

Carbon-14 Dates from Kota Batu, Brunei (Borneo)

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IN *Asian Perspectives* 15(1), S. J. O'Connor and I reported the first C-14 date for a prehistoric open site in Borneo, ca. A.D. 1315 for termination at the Sarawak River delta ironworking complex (Harrisson and O'Connor 1972). At that time we indicated the difficulty of getting sufficient radiocarbon samples from such terrain and climate conditions. However, at one open site, Kota Batu in the northwest, acid soil and saline water table favor long preservation of vegetable materials. A good series of results has now been obtained with the help of Geochron Laboratories at Cambridge, Massachusetts, and the Faculty of Science Laboratory of Gakushuin University, Tokyo, where the director, K. Kogoshi, has taken special trouble with our problems.

The sample material was initially excavated and stored twenty years ago, when Kota Batu was first proved to have been a major entrepôt and probably an ancient capital for the great interisland sultanate of Brunei (Harrisson and Harrisson 1956). Since then an impressive new Brunei Museum has been built on the edge of Kota Batu, while all of the relevant land (36 acres) has been acquired by the government for future study on the writer's advice.

The full laboratory results have been detailed in three reports for the *Brunei Museum Journal* (T. Harrisson 1970a, 1971, 1972). This note summarizes for readers of *Asian Perspectives* the main impact of these results.

All of the many thousands of artifacts so far excavated from Kota Batu are "iron age," and are largely connected with a vigorous trade in ceramics and other wares between Borneo and China. Later Thailand and Annam were also involved in this trade. What is special here is the continuation of this activity over a much longer period than at any other site of the sort yet identified in the region. From artifacts alone (cf. B. Harrisson 1970) we put the main operation as extending from the 10th century to the 17th century A.D.; that is, parallel to the full swing of the late T'ang to Ming dynasties in China (Harrisson and Harrisson 1956: 290). Thirty-six dated Chinese coins cover the same period as the ceramics, but with a

marked peak in the Sung (A.D. 960–1280; cf. Moore 1970, T. Harrison 1970b: 25). Elsewhere in Borneo, as throughout Southeast Asia, the normal pattern is for occupation over one or two centuries (or less). At Kota Batu the evidence for prolonged usage right up until major attack by the Spaniards is artifactually strong. Brunei tradition and folklore suggest the same.

The new C-14 results support and extend this view. They also indicate that a small-scale human presence continued after the Spanish left, as is indeed shown since 1900 by the growth of rubber gardens there.

TABLE 1. SUMMARY OF KOTA BATU C-14 DATES

	APPROXIMATE DATE	MATERIAL	EXCAVATED DEPTH (INCHES)
1	A.D. 1850	dammar resin	24–30
2	1815	charcoal	24–30
3	1695	charcoal	24–30
4	1630	dammar	54–60
5	1590	coconut	60–66
6	1415	charcoal	24–30
7	1320	dammar resin	24–30
8	1300	charcoal	24–30
9	1300	wood (<i>Koompassia</i>)	54–60
10	1090	wood (<i>Eusideroxylon</i>)	78–84
11	1030	wood and charcoal	54–60
12	980	charcoal	30–36
13	950	charred wood	36–42
14	940	wood (<i>Shorea</i>)	54–60
15	875	wood and charcoal	48–54
16	820	charcoal	72–78
17	805	wood (<i>Intsia</i>)	66–72
18	690	wood (<i>Intsia</i>)	84–90
19	605	charcoal	66–72
20	600	charred wood	42–48
21	595	charcoal and wood	48–54
22	95 B.C.	charcoal	72–78
23	12,500	charred wood	36–42

A correction range of ± 350 years is given to sample no. 23, and the rest are ± 70 –125 years. So far the two B.C. dates are not supported by any stone-age indications in the coastal flats around Brunei Bay. They may be related to very late, massive sedimentary deposits bearing tektites, from which wood samples have been dated individually later than no. 23 (Tate 1971).

Like most later open sites in this part of the world, Kota Batu has been heavily disturbed. No exact stratification is to be expected (cf. *Brunei Museum Journal* reports cited earlier). However, the results listed in Table 1 show a broad natural trend which is simply summarized in Table 2. Comparable information is now needed for sites elsewhere in the islands and on the Malay Peninsula.

TABLE 2. DEPTH AND AGE AT KOTA BATU

APPROXIMATE DATE SPAN	NUMBER OF C-14 RESULTS	NUMBER IN	
		Top 3 ft. of deposit	Below 36 in.
A.D. 1850 to 1300	9	6	3
A.D. 1090 to 805	8	1	7
A.D. 690 to 12,500 B.C.	6	0	6
Total	23	7	16

REFERENCES

HARRISSON, BARBARA

- 1970 Classification of archaeological trade ceramics from Kota Batu. *Brunei Museum Journal* 2(1): 114-187.

HARRISSON, TOM

- 1970a First C-14 dates from Kota Batu. *Brunei Museum Journal* 2(1): 188-198.
 1970b The prehistory of Borneo. *AP* 13: 17-45.
 1971 Deep level carbon dates from Kota Batu. *Brunei Museum Journal* 2(3): 96-107.
 1972 Further radio-carbon dates from Kota Batu. *Brunei Museum Journal* 2(4): 209-216.

HARRISSON, TOM, and BARBARA HARRISSON

- 1956 Kota Batu in Brunei. *SMJ* n.s. 7(8): 283-319.

HARRISSON, TOM, and S. J. O'CONNOR

- 1972 The first C-14 date for an open site in Borneo. *AP* 15(1): 89-91.

MOORE, EINE

- 1970 A suggested classification of stonewares of Martabani type. *SMJ* n.s. 18(36): 1-78.

TATE, R. B.

- 1971 Radio-carbon from Quaternary terraces. *Brunei Museum Journal* 2(3): 108-123.