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NEXT MEETING: Sep 21, 2020
TIME: 7:30 p.m.
LOCATION: VIRTUAL meeting.

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MINUTES OF THE August CLGMS GENERAL MEETING

No minutes are available – We did not have a general meeting.
The virtual meeting was held but only a couple of club's officers attended.

MINUTES OF THE September CLGMS BOARD MEETING

There was no BOD meeting in September due to Labor Day Holiday.

September general meeting agenda – main topic will be discussion on the 2021 CLGMS Annual show.

September general meeting - we will have an alternative to use a VIRTUAL meeting on **MONDAY – 9/21 at 7:30 pm.**

We will use Zoom meeting this time, here is the link (just click on this link):

[https://us02web.zoom.us/j/82626455321?
pwd=VU1oTXpiWnhHMjlKOTIzcWwvbWxaZz09](https://us02web.zoom.us/j/82626455321?pwd=VU1oTXpiWnhHMjlKOTIzcWwvbWxaZz09)

If the link does not work well, please use this on the ZOOM app: Join Meeting

Meeting ID: 826 2645 5321

Passcode: 431083

Please join and also we will send you all an email as a reminder later.

Upcoming events - We are looking forward to the following programs.

In the planning.

Kelimutu

From: Wikipedia – Please visit Wikipedia.com for all detailed references.

Introduction

Kelimutu (pronounced [kəli'mutu]) is a volcano, close to the small town of Moni in central Flores island in Indonesia. The volcano is around 50 km to the east of Ende, Indonesia, the capital of Ende regency in East Nusa Tenggara province. The mountain has three volcanic crater lakes that differ in color.

The science of the Kelimutu lakes is relatively well-known.[2] Lake colors periodically change due to adjustments in the oxidation-reduction status of the fluid of each lake, and also considering the abundance of different major elements, such as iron and manganese. Oxidation-reduction status depends on the balance of volcanic gas input and rainfall rate, [3] and is thought to be mediated by the groundwater system in the volcano itself.[4] The colors in the lakes change independently from each other, as each has its own unique connectivity to the underlying volcano's activity. Between January and November 2016, the colors of the craters changed six times.[5] Although it is widely believed that the changes are unpredictable, it is more accurate to say that the lack of any regular monitoring of the volcanic system precludes scientists from having the data necessary to drive widely available predictive models.

Geological details

The volcano contains three striking summit crater lakes of varying colors. Tiwu Ata Bupu (Lake of Old People) is usually blue and is the westernmost of the three lakes. The other two lakes, Tiwu Ko'o Fai Nuwa Muri (Lake of Young Men and Maidens) and Tiwu Ata Polo (Bewitched or Enchanted Lake) are separated by a shared crater wall and are typically green or red respectively. The lake colors vary on a periodic basis. Subaqueous fumaroles are the probable cause of active upwelling that occurs at the two eastern lakes. [1]

The lakes have been a source of minor phreatic eruptions in historical time. The summit of the compound 1639-m-high Kelimutu volcano is elongated two km in a WNW-ESE direction; the older cones of Kelido and Kelibara are located respectively three km to the north and two km to the south. The scenic lakes are a popular tourist destination.[6]

Kelimutu is also of interest to geologists because the three lakes have different colors yet are at the crest of the same volcano.[7] According to Kelimutu National Park officials, the colour changes as a result of chemical reactions resulting from the minerals contained in the lake perhaps triggered by volcano gas activity.[8] However, it is more accurate to refer to the color changes as being driven by oxidation-reduction chemical dynamics.

Kawah Putih lake in West Java, south of Bandung, is another crater lake in Indonesia with some similarities to the lakes at Kelimutu.

Tourism

In the early days of developing the local national park in the Kelimutu area, there were some disputes with local communities over the use of the resources. More recently, forest rangers have worked to develop better relations with nearby village communities and overall management has improved.[9]

Kelimutu is one of the mountains listed as a ribu in Indonesia which are mountains in Indonesia which are more than 1,000 meters high.

The area is said to have begun to attract attention after being noticed by a regional Dutch military commander, B. van Suchtelen in 1915 and became more well known after Y. Bouman wrote about the site in 1929.[10]

The closest airports are Maumere, and Ende. There are regular flights to Ende from Bali. The drive from Ende to Moni, the town at the base of Kelimutu where accommodation is available, takes about 3 hours, while from Moni to Kelimutu vehicle park, a 13 kilometer drive, needs 45 minutes.[11] Usually tourists sleep one night to catch sunrise at Kelimutu.



Kelimu

Highest point

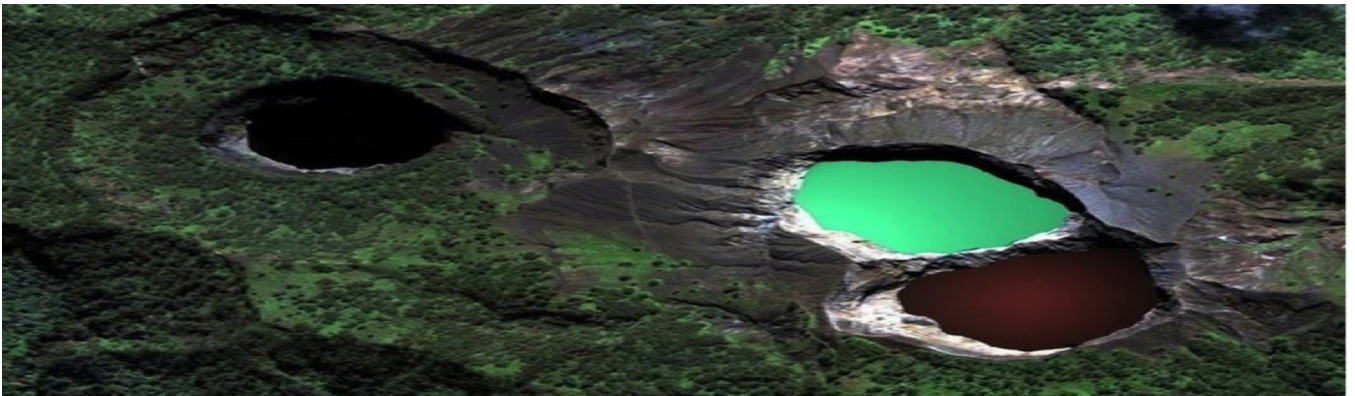
Elevation

1,639 m (5,377 ft)

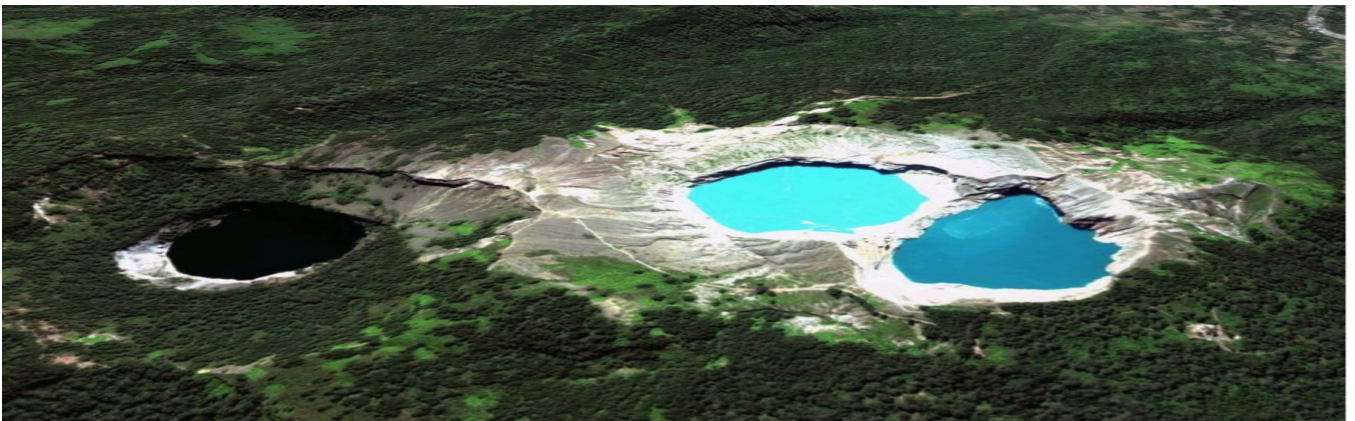
Location: Ende Regency, Flores Island,
Indonesia



A panoramic view of all three lakes at Kelimutu, from left to right: Tiwu Ko'o Fai Nuwa Muri, Tiwu Ata Polo (behind Tiwu Ko'o Fai Nuwa Muri), and Tiwu Ata Bupu (black lake on far right)



Enchanted lake (black), lake of young men and maidens (green), and lake of the elders (red).







Unpredictable color changes overtime

Upcoming Programs:

No program is scheduled for September as we do not have the general meeting due to COVID-19 situation.

Most of the shows listed below are cancelled due to COVID19 – Please contact individual show website to find out.

SCFMS and MEMBER CLUB GEM SHOWS			
OCT 10, SCFMS Convention Meeting via ZOOM	Oct 9-11, Greater Detroit Gem, Mineral & Fossil Show, Macomb Community College Expo, (313) 255-7774 www.michmin.org/show	Oct 9-11, Big Sur Jade Festival Los Padres National Forest, 69325 Highway 1, Big Sur, CA 93920 https://bigsurjadefestival.com/	Oct 10-11, Tri-City Gem and Mineral Society, Mayborn Civic and Convention Center, Temple, TX 76501. dfarthic@gmail.com CANCELLED
OCT 23-25, Austin, TX, Austin G&MS, Palmer Events Center, www.agms-tx.org	Oct 24-25, Akron Mineral Society Show, Emidio & Sons Banquet Center, 48 E Bath Rd, Cuyahoga Falls, OH 44223, www.gemboree.org/	Oct 31-01, OK Mineral and Gem Society Show, State Fair Park, 608 Kiamichi Place, Oklahoma City, 73107, http://omgs-minerals.org/	NOV 6-8, Humble, TX, Houston G&MS, Humble Civic Center, hgms.org CANCELLED
NOV 7-8, Amarillo, TX, Golden Spread G&MS, Amarillo Civic Center, www.amarillotreasure.com/			
STONEY STATEMENTS Clear Lake Gem and Mineral Society, Inc PO BOX 891533 Houston, Texas 77289			
Meeting 3rd Monday of the Month 7:30 P.M. Clear Lake Park Building 5001 NASA Parkway, Seabrook, Texas			

				
		Member of		
Next Annual Show February 20-21, 2021 Pasadena Convention Center				
CLGMS is on the Web: http://www.clgms.org 2/20-21/2021		American Federation of Mineral Societies	South Central Federation of Mineral Societies	
Clear Lake Gem and Mineral Society, Inc				
MEMBER: American Federation of Mineralogical Societies and South Central Federation of Mineral Societies				
PURPOSE: To promote education and popular interest in the various earth sciences; in particular in those hobbies dealing with the art of lapidaries and the earth sciences of minerals, fossils and their associated fields.				
2020 OFFICERS:	President Vice President Secretary (Interim) Treasurer Program Director Board of Directors: Newsletter Editor	John Caldyne Cynthia McGowan Trina Willoughby Morgan Davies VACANT Sandra Christiansen Jerry Newberry Jim Edwards Donna Nelson David Tjiok	832-282-4270 281-546-2662 713-815-0275 281-224-2444 Jim Hawkins Sara Tanner	
Annual Show 2018Sandra Christiansen Constitution & Bylaws.....Sara Chelette Community Benefits.....Charlie Timme Historian.....David Tjiok Publicity..... VACANT Facebook.....Cynthia McGowan Membership.....David Tjiok WWW System Admin..Mike Flannigan Refreshments.....John Caldyne Education/Field Trips.....Annabel Brownfield				
Membership Dues Jan. to Dec. 2020: Adult \$15:00, \$5.00 per additional adult at same address, Junior \$5.00, \$5.00 per member with adult at same address, Family Dues \$20.00 (4+) at same address. Send Dues to CLGMS, PO BOX 891533, Houston, TX, 77289				