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Historical glimpses of Sarawak's hairy rhinoceroses [Part One]

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Heritage Snippets of Sarawak by FoSM

This is part one of a two-part series. Part two can be read here: https://dayakdaily.com/historical-glimpses-of-sarawaks-hairy-rhinoceroses-part-two/

By Lim Tze Tshen

THE hairy rhinoceros, also known as the Sumatran rhinoceros or Asian two-horned rhinoceros, is universally recognised by its scientific name *Dicerorhinus sumatrensis*—a name that is not shared with other species of animals or plants.

This scientific name is standardised and applied to any individual hairy rhinoceros, irrespective of where it occurs across the range of the species. Physically, it is the smallest among all five species of rhinoceros living today in the world.

Isolated skeletal remains of the species had been identified among the ancient food leftovers discarded by prehistoric hunters at Niah Cave, alongside with those of another Asian rhinoceros species, the Javan rhinoceros or lesser one-horned rhinoceros, *Rhinoceros sondaicus*.

Unlike the latter, the hairy rhinoceros is the only species of rhinoceros known to have existed in modern-day Borneo. That is to say, despite being hunted since

prehistoric times, representative animals of the species persisted in certain parts of Borneo.

Do they still exist in Borneo today? This remains an open question, although many people, including this author, retain the slim hope that the species may still survive in parts of the island less accessible to humans. In the very unfortunate event that all the hairy rhinoceroses were gone from Borneo, then Sumatra would be left to be the only place on earth where the species still occurs. Even here in Sumatra, with widely scattered populations, their future does not look very bright. Other areas in Asia where the species used to roam do not now seem to have any hairy rhinoceros left.

On the other hand, the lesser one-horned rhinoceros may have disappeared from Borneo well before the modern times, but it is not entirely clear exactly when or how the species went extinct from the island. It certainly does not leave any mark in the memories of the living generations of native people in Borneo.

In contrast, the hairy rhinoceros sometimes featured quite prominently in some of the great campfire stories of the natives. Historically, like the hairy rhinoceros in the past, the lesser one-horned rhinoceros enjoyed a wide geographic range in Asia, but now, there is only one small population (estimated to be less than 70 individuals) left in the whole world—all living within the confines of a small national park at the westernmost tip of the island of Java.

Regrettably, these two species of rhinoceros, so iconic of the tropical rainforests of western southeast Asia, have the misfortune of being declared extinct in Malaysia. The last known lesser one-horned rhinoceros in the country was gunned down in southern Perak in the middle of the preceding century. The year 2003 saw the death of several of the last hairy rhinoceroses in Peninsular Malaysia. In 2019, Iman, the country’s last known hairy rhinoceros, died of cancer at the Tabin Wildlife Reserve in Sabah, despite the best care and attention given by dedicated workers and scientists.

As for the fate of the last hairy rhinoceroses in Malaysia, we know more about it in Peninsular Malaysia and in Sabah due principally to the fact that, in a last-ditch effort to save the species from poaching and to encourage reproductive success, some of the last remaining animals known in these regions were captured from the wild and kept in specially built conservation facilities at Sungai Dusun Wildlife Conservation Centre (Selangor) and at Tabin Wildlife Reserve (Sabah), respectively. The final few chapters of the lives of the animals in these places were, therefore, better recorded than anywhere else in the country.

Sarawak at the twelfth hour?

In Sarawak, the hairy rhinoceros was legally afforded a fully protected status since 1947. However, actual protection on the ground was hard to implement for various reasons. Certain basic information about the species that is needed for immediate conservation actions to be taken was lacking—for example, it was far from clear as to how many rhinoceroses still remained in Sarawak at that time or where in the vast and rugged terrains and thick jungles of Sarawak one should locate the elusive animals in order to protect them.

Also, there seems to be no captive breeding programme for rhinoceros in Sarawak at that time, otherwise, we would at least be blessed with a better knowledge about some of the last animals that might have walked the earth of Sarawak. To be fair, the concept of captive breeding as a conservation tool to save species from extinction was a novelty in the making about a decade-and-a-half in the future.

Yet, my fellow Sarawakians, despair not.

A thorough survey of published literature, in combination with careful examination of museum collections had revealed some hitherto rarely known specimens of the hairy rhinoceros, each with a clear or likely link to Sarawak.

Presented here are the remaining last few pages of the history of the tantalizing hairy rhinoceroses in Sarawak. These are the stories told in the form of physical specimens collected from a not-too-long-ago Sarawak—our only tangible links to the bygone hairy rhinoceros.

Charles Hose and the rhinoceroses from Baram

Charles Hose (1863-1929), with his wide-ranging interests and a curious mind of a naturalist, had amassed large and varied collections of natural history and ethnological objects during his 23 long years of service in Sarawak (1884-1907) as a colonial official and ethnologist resident under the second white Rajah, Sir Charles Brooke.

Many of these objects were presented to museums and universities in Europe and North America, as noted in his 1927 book *Fifty Years of Romance and Research in Borneo*. Several rhinoceros-related objects ended up in institutions at his alma mater, University of Cambridge.

There are two specimens (representing two different individual animals) of the hairy rhinoceros among the current collections of the University Museum of Zoology, each with its own catalogue number: UMZC H.6381 and UMZC H.6383. The former consists of a relatively complete full skeleton of an immature female (Figures 1 and 2). The latter specimen is represented by only a skull and lower jaw (Figure 3).

Figure 1: Skull (right) and lower jaw (left) of a female animal, collected from the Baram District by Charles Hose. Museum of Zoology (University of Cambridge), UMZC H.6381. Picture by Lim Tze Tshen.

Figure 2: The rest of the skeleton of the female animal. Museum of Zoology (University of Cambridge), UMZC H.6381. Picture by Lim Tze Tshen.

Figure 3: Skull of an adult individual collected from Baram District. Museum of Zoology (University of Cambridge), UMZC H.6383. Picture by Lim Tze Tshen. Museum database indicates that both animals were collected from the Baram district. The skeleton of the immature individual, said to be collected by Hose, was among the modern materials used by the Earl of Cranbrook (V) in his comprehensive study of the fossil and prehistoric rhinoceroses from Borneo, the results of which were published in the 1986 issue of *Sabah Museum and Archives Journal*. Unfortunately, no collection date is known for either specimen. However, original packing materials which include pages of old newspaper with dates on them, suggested that the full skeleton was collected before 1903. (Figures 4 and 5).

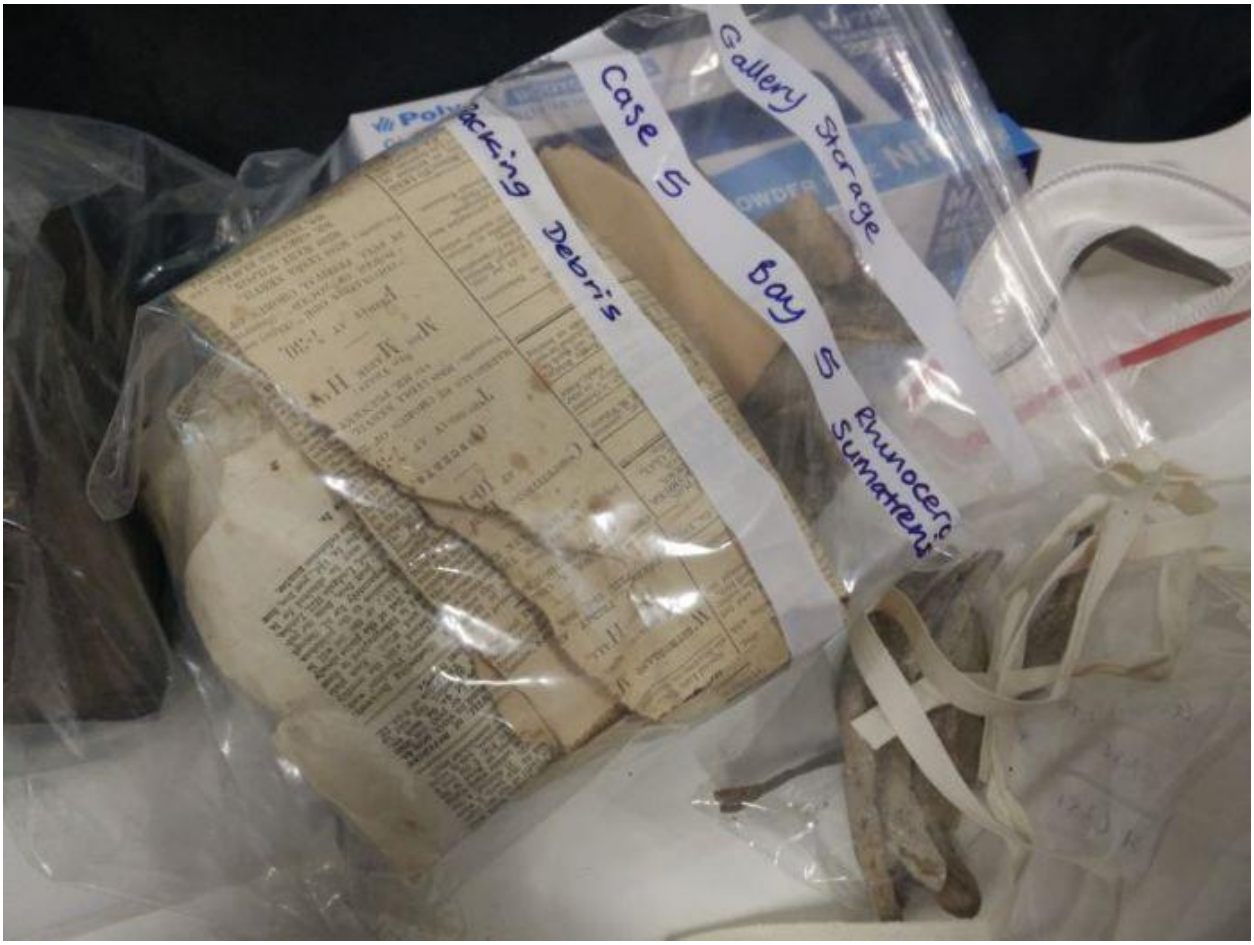

Figure 4: Original packing material: newspapers from 1903 and 1904 used for wrapping bones of the female animal. Museum of Zoology (University of Cambridge), UMZC H.6381. Picture by Lim Tze
Tshen.

Figure 5: Original packing material—tin biscuit box used to keep some of the smaller bones of the female animal. Museum of Zoology (University of Cambridge), UMZC H.6381. Picture by Lim Tze Tshen.

The conscientiousness of generations of scrupulous museum curators in carefully keeping all materials coming into their museum (including something as trivial as the papers used for wrapping a specimen) should be lauded. Otherwise, in this case, modern-day researchers will not be able to know the time period the specimen was collected in the field or received by the museum. In other words, if not for the seemingly inconsequential acts on the part of the curators, information important for reconstructing the history of this specimen would be lost in the mists of time.

It also tells us something about the most economical (but not in the least less ingenious) way employed by early field naturalists and curators in storing natural history specimens. This was a time before more sophisticated methods (such as the using of acid-free papers) were invented. We have come a long way since then!

Artefacts made from rhinoceros materials

The Museum of Archaeology and Anthropology in the same university holds two fascinating cultural objects made from recent rhinoceros bone and tooth—armlet (MAA: Z 2175), and a toggle (Figure 6; MAA: Z 2171) that once formed part of a parang belt. It is said that these objects were collected by Hose from the Kenyah people of the Baram-Tinjar area.

Figure 6: Worked tooth used as a toggle from the Baram-Tinjar area, collected by Charles Hose. Museum of Archaeology and Anthropology (University of Cambridge), MAA: Z 2171. Picture by Lim Tze Tshen.

The toggle is instantly an eye-catcher for its beauty and superb craftsmanship. The lower parts of the four roots of the tooth were each transformed into hook-shaped, with the bends facing out- and up-wards. The end of each was further delicately modified into finely carved figure resembling the head of a bird or human adorned with eyes and mouthparts. The tooth crown remains relatively unmodified by the craftsman, except for a circular hole made through the softer part in the middle.

Tooth crown with its protective layer of enamel on the outside is harder in texture than roots and the inner part of the crown (called the dentine). As a result, tooth parts covered with enamel layer are usually not a convenient raw material for carving purposes.

Lucky for us, the unworked parts of the crown preserve sufficient morphological features for us to be able to identify the species. They indicate that the tooth is from a hairy rhinoceros. The specimen is likely a last premolar or first molar from the left upper tooth row. Furthermore, the wear condition of the tooth shows that the individual was an adult animal when it died.

It certainly is a unique natural object not commonly seen. The rarity, as well as the unusual shape and pattern of a rhinoceros tooth probably fired the craftsman with enthusiasm and provided the impetus for such artistic ingenuity.

Though Hose was attributed to be the collector/donor of most of the items, none of these modern hairy rhinoceros materials from Sarawak seem to have appeared in any of his publications on Bornean subjects—for example, his 1927 book mentioned above, and his *Descriptive Account of the Mammals of Borneo* of 1893. Perhaps more information may one day be revealed when his personal papers and records of correspondence are thoroughly combed through.

Not all specimens of the hairy rhinoceros collected from Sarawak ended up overseas though… stay tuned for some intriguing rhinoceros stories closer to home in the second installment.

Lim Tze Tshen is a zooarchaeologist and vertebrate palaeontologist. Formerly attached to the Sarawak Museum Department as a research fellow and guest curator (zooarchaeology) of the Sarawak Museum Campus Project & Heritage Trail (2019-2020), and a research associate at the Zoology Museum in Universiti Malaya (2011-2012). His current research topics focus on the evolution of southeast Asian Quaternary mammal faunas. He is also president of the Paleontological Society of Malaysia (PaleoSOM). He is reachable through limtzetshenyahoocom.

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"Heritage Snippets of Sarawak" is a fortnightly column.

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