2) SPLIT....diagonal clean opal seam



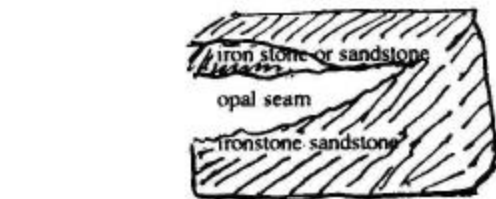
(3) SPLIT
double seam, clean, no crack



(4) NO SPLIT...sandstone/ironstone
not thick enough to support split



(5) NO SPLIT



(6) NO SPLIT

