

HUI PŌHAKU 'Ō HAWAII

Rock & Mineral Society of Hawai'i, Inc.



Meeting Times

MEETING

Wednesday
November 16, 2016

6:15-8:00 pm

Makiki District Park
Admin Building

NEXT MONTH

Dec 2, 2016
Xmas Potluck

LAPIDARY

Every Thursday
6:30-8:30pm
Makiki District Park
2nd floor Arts and
Crafts Bldg

MEMBERSHIP DUE COSTS 2017

Single: \$10.00
Family: \$15.00

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Hawai'i, Inc.
P.O. Box 23020
Honolulu, HI
96823-3020

Minerals of Australia By Dean Sakabe

The last topic of 2016 will be minerals from Australia. Most people's first mineral is the amorphous form of Silica related to Quartz, which happens to be Opal. The most common Opal is white with no hint of fire of any kind. This can be found in the Koolau's formed in little vesicles or areas left behind by gas bubbles within basalt. Not easy to get to, as it requires a big hammer. Never the less it is opal and it is there. The opal we are talking about is precious opal, with all of the colors of the rainbow represented inside each stone. The Opal from Australia range from the white based opal of Cooper Pedy. The Black Opal from Lightning Ridge. The Grey Based Opal of Mintabie. To the Crystal Opal and grey matrix opal from Andamooka.



Opal Pineapple

Opal also forms in concretions within ironstone. Such as the boulder opal from Queensland. Which could be further broken down to the Kyunha mines in the north, and then the Yowah area with the Koriot, Jundah, and Quilpie mines.

Garnets, primarily the Pyrope and Almandine varieties are found in Australia. The Pyrope garnets range from black to blood red. Whereas, the Almandine garnets are brownish to black. Garnet in various forms can be found in many sites throughout Australia, two of the most prolific sites are the "Harts Range" area in the Northern Territory and Fullarton River in Queensland.

Corundum have been found in Australia for over 150 years. In 1851, it was reported that a sapphire was recovered during gold mining on the Cudgegong and Macquarie rivers in New South Wales. In 1854 sapphires were found in the New England area of New South Wales. Since then numerous small deposits have been found up and down Eastern Australia. The discovery of fancy Sapphires at Sapphire, Queensland has led to the commercial Sapphire mining industry. Most of the early production from Australia went through German jewelry agents and was sold into other European countries. From there a number of Australian Sapphires found their



Yowah Nuts, Southern Queensland

Minerals of Australia

way into the crown jewels of the Russian Imperial family and other Russian nobility.

Crocoite is a lead chromate whose name comes from the Greek krokos, meaning "saffron". This is in reference to the bright red orange color of the mineral. Crocoite typically forms prismatic crystals sometimes two or more inches in length. It was first described scientifically after its discovery in the 1760s in Berezovskoe, a gold-mining district on the east slope of Russia's Ural Mountains. In the 1970s Crocoite was discovered at the Adelaide Mine in the Dundas area of Tasmania, Australia. Crocoite is also found in Minas Gerais, Brazil; Saxony, Germany; and Otjozondjupa, Namibia, however the Tasmania takes the prize. In 2000, Tasmania's governor, the Honorable Sir Guy Stephen Montague Green, proclaimed the adoption of Crocoite as the mineral emblem of Tasmania. Upon reporting the event, the Tasmanian Government Gazette called specimens of Crocoite "amongst nature's most brilliant creations" and "amongst the most beautiful objects to originate underground."



Crocoite (Dundas, Tasmania)

Chrysoprase is a form of chalcedony, which is colored by trace amount of nickel. The color variation ranges from deep jadeite green to light translucent glass like apple green. Chrysoprase is a cryptocrystalline, meaning that instead of being formed by large six sided crystals, the size of the crystals are extremely small and invisible to the naked eye. The Candala Mine in Marlborough, Queensland produces some of the worlds best Chrysoprase. It has been referred to as Australian Jade, due to its resemblance to this gemstone.

Marra Mamba is considered the Rolls Royce of all tiger eye. In the Hamersley Ranges of the Pilbara region, there are a few small areas where Australian tiger-eye has been found. The best known area is near Mount Brockman. Only two of these deposits have ever produced the "true" Marra Mamba a very rare type with reds, blues, yellow gold and greens. Unfortunately this has been mined out for nearly twenty years now. Tigereye is still being mined and sold today as Marra Mamba. Some of the new material is nice but not near as colorful or chatoyant as the original deposit.

Emerald - Emerald has been mined at Poona and west of Menzies, Western Australia . Furthermore it has also been found in New South Wales near Emmaville and Torrington in the New England area. The Emerald has found at Fielders Hill, near Torrington, has a strongly defined green zones within colorless beryl crystals. If one cuts these perpendicular to the c-axis, these crystals yield a standard emerald.

However if they are cut parallel to the c-axis they produce an unusual striped stone.



Quartz (Campfield Station, New Territories, Australia)

Nephrite - This magnesium iron calcium silicate, with just enough iron as the coloring agent, occurs in deep green to black colors. If it has a low iron content, this results in lighter green to whitish shades. Amphibole minerals have elongated, fibrous crystals and this fibrous, interlocking structure gives nephrite its inherent toughness and enables it to take on a high polish. Australia has a large deposit of nephrite at Cowell, South Australia and a smaller one near Tamworth, New South Wales.

Zirconia Dioxide – processed from Australian Zircon sands. Along with 5% of the current production of Rare Earth Minerals. This is finally processed into a pure white powder used in the production of fine ceramic knives.

Proposed Officers for 2017

President : Matthew Martin

Administrative Vice-President : Jon Bly

Lapidary Vice-President : Dean Sakabe

Secretary : Blair Ishitani

Treasurer : Debbie Iijima

Proposed Board of Director:

1 year Director : Markus Faigle

WE HAVE A FACEBOOK PAGE! LET'S GO LIKE IT!

[HTTP://WWW.FACEBOOK.COM/PAGES/ROCK-AND-MINERAL-SOCIETY-OF-HAWAII/103902329673700?v=wall&ref=sgm](http://www.facebook.com/pages/Rock-And-Mineral-Society-Of-Hawaii/103902329673700?v=wall&ref=sgm)

MAHALO TO MARKUS FOR ESTABLISHING OUR *ROCK FACE!*

Officers

President

Jon Bly
BLYJ1966@gmail.com

Vice President/Admin.

Matthew Martin

Vice President/Lapidary

Dean Sakabe
Dean.d.sakabe@verizon.com
(808) 282-6681

Treasurer

Debbie Iijima

Secretary

Blair Isitani

Newsletter Editor

The Rock & Mineral Society meets on the 4th Wednesday of each month (except for adjusted dates in November and December) at the Makiki District Park, 6:15-8 pm. Enter from Keeaumoku Street. Parking is free but limited.

The Newsletter is published monthly, some days prior to the meetings and is distributed in electronic format by email (Adobe Acrobat PDF file attachment). Printed copies are "snail" mailed to those who do not have email. The electronic format usually contains full-color images; the print version may be limited to B&W due to reproduction costs.

DOOR PRIZES

Please note that we have instituted door prize drawings at our monthly meetings. Because of Hawaii's gambling laws, these drawings cannot be conducted in the common "raffle" format where tickets are sold. Rather, each *paid* member attending the meeting will receive a drawing ticket upon request. A voluntary donation of \$1.00 is requested and encouraged. Drawings will be conducted at the end of the meeting with available prizes awarded in random order. You must be present to win. Please remember: if you win a prize, please bring one to the next meeting. This helps to keep our drawings going. Thank you.

**Christmas Potluck Dinner
Dec. 2, 2016
Arts & Craft Building
5:30 pm — 8:00 pm**



Marra Mamba Tiger's Eye (Western Australia, Australia)



Smithsonite on Psilomelane, Broken Hill, New South

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