## Caving in the Abode of the Clouds Expedition – 2020 Summary.

In 2020 an exploration team of up to 19 members took part, a little fewer than in previous years, but still very multi-national. They had yet another successful period of cave exploration in what was the 28<sup>th</sup> year of the Caving in the Abode of the Clouds Project. The team comprised cavers from across Europe and India, including representatives from Austria, Ireland, Netherlands, Serbia, Switzerland and the UK.

As has become the norm the expedition took place in February and this year ran from 3<sup>rd</sup> to 26<sup>th</sup> February, comprising two distinct phases with a one week preexpedition in the Jalaphet Area in the Central Jaintia Hills, followed by a two and a half week main expedition in the Muallian/Thlang Moi area in the East Jaintia Hills. In the latter area activities built on the productive exploration that had taken place from 2016 to 2019. The expedition base for the Jalaphet Area was actually on the Shnongrim Ridge utilising the former Shnongrim Ridge camp/expedition site of the 2000's bringing back fond memories for those time-served expedition members that were part of the exploration at that time. For the main expedition the base was once again in the village of Muallian that lies at the southern-most spur of the Shnongrim Ridge.

The Jalaphet area lies around 6kms to the NW of the Shnongrim Ridge east of Jalaphet town and it comprises a NNW to SSE limestone ridge approximately 5km long and 1.5kms at its widest, reaching a maximum altitude of 1170m. In some ways it is a miniature version of the Shnongrim Ridge.

Achievements in the Jalaphet Area (Central Jaintia Hills) were as follows:

- Krem Satat 1 Situated at the base of the Jalaphet ridge on its western side this stream sink began as a large collapsed entrance feature that broke into sections of stream passage intersecting rift chambers and finally a large breakdown chamber. It was surveyed to conclusion yielding 593m of passage with the water reported to emerge at a resurgence further down the ridge.
- Krem Ksyiar The name of which translates as 'Golden Cave' due to the large amount of yellow/golden coloured flowstones within it. This proved to be a complicated multi-level cave with three chambers, one above the other, that was explored to conclusion after 226m. Nearby the promising looking entrance of Krem Rimanuh quickly choked yielding 81m of passage.
- On the crest of the Jalaphet Ridge a series of shafts were located, some terminated in chokes or constrictions such as, Krem Exe Buck Lander 12.5m, Thloo Mahin 1 -31m and Thloo Mahin 2 -17m, whilst others such as Krem Khlieh um Sow Jan reached a depth of -24m and were ongoing. In addition to this a number of other shafts were located but there was not time to descend and explore them.
- On the Shnongrim Ridge itself, and only a couple of kilometres from the preexpedition camp, a newly located, **Krem Shnongrim Labbit Baret**, was

explored and after the descent of some fine shafts yielding 209m of passage and a depth of -94m was joined to the **Liat Prah Cave System** adding yet another entrance and modestly extending the system to 31,279m in length.

The Jalaphet Area does offer further potential with other caves reported but not yet located. It is however more likely that the shafts on the crest of the ridge will yield better results than sinks or resurgences at the base.

The base camp location for the main expedition was once again in Muallian Village, but not at the lower school used in 2019 adjacent to the spacious football pitch, but at the smaller upper school. This new site was much less spacious with many of the expedition members needing to put up their tents on the flat concrete roof of the school to find a flat area and some space. Access to the roof area was by a steep and somewhat rickety bamboo ramp/ladder constructed by the village headman. This was christened 'The Stairway to Heaven' and served to make post cave exploration beer drinking prior to bedtime somewhat more hazardous than normal, at least for the 'roof campers'.

The headman and village secretary had clearly been busy in between this and last year's expedition and had collected a large amount of information on new cave entrances along with various local guides who knew where they were. Needless to say teams were deployed on reconnaissance trips almost every day. From Muallian the exploration team were able to access Thlang Moi which due to improvement made to the local road was a journey of just over 40 mins back up the ridge. One of the features of exploration in the Muallian area is that many of the cave entrances are situated in the valleys below. This results in some fearsome 2 to 3 hr walks, back up the hill after a good days caving, with up to 700m of ascent. To reduce the impact of this a Satellite Camp was also set up in the valley near to Retdung Khur, which allowed exploration teams to stay in the valley for 3 to 4 days at a time. For forays down to other caves some overnight bivouacs in the splendid river valleys below Muallian were also used.

Achievements in the Thlang Moi and Muallian Areas were as follows:

• Retdung Khur – In 2019 this sizable resurgence and its largely uninspiring entrance series broke into another magnificent Meghalayan River Cave that in places was spectacularly decorated and was explored for 4.0km and was very much ongoing. With the 2020 Satellite Camp established near to the original entrance another 8 entrances were located some of which gave easier, quicker and drier access into the system. Over the course of the 2020 expedition exploration in the downstream area of the cave and several tributaries added more fine passages being a mixture of clean washed joint controlled maze and large well decorated trunk passages. The upstream section of the cave was not pushed very far because priority was given to consolidating the other parts of the cave, but over the course of the expedition another 7.5kms of beautiful passage was mapped taking the cave to 11.56km

establishing it as India's 7<sup>th</sup> longest cave known to date and very much ongoing. Nearby, **Laia Dung Mual** was explored for 665m to a depth of 19m and this will almost certainly join into the eastern part of Retdung Khur adding further to the overall system length.

- **Pynnoh Um Sngat** The entrance shaft to this cave was located during the January 2020 (Young Meghalayan Cavers training) Expedition and descended to -40m. In February the bottom of the shaft was reached at -85m and horizontal passage and more pitches were explored to reach a large ongoing trunk passage. By the end of the expedition some fine pitches and 4.1kms of passage had been explored and reaching a depth of -164m it became Indian sub-continents10<sup>th</sup> deepest cave known to date.
- Zong Khur This massive surface shaft measuring 25m x 18m at its mouth dropped to a depth of -142m all in daylight' to become the deepest shaft found to date in the Indian Sub-continent. Meeting horizontal passage at it base 1,090m of passage were surveyed with the cave ongoing. Reaching a depth of -192m it became the Indian Sub-continents 7<sup>th</sup> deepest cave known to date.
- On the flanks of the ridge to the South and South East of Muallian village a number of other shafts were explored these included:, Khloile Khur 133m in length to a depth of 51m, Rochonga Shaft, 89m in length also to a depth of 51m), Chonga Shaft, 78m in length to a depth of 40m, Serbilphai, 89m in length to a depth of 42m and Morkana Shaft 25m in length to a depth of 21m all of which were explored to conclusion and Kellung Mual for 209m to a depth of -68m and still ongoing.
- Deep in the Saisi River Valley (Unfortunately around 700m lower than the expedition base camp!) the stunning and atmospheric **Tuikhur Lut River Sink** was explored. The upstream entrance to the cave is a huge pothole entirely filling the base of the river valley that swallows the whole river only to emerge at a large downstream exit some 120m further on. The entrance is at the side of a gorge in the river valley with a 12m drop followed by a 9m drop reaching the lip of a pothole where a final 20m pitch drops into a plunge pool that requires a swim to reach dry land. A section of river passage and several flood oxbows were explored yielding 251m of passage. The cave is home to a large colony of fruit bats and although not a large cave by most standards it is certainly a very spectacular and esoteric one.
- Rather unexpectedly **Saisi Blue Pool Cave** explored for 129m in 2019 was only extended by a further 143m to a total of 270m in length and stopped at a sump. The nearby **Ponkolio Resurgence Cave** also terminated prematurely in a sump after only 24m. Situated at the Sasia/Ponkolio River Junction and draining a very large catchment both of these caves were expected to yield much more than they did. Evidence now however suggests that the shafts located on the flanks of the ridge offer the best cave potential.

By the end of the 3.5 week 2020 Caving in the Abode of the Clouds Expedition just over 15.8 kms of yet more excellent new cave passage had been explored and mapped.

To date (March 2020) the whereabouts of over 1,700 caves and cave locations are known in Meghalaya of which over 1,000 have been explored or partially explored to yield in excess of 518 kilometres of surveyed cave passage, with much more still waiting to be discovered.

Many of the caves that have been explored and mapped in Meghalaya over the last 28 years consist of impressive river caves mixed with massive and often richly decorated relict passages that are often accessed by magnificent clean washed shafts. These are formed both in limestone and sandstone with some significant caves being found in the latter. Together they create cave systems equal in size and beauty to those found anywhere else in the world, maintaining Meghalaya's status as one of the world's leading caving regions.

For these achievements the Caving in the Abode of the Clouds Project is indebted to the help and support received from The Meghalaya Adventurers Association (Shillong), the Government of India Tourist Office (East and North East India) Kolkata, the Meghalaya State Tourism Department, Officials and Government Departments of Meghalaya, The Grampian Speleological Group and most importantly, the people of Meghalaya, particularly those in the villages in which we stay who make us so welcome, guide us through the forests and help the expedition locate many fine caves.

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