

Gazetteer of Limestone Localities in Sabah, Borneo

LIM SHEH PING

Forest Research Centre, Forest Department,
Locked Bag 68, 90009 Sandakan
Sabah, Malaysia

and

RUTH KIEW

Singapore Botanic Gardens
Cluny Road, Singapore 259569

Abstract

A map of the 59 limestone localities in the Malaysian state of Sabah, Borneo, is presented together with a table with their co-ordinates, accepted name and the forest area in which they occur.

Introduction

In investigating the limestone flora in Sabah, it became obvious that there was no complete and convenient gazetteer to limestone localities. Limestone hills had been surveyed for their caves with archaeological remains (T. and B. Harrison, 1971), for caves from which edible bird's nests are collected (Francis, 1987) or for their mollusc fauna (Vermeulen, 1996). None of these sources covers even half the limestone localities. The section on hill and mountain peaks in the Sabah Gazetteer (Tangah and Wong, 1995) lists two limestone hills and gives their altitudes (Dulong Lambu attains 229 m a.s.l. and Madai reaches 359 m) but without mention that they are limestone.

In addition, there are discrepancies in names or the spelling of names. Standardising names has therefore been an important part of this work. For example, the name 'Lobok Buaya' cited by the Harrissons is not to be found on any maps and it was necessary to retrace their route to the site and confirm the accepted name with local villagers. The hill should be called Baladut. Similarly, Batu Punan has been given as an alternative name to Pun Batu, but the local villagers are adamant that it should be called Pun Batu.

Tourist localities are also not accurate in their use of names. Thus the hill in which the Gomantong Cave is located is Bukit Dulong Lambu

(not Bukit Gomantong) and the hill commonly called Batu Putih should correctly be known as Batu Tulug (Batu Putih being the name of the nearby village, not the hill itself).

Two limestone localities are not included in the gazetteer. One is a mollusc site, 'Kirk's Cave, 8 km N of Lahad Datu', for which no co-ordinates are available (Vermeulen, 1996). It is not to be found on any map probably because it is a 'small hill hidden among oil palm estates' and so would not have shown up on aerial photographs if it did not emerge above the tree canopy. Similarly, George Argent (pers. comm.) reports that there are a few large limestone boulders in the river at Danum Valley (Sungai Palum Tambun 4° 58'N 117°49'E), but the source of these has not been found.

Francis (1987) drew attention to the confusion about the number and names of limestone hills in the Sapulut and Sinobang areas, which until recently were very remote and inaccessible. Now the area is riddled with a maze of logging roads and it was possible to visit the Sinobang area on the Sungai Pinangah and obtain information from the local Muruts. This revealed that the hills do not have proper names and that Batu Urun (not a hill but a unique bowl-shaped sunken gorge) is a descriptive name, which merely indicates that it is upriver ('oron' in the Murut language, equivalent to 'ulu' in Malay) and Kelabangan meaning 'a trail' ('labangan' in Murut), is a long cliff face that intermittently outcrops along a stretch about 3-km long (R. Kiew, unpublished data).

The gazetteer was compiled from the following three maps as no single map included all the limestone hills. The mineral map is the most complete.

1. **The Soils of Sabah.** 1974. Scale 1: 125,000. Published for the Sabah Government by the British Overseas Development Administration (Land Resources Division), U.K.
2. **Mineral Distribution Map of Sabah.** 1st edition, 1976. Scale 1: 500,000. Compiled by K.M. Leong, published by The Geological Survey of Malaysia.
3. **Geological Map of Sabah.** 3rd edition, 1985. Scale 1: 500,000. Compiled by P.S. Lim, published by Directorate of Mapping Malaysia. No. 36/87.

Some hills have no names on the maps and these are recorded as unnamed in Table 1 and, where there is a village or river close by, this is given in parenthesis. The position of all hills is shown in Figure 1, the numbers corresponding to the numbered localities in Table 1. The Forest Reserve in which the hill is found is also given, as this is important in considering the conservation status of the limestone flora. The limestone flora is extremely susceptible to burning, which destroys not only the

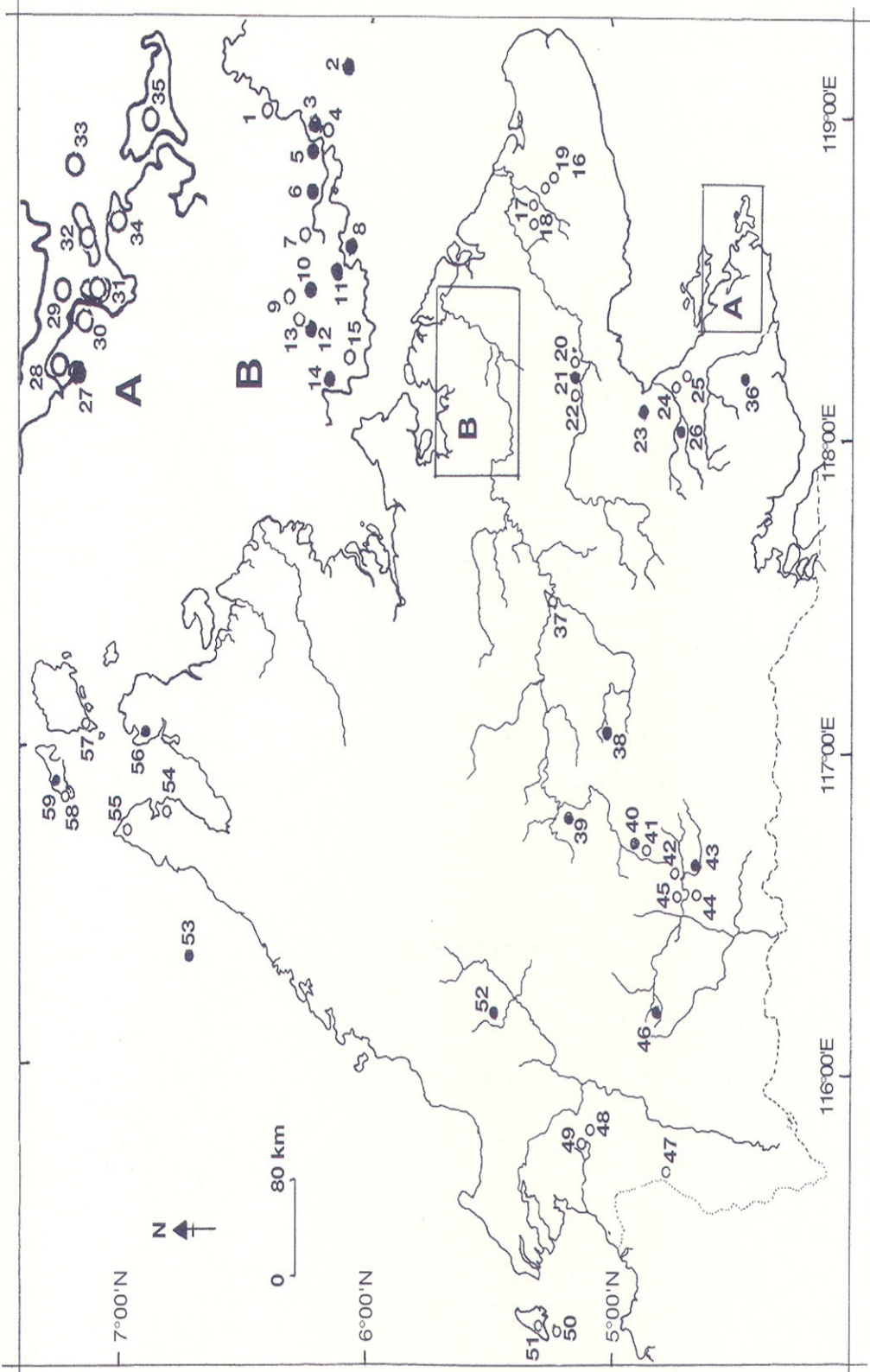


Figure 1. Limestone localities in Sabah.

(Number of the localities corresponds to those in Table 1; solid circles indicate hills from which birds' nests are collected in commercial quantities).

vegetation but also the soil layer, which when no longer protected by vegetation is washed away by subsequent rains leaving the rock bare (Kiew, 1991). The original vegetation on hills that suffered burning in the 1982-83 drought has still not recovered. Protection against fire by a buffer zone of forest is therefore essential for the conservation of the limestone flora. Hills that are not located within Wildlife Reserves or Virgin Jungle Reserves are extremely vulnerable to fire.

Fifty nine limestone localities are listed here. They include the raised coral limestone found on islands, for example in the extreme north and the south east of Sabah, and the inland tower karst hills. It is in these latter that the caves are found.

While we can be confident that all the major hills are listed, there remains the possibility that smaller outcrops (such as 'Kirk's cave' mentioned above), which do not emerge above the forest canopy and so cannot be identified from aerial photographs remain to be mapped. However, based on our field survey their number is likely to be very small.

Acknowledgements

The authors are extremely grateful to World Wide Fund for Nature Malaysia for funding under Project No. MYS 328/ 95; to Dr Wong Khoon Meng, Mr Robert C. Ong and staff at the Forest Research Centre for providing facilities; to G. Argent, A. Lamb and J.J. Vermeulen for answering queries.

References

- Francis, C.M. 1987. *The Management of Edible Bird's Nest Caves in Sabah*. Wildlife Section, Sabah Forest Department, Sandakan, Sabah.
- Harrisson, T. and B. Harrisson. 1971. The Prehistory of Sabah. *Sabah Society Journal*. 4:1-272.
- Kiew, R. 1991. The limestone flora. In: R. Kiew (ed.), *The State of Nature Conservation in Malaysia*. Malayan Nature Society, Kuala Lumpur, Malaysia. pp. 42-50.
- Tangah, J. and K.M. Wong. 1995. *A Sabah Gazetteer*. Sabah Forest Department and Forest Research Institute Malaysia, Malaysia.
- Vermeulen, J.J. 1996. Notes on the non-marine molluscs of the island of Borneo, 8. *Basteria* 60: 87-138.

Table 1. Gazetteer of limestone localities in Sabah

Name of Locality	Coordinate	Forest Reserve
1. Tanjung Batu	5°36'30"N 118°20'00"E	—
2. Ulu Sungai Resang	5°28'45"N 118°23'00"E	—
3. Panggi (Bt. Temanggong Besar)	5°32'15"N 118°18'30"E	Panggi FR
4. Batu Temanggong Kecil	5°32'00"N 118°18'00"E	—
5. Keruak (Cave)	5°31'30"N 118°17'00"E	Keruak VJR
6. Bod Tai Cave	5°31'45"N 118°13'00"E	Bod Tai VJR
7. Unnamed	5°32'45"N 118°9'30"E	—
8. Baladut	5°26'30"N 118°8'00"E	—
9. Kuntos	5°33'00"N 118°4'30"E	Gomantong Protected FR
10. Bukit Dulong Lambu (Gomantong Cave)	5°31'30"N 118°4'15"E	Gomantong VJR
11. Batu Batangan	5°28'00"N 118°6'00"E	—
12. Batu Materis	5°30'30"N 118°2'15"E	—
13. Batu Bunod	5°31'45"N 118°2'45"E	—
14. Batu Supu	5°29'00"N 117°55'15"E	Pin-Supu VJR

15. Batu Tulug	5°25'45"N 117°56'30"E	Pin-Supu VJR
16. Tabin (Batu Quoin)	5°18'00"N 118°44'30"E	Tabin Wildlife Sanctuary
17. Unnamed (Tabin)	5°20'30"N 118°43'30"E	Tabin Wildlife Sanctuary
18. Unnamed (Tabin)	5°21'00"N 118°40'30"E	Tabin Wildlife Sanctuary
19. Unnamed (Tabin)	5°16'15"N 118°46'15"E	Tabin Wildlife Sanctuary
20. Batu Belas	5°7'45"N 118°8'45"E	—
21. Tempadong	5°8'30"N 118°8'15"E	Mensuli VJR
22. Upak	5°7'00"N 118°3'45"E	—
23. Unnamed	4°50'30"N 118°4'45"E	—
24. Gunung Madai	4°43'00"N 118°9'15"E	Madai-Baturong VJR
25. Batu Supad	4°42'15"N 118°10'15"E	Madai-Baturong VJR
26. Bukit Baturong	4°42'00"N 118°00'30"E	Madai-Baturong VJR
27. Batu Tengar Cave (Segarong)	4°34'15"N 118°24'30"E	Segarong Protected FR
& Pababola Cave (Sipit)	4°33'30"N 118°24'15"E	Segarong Protected FR
28. Semorang Cave (Sipit)	4°35'45"N 118°25'00"E	Segarong Protected FR
29. Selangan Island (Sakong)	4°34'45"N 118°30'00"E	Selangan Protected FR

30. Unnamed (Kampung Ballong)	4°34'00"N 118°28'30"E	—
31. Pulau Pababag (Sakong)	4°32'30"N 118°29'30"E	Pababag Protected FR
32. Bait Island (Sakong)	4°32'30"N 118°31'30"E	—
33. Larapan Island	4°33'45" 118°36'15"E	—
34. Tanjung Kapur	4°31'30"N 118°32'15"E	—
35. Bum Bum Island	4°28'00"N 118°40'00"E	—
36. Batu Pang	4°27'00"N 118°11'00"E	—
37. Sarupi	5°14'00"N 117°28'30"E	—
38. Batu Timbang	4°59'00"N 117°6'00"E	Batu Timbang VJR
39. Melikop	5°5'00"N 116°48'00"E	—
40. Kelabangan	4°49'30"N 116°38'00"E	Sg. Pinangah Commercial FR
41. Batu Urun	4°49'30"N 116°38'00"E	Sg. Pinangah Commercial FR
42. Bandakan	4°43'45"N 116°36'00"E	Sapulut Commercial FR
43. Batu Punggul	4°38'45"N 116°37'00"E	Sapulut Commercial FR
44. Unnamed (Labang)	4°39'00"N 116°33'45"E	Sapulut Commercial FR
45. Sambulyan	4°43'30"N 116°33'30"E	—

46. Pun Batu	4°48'00"N 116°12'00"E	—
47. Pulun	4°46'15"N 115°39'45"E	Sabah Forest Industries
48. Unnamed (Sg. Pangi)	5°5'45"N 115°48'45"E	Gunung Lumaku Protected FR / Sabah Forest Industries
49. Lakutan	5°7'00"N 115°43'15"E	Sabah Forest Industries
50. Burong Island	5°14'30"N 115°11'30"E	—
51. Labuan	5°18'45"N 115°12'00"E	—
52. Lian Cave	5°29'30"N 116°10'30"E	—
53. Mantanani Island Besar	6°43'30"N 116°20'30"E	—
& Kecil	6°43'00"N 116°18'30"E	—
54. Unnamed	6°50'00"N 116°49'00"E	—
55. Unnamed	7°1'00"N 116°45'30"E	—
56. Melobang	6°53'30"N 117°2'30"E	—
57. Karakit	7°7'15"N 117°5'00"E	Karakit VJR
58. Kok Simpul & Tg. Kalutan	7°13'00"N 116°52'45"E	Balambangan Protected FR
59. Tanjung Timohing (Balambangan)	7°17'30"N 116°54'30"E	—